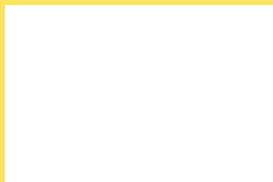


DQI

Why, what
and how?

Robin Nicholson CBE RIBA Hon FStructE
Edward Cullinan Architects
CABE Commissioner



- In 1997 New Labour had huge ambitions after 17 years of little public sector investment
- Egan Report 'Rethinking Construction' 1998
- The Commission for Architecture and the Built Environment (CABE) 1999-
- The Design Quality Indicator (DQI) 1999-
- A Case Study at the University of Warwick

....under New Labour Performance Measurement dominated every aspect of life in UK and they multiply...

- Key Performance Indicators (KPIs) for construction grew out of the Egan Report
- The Design Quality Indicator (DQI) extends these construction KPIs
- CABE Design Review examines 350 major projects each year + the Olympics + all new secondary schools
- Building for Life evaluates the site layout of new housing schemes
- The Code for Sustainable Homes has rising targets towards zero carbon homes (and schools) by 2016



is the Government's advisor on architecture,
urban design and public space in England

- Enabling
- Design Review
- CABE Space
- Learning and skills (+ regions)
- Research and Communications

- Homes and neighbourhoods
- Parks and Public spaces
- Schools
- Healthcare

with two cross-cutting themes

- Climate change and sustainability
- Inclusive Design



DQI

Building for Life...



...is the National Standard for well-designed Homes and Neighbourhoods with 4 sets of 5 questions about:

- Environment and Community
- Character
- Streets, Parking and Pedestrianisation
- Design and Construction

See www.buildingforlife.org



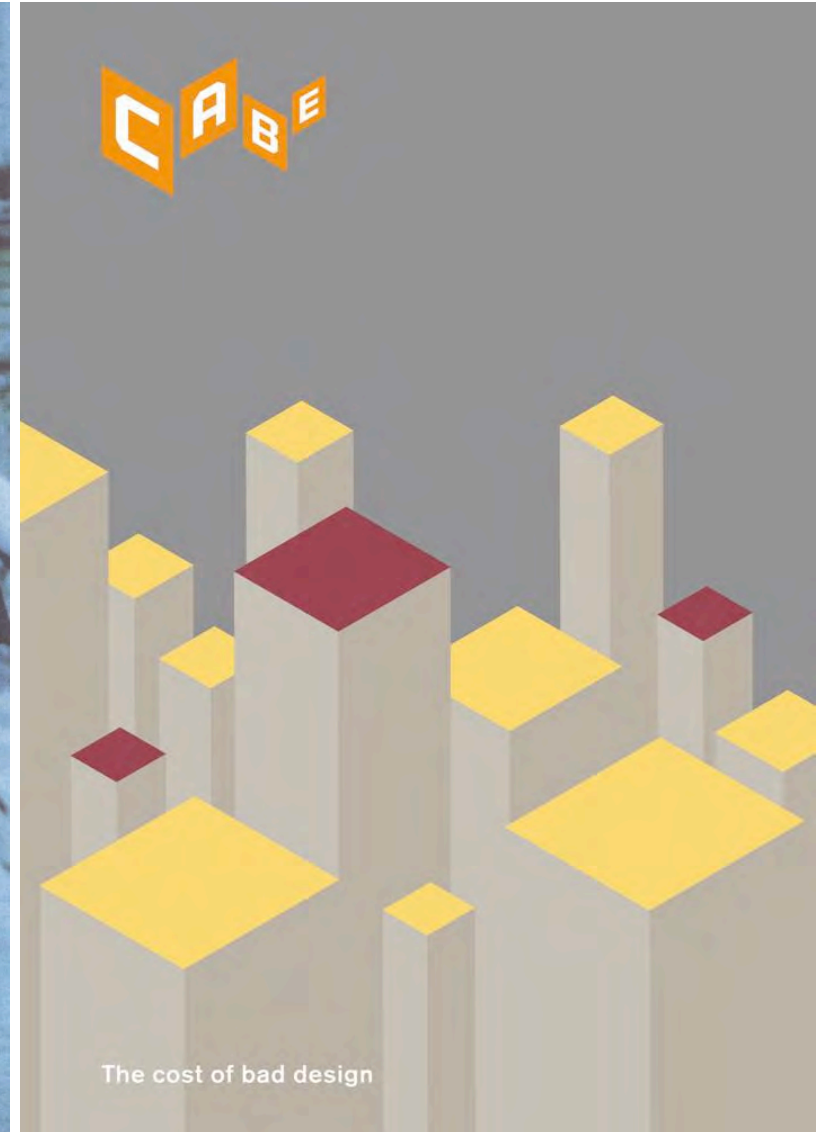
researches and publishes – www.cabe.org.uk

The value of good design



How buildings and spaces create economic and social value

cabe



The cost of bad design

DQI

CABE Housing Audit



Only 18% of new housing across England could be classed 'good' or 'very good'...29% so poor they should not have been given planning consent (based on site visits to 300 developments, 33 in each of the nine regions)

DQI

Why is design quality so important?

Introduction

What is design quality

Conceptual framework

Using the DQI

Aims of the DQI

What to do now

Peckham Library, Alsop Associates, RIBA Stirling Prize Winner 2000. This new library replaced two existing libraries in the area. In the new library completed cumulative use went up 3 times, and book borrowing increased 8 times.

The aspirations for the library, the involvement of users in its design allowed the building to perform better than those it replaced.



DQI

Why is design quality so important?

Introduction

What is design quality

Conceptual framework

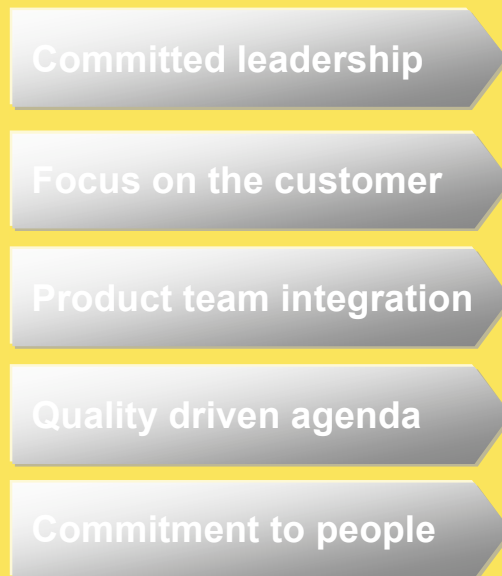
Using the DQI

Aims of the DQI

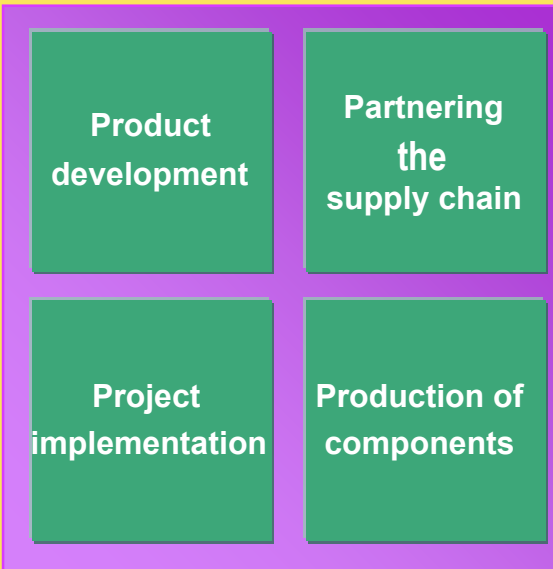
What to do now



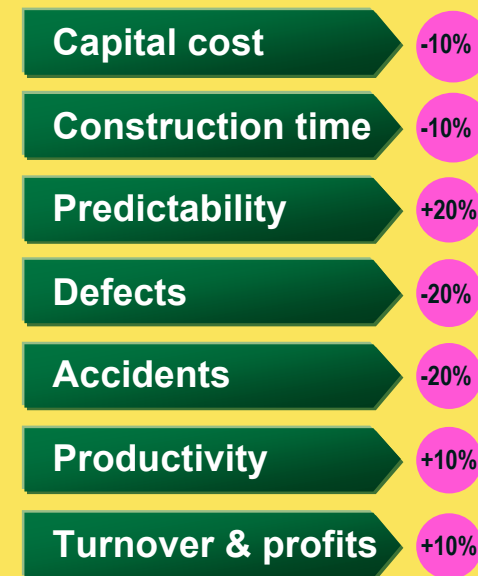
Drivers for Change



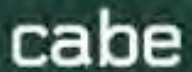
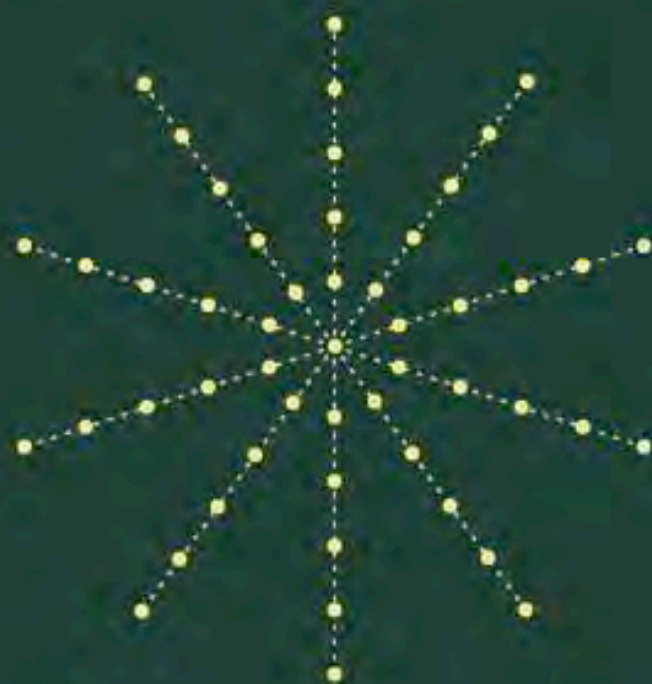
Improving the Project Process



Targets for Improvement



CIC DESIGN QUALITY INDICATOR



Introduction

What is design quality

Conceptual framework

Using the DQI

Aims of the DQI

What to do now



Introduction

What is design quality

Conceptual framework

Using the DQI

Aims of the DQI

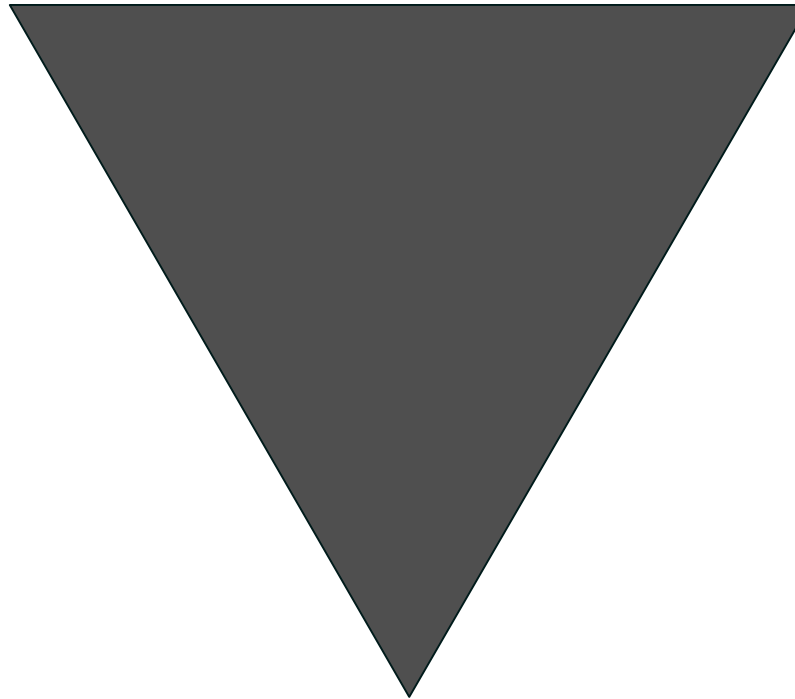
What to do now

Commodity

Utilitas

Delight

Venustas



Firmness

Firmitas

Introduction

What is design quality

Conceptual framework

Using the DQI

Aims of the DQI

What to do now

FUNCTIONALITY

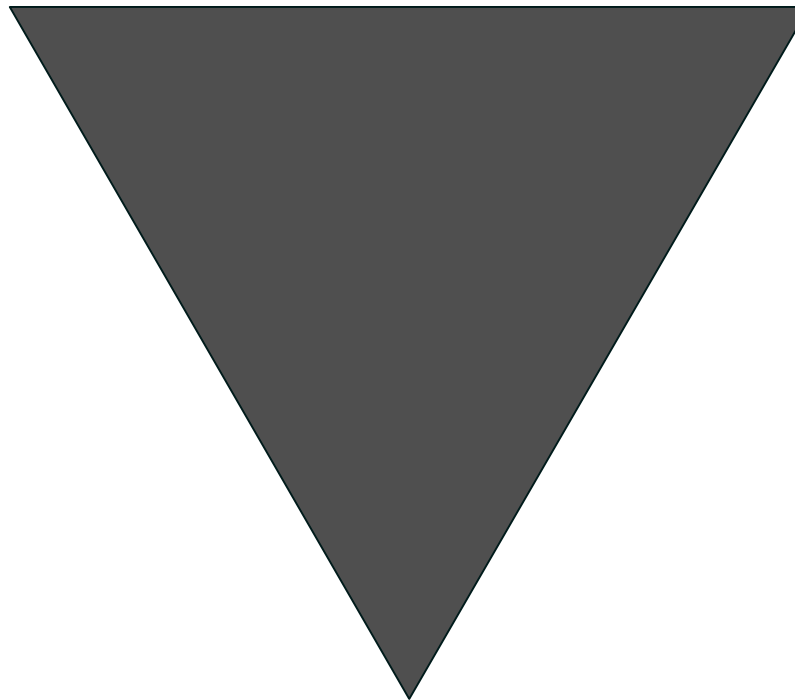
Commodity

Utilitas

Delight

Venustas

IMPACT



Firmness

Firmitas

BUILD QUALITY

Introduction

What is design quality

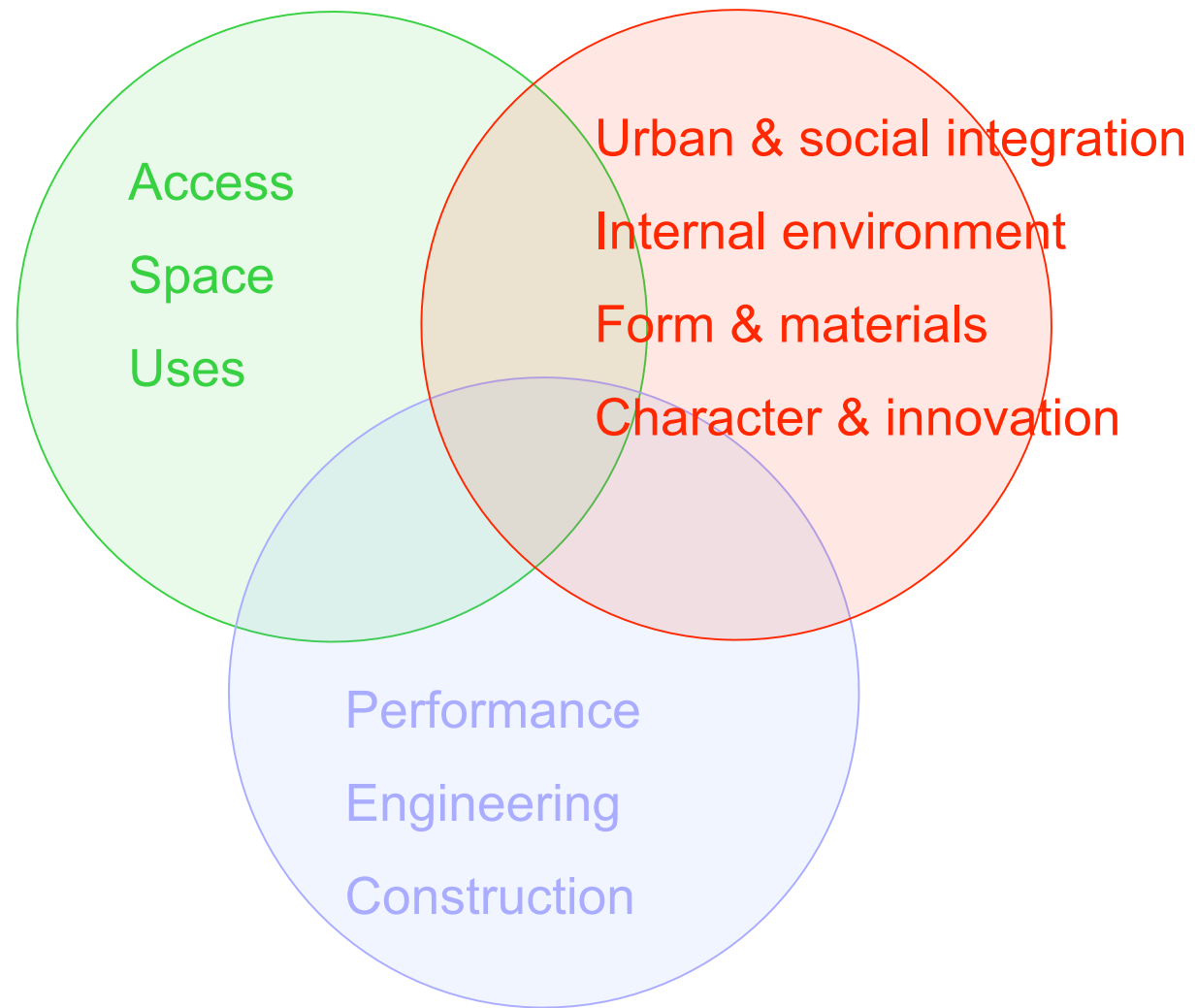
Conceptual framework

Using the DQI

Aims of the DQI

What to do now

FUNCTIONALITY



IMPACT

BUILD QUALITY

- Sept 1999 - development starts
- March 2001 – version one (on paper)
- July 2002 – trailblazing scheme with 84 organisations testing the tool
- Oct 2003 – DQI launched (on-line)
- July 2005 – FAVE weighting added (now RDI)
- Dec 2005 – DQI for Schools launched; use is mandatory for Building Schools for the Future
- July 2006 – use began in USA for public buildings and hotels
- To date 1000 projects registered

Introduction

What is design quality

Conceptual framework

Using the DQI

Aims of the DQI

What to do now

Project stages:

Briefing

Commit to Invest

Design

Commit to Construct

Construction

In-Use

Increasing detail

Increasing legibility for users

setting aspirations

assessing aspirations

DQI

Application over the project cycle

Introduction

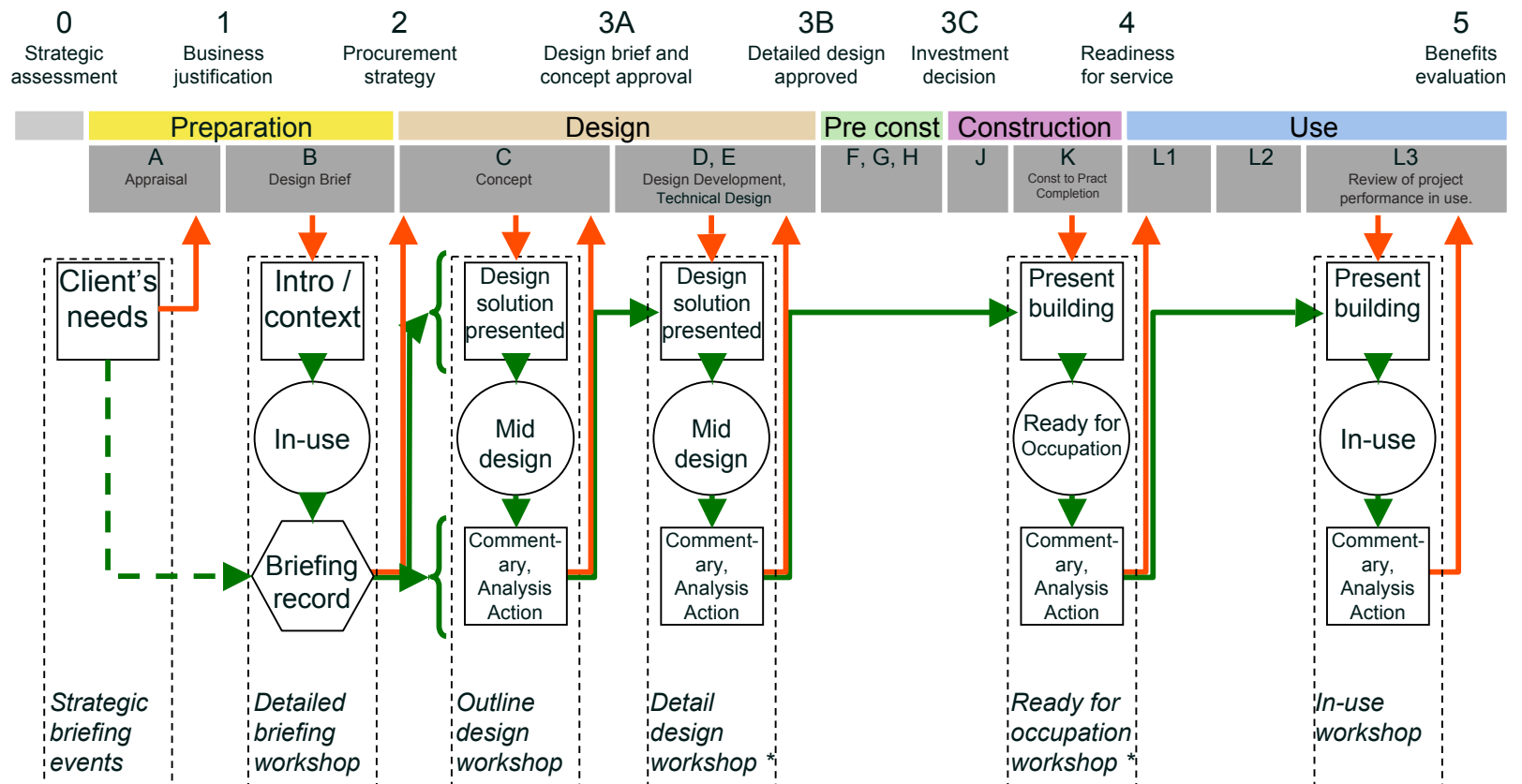
What is design quality

Conceptual framework

Using the DQI

Aims of the DQI

What to do now



Introduction

What is design quality

Conceptual framework

Using the DQI

Aims of the DQI

What to do now

- when assessing a design or building the DQI collects views from stakeholders using the DQI assessment tool
- the tool is used by clients, users (including school children), administrators and facility managers as well as the design team.
- it highlights different views and aspirations of the various stakeholders
- it allows comparison with the briefing data to see how well the design or building is achieving the agreed aspirations

DQI

Questionnaire to assess your design

Introduction

What is design quality

Conceptual framework

Using the DQI

Aims of the DQI

What to do now

http://www.dqi.org.uk - DQI - DQI Questionnaire - Microsoft Internet Explorer

DQI QUESTIONNAIRE

Impact
Impact includes a building's ability to delight, to intrigue, to create a sense of place, and uplift the local community and environment. Also the design's contribution to the arts and science of building and architecture.

Internal Environment
Internal Environment is concerned with the quality inside the buildings envelope. The quantitative aspects of some of these elements are dealt with under Performance.

	Strongly Disagree	Disagree	Tend to Disagree	Tend to Agree	Agree	Strongly Agree	Not Applicable	Don't Know
1 The building will be a pleasure to use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 The building will not feel cramped or overcrowded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 The building will reduce stress for users	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 The circulation spaces and common areas will be enjoyable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 The natural light in the building will be of high quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 The artificial light in the building will be of high quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 The indoor temperature of the building will be comfortable in all seasons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 The indoor air quality will be pleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 The building will have good acoustics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10 The building will provide good views	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11 The level of personal control of the internal environment will be appropriate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Close Session

Previous Section Next Section

Introduction

What is design quality

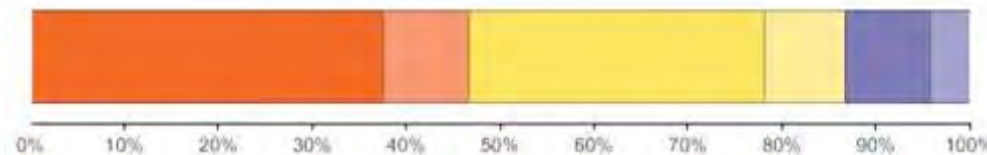
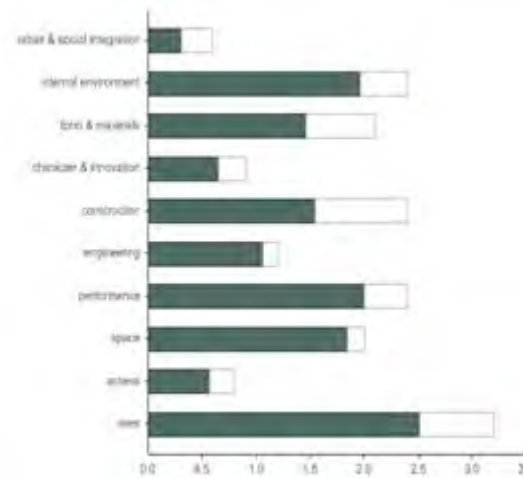
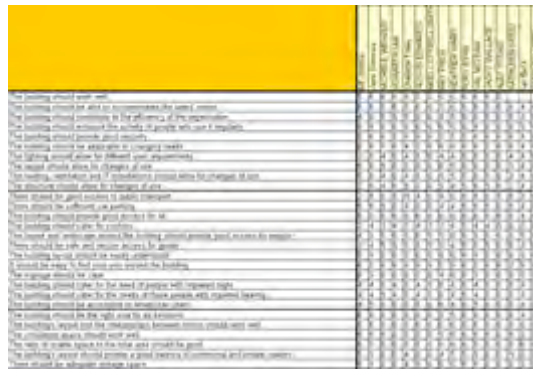
Conceptual framework

Using the DQI

Aims of the DQI

What to do now

Assessment results from stakeholders are presented in graphs and Excel sheets to help compare between groups of respondents, project stages and different projects



Introduction

What is design quality

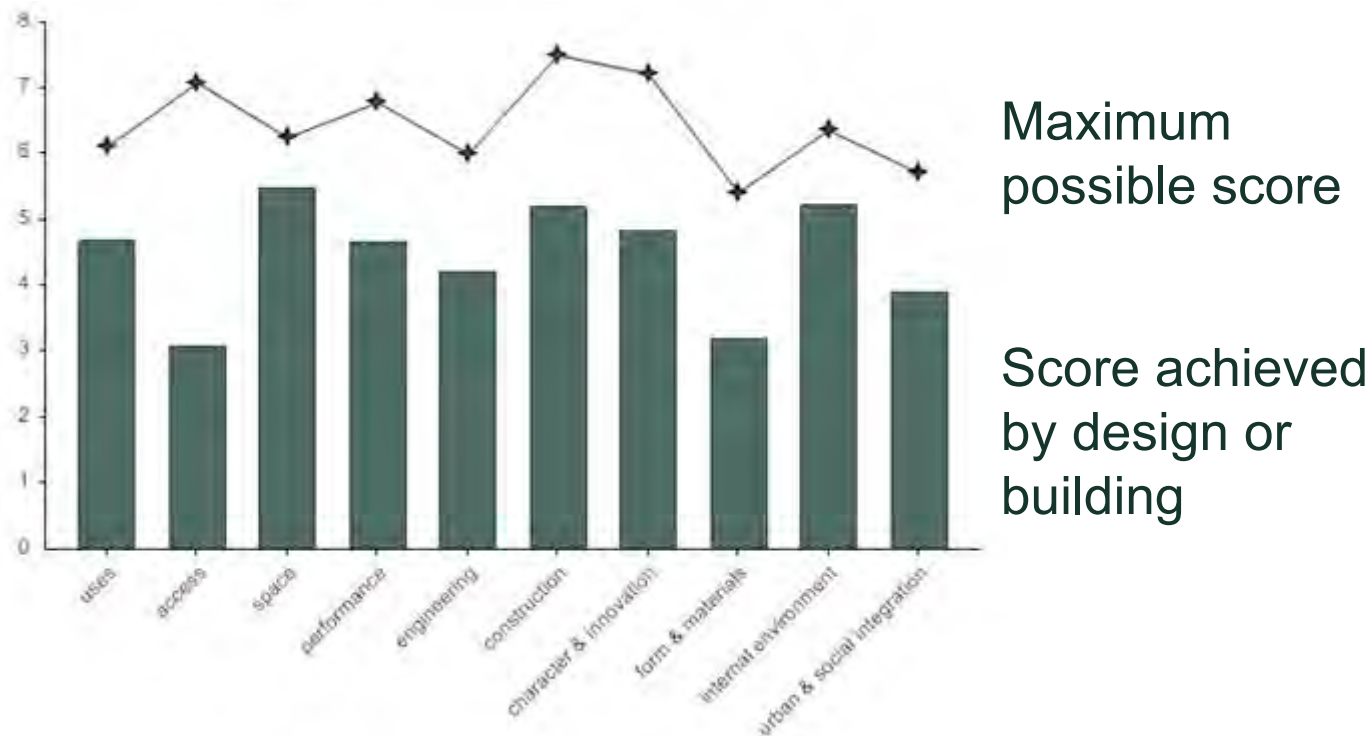
Conceptual framework

Using the DQI

Aims of the DQI

What to do now

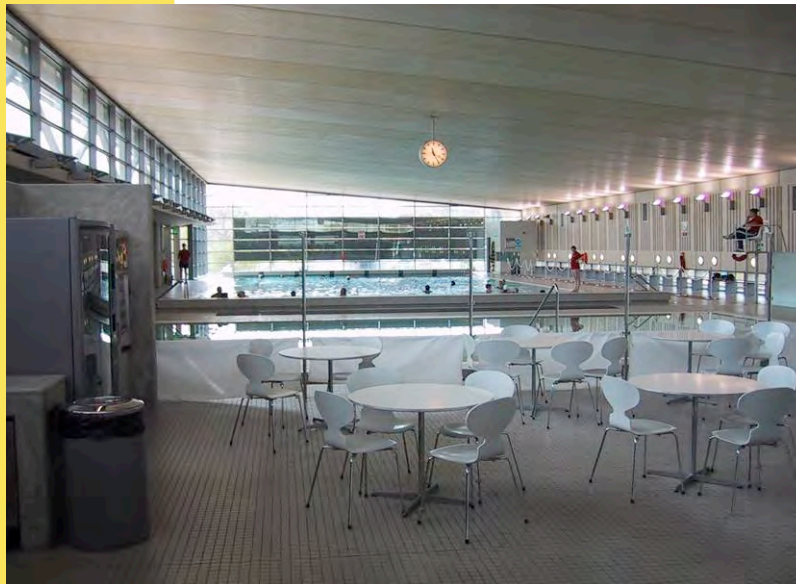
Data from assessments is compared with the Required, Desired, Inspired weightings defined at briefing to visualise how well the building or design is achieving stakeholders aspirations



DQI

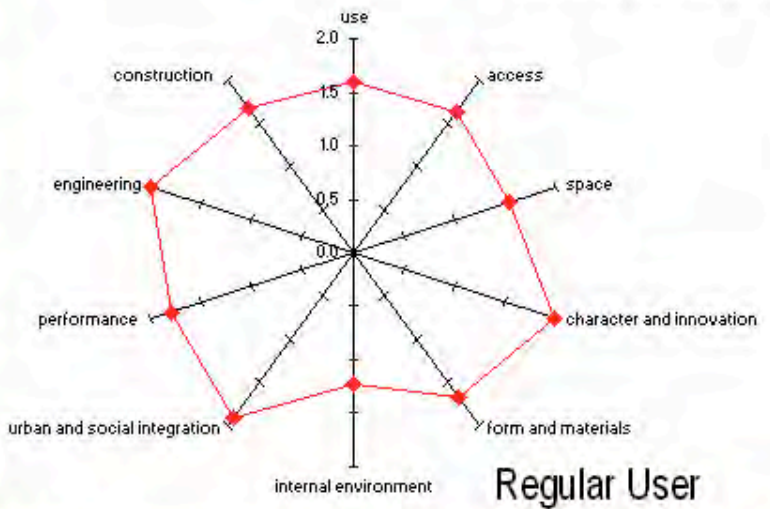
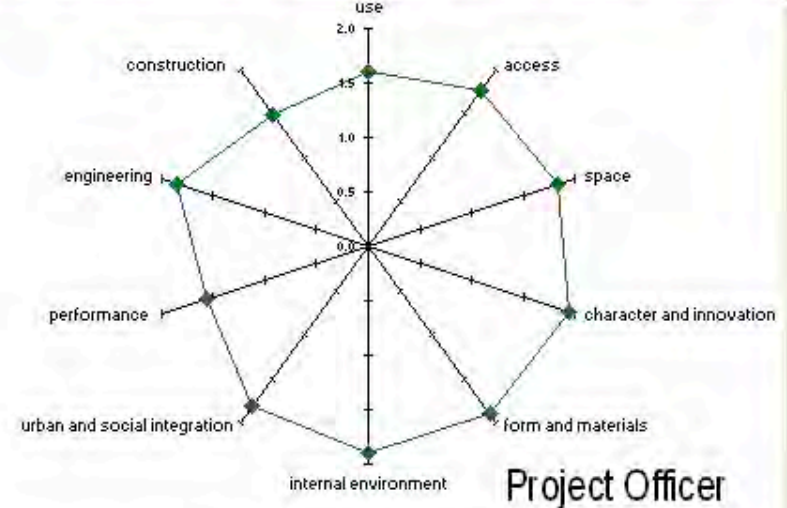
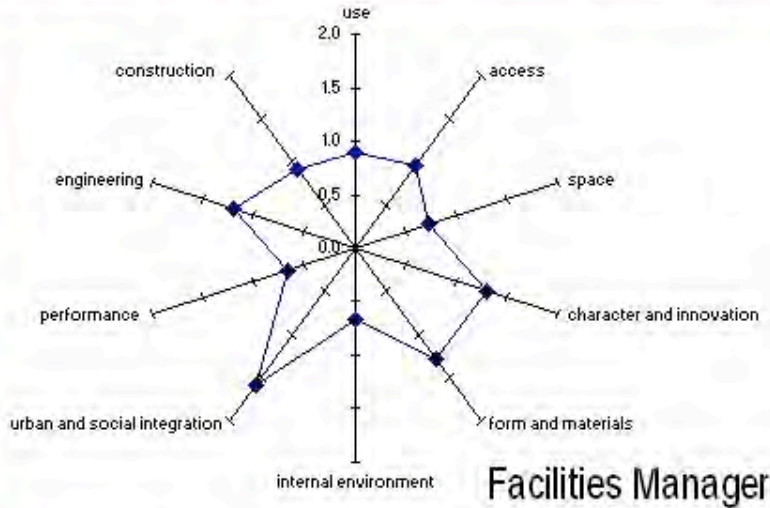
Darlaston Leisure Centre

“... We've got the best baths in the area and people are coming from miles to use it.” (local user)



BUT

“..the gym overheats and the reception desk is very difficult to use.” (facilities manager)



- FINANCE**
 - Time spent on site
 - Capital cost of construction
 - Cost per square metre
 - Total floor area
- RESOURCES**
 - Use of robust method of whole life costing in design development
 - Environmental sustainability an important driver in design of the building
- CONTEXT**
 - Environmental sustainability assessed
 - Procurement route
 - Key planning/legislative issues
 - Design champion
 - What drove design quality?

DQI

Case Study : International Digital Laboratory at the University of Warwick

Introduction

What is design
quality

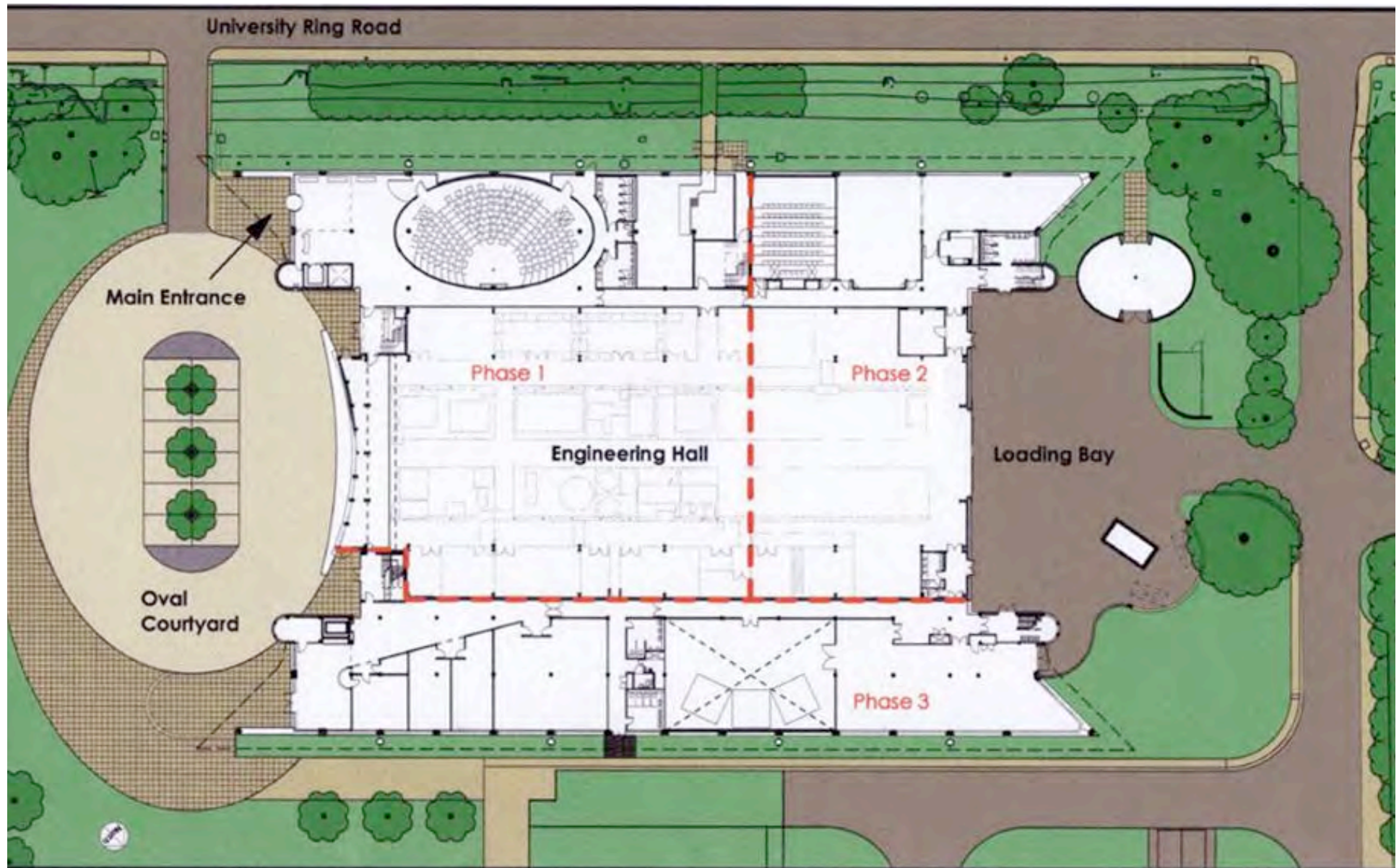
Conceptual
framework

Using the DQI

Aims of the DQI

What to do now

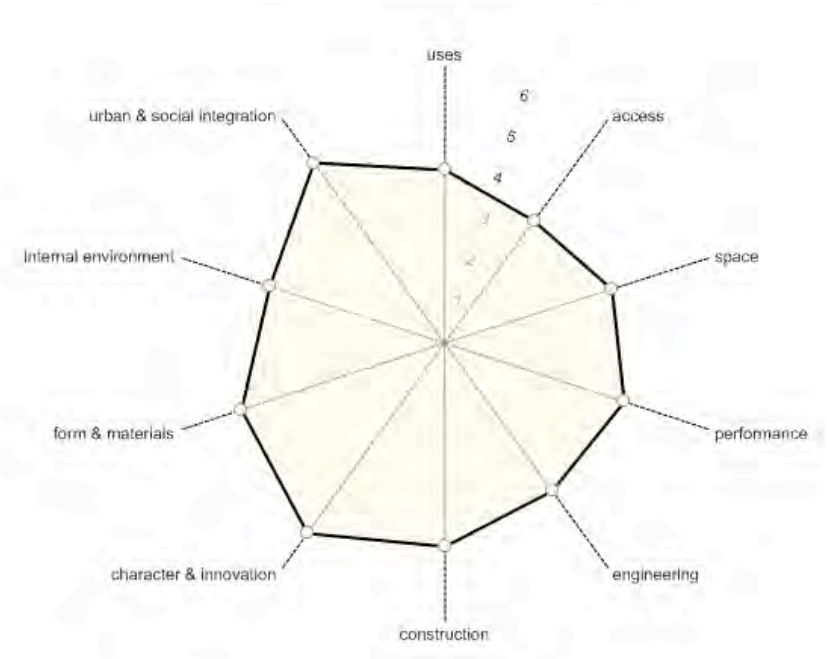




International Manufacturing Centre
University of Warwick

Plan 1:600





The DQI participants:

- Facilities Manager
- Project Manager
- Systems Manager
- Senior Researcher
- Head of Academic Admin.
- Receptionist

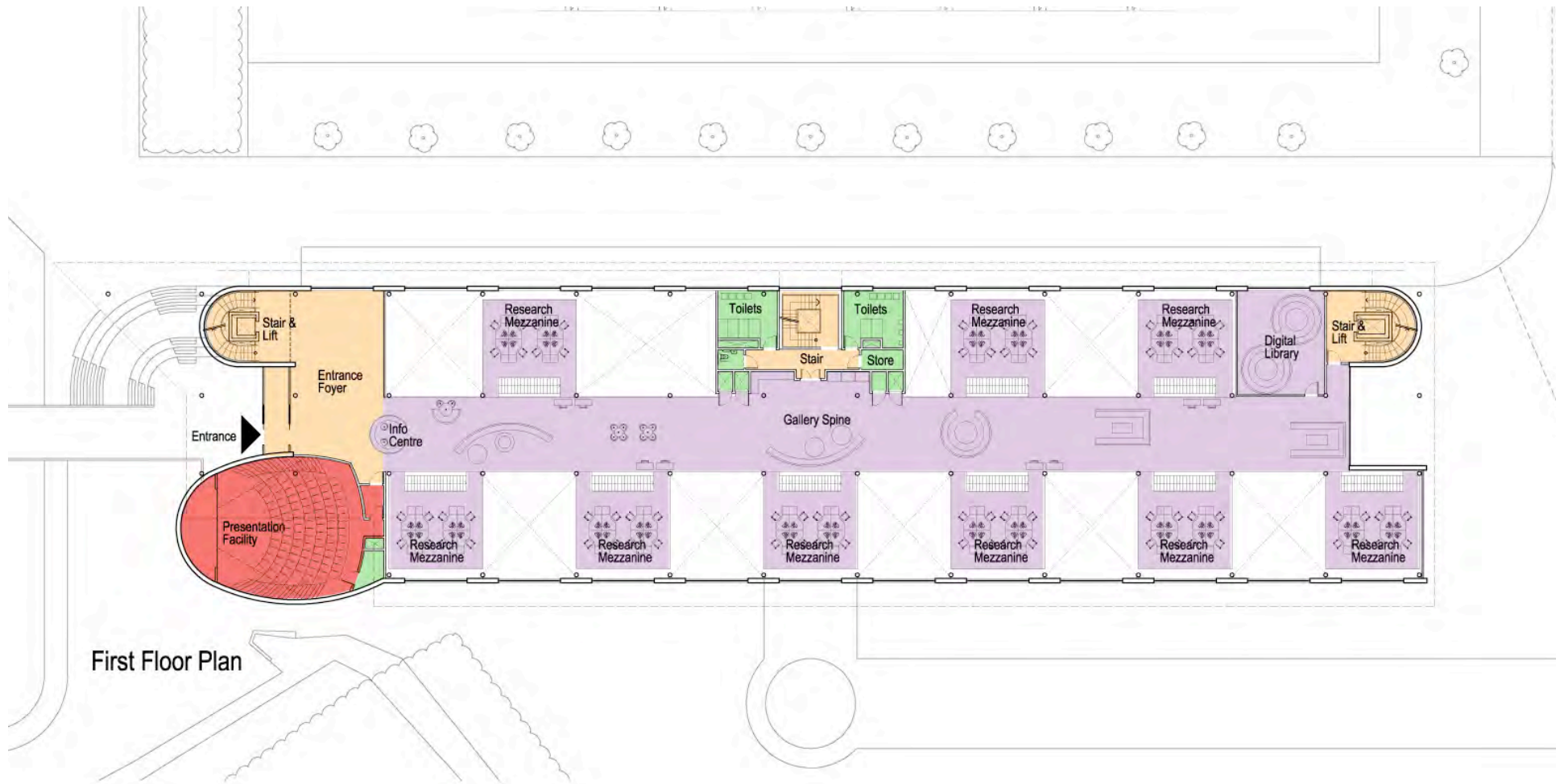
and were observed by

- Architects
- Engineers
- Quantity Surveyor



EDWARD CULLINAN ARCHITECTS





First Floor Plan

- Key:
- Lobby/Circulation
 - Presentation Facility
 - Demonstrator & Research Space
 - Offices & Meeting Rooms
 - Toilets/Plant



Ground Floor Plan







Introduction

What is design quality

Conceptual framework

Using the DQI

Aims of the DQI

What to do now

- focus on comparison to help communication and encourage involvement within the project team
- improve briefing in a shared language
- monitor and review design aspirations throughout the process
- manage expectations by aspiring for quality and in the longer term
- through benchmarking and cross comparison to correlate quality with factors in the procurement process to influence decisions for delivering excellent quality

DQI

Find out more...

Introduction

What is design
quality

Conceptual
framework

Using the DQI

Aims of the DQI

What to do now

- www.dqi.org.uk
- read case studies about how the DQI has been applied at www.dqi.org.uk/casestudies

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