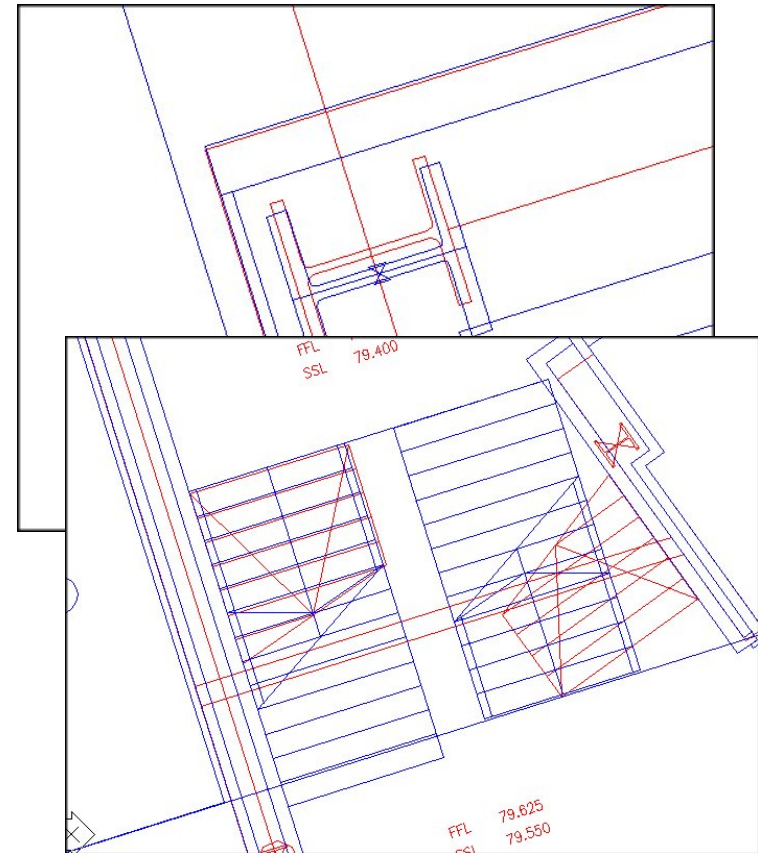




# Avanti is an approach

- An approach to collaborative working that enables construction project partners to work together effectively.
- The Avanti approach is supported by handbooks, toolkits and on-site mentoring.
- The Avanti approach improves business performance, by increasing quality of information and predictability of outcomes and by reducing risk and waste.
- Avanti is not an IT system or tool, nor an organisation or club.



# Who has had experience of the Avanti approach?

**Buro Happold**

**Balfour Beatty**

ARUP

roberts & partners

**RW Gregory LLP**  
CONSULTING ENGINEERS

GVA Second London Wall  
Project Management

hbg

FABER MAUNSELL

ATKINS

HOK  
SPORT+VENUE+EVENT

carillion

BDP

RICS

ZBP  
Zissman Boyer & Partners  
Consulting Engineers

BAA

BLACK & VEATCH

HOARE  
LEA

SKANSKA

peter brett associates

WELSH HEALTH ESTATES  
YSTADAU IECHYD CYMRU

nbs

Pell Frischmann  
CONSULTANTS

MANCHESTER  
CITY COUNCIL

m Mott  
MacDonald

Gehry

POLLARD THOMAS EDWARDS architects

Halcrow

COSTAIN

excitech  
technology for design

Stent

Bovis  
Lend Lease

EPR

whitbybird

TPS

architecture  
REID

Allies and Morrison

Sir Robert  
McALPINE

sloughstates  
international

Taylor Woodrow

CAPITA SYMONDS

NG Bailey & Co

Interserve

WSP

LAING O'ROURKE

DAVIS LANGDON

MWH

British Land

ARCHITECTS  
HW

SOLAGLAS  
Saint-Gobain  
Glass Solutions

wates

amec

Waterman Group

Carl Bro

GABLE

Somerfield

BSRIA  
Institute of Brick, Stone and Building Research

Thames  
Water

Hyder  
Consulting

CN&M  
CONCRETE NETWORK

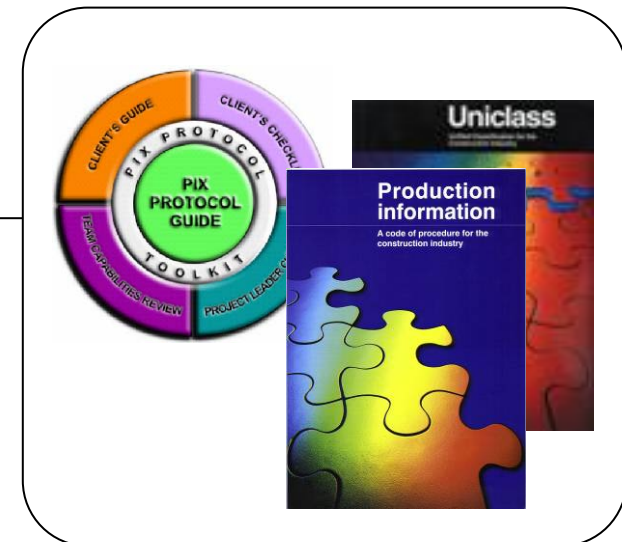
thestudioFAB.network

CAPITA

Capita Percy Thomas

# How did the approach come about?

- An industry led improvement programme which brought together leading players in the UK.
- Government support from the **dti**
- Builds upon existing industry approaches
- Aim: to deliver **improved project and business performance** through the use of Information & Communication Technology (ICT) to support collaborative working.

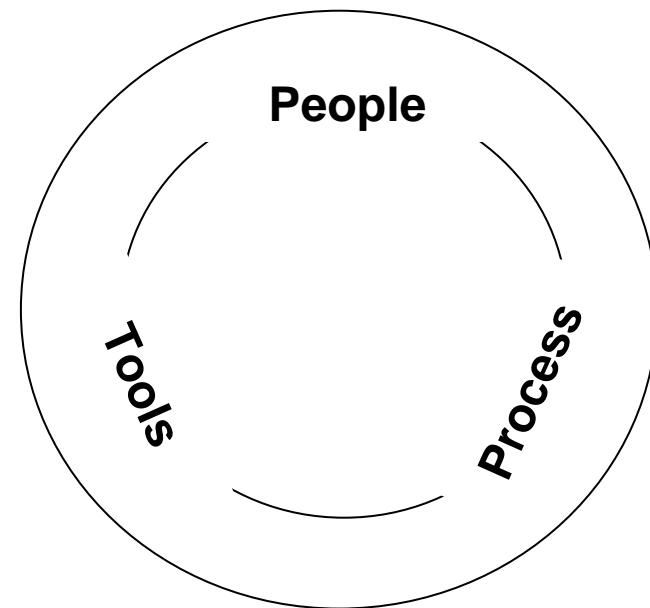


- Now led and driven by




# 3 aspects of the Avanti approach

- Getting **people** to work together
- Providing **processes** to enable collaboration
- Applying **tools** to support collaborative working



# The route to integrated projects

	Increasing levels of collaboration, process alignment and technical capability 		
<b>People:</b> team integration	Separate black box organisations	Co-ordinated project teams	Fully integrated project teams
<b>Process:</b> compatible approaches	Sequential, independent project processes	Co-ordinated project processes	Concurrent project processes
<b>Tools:</b> technical capability	Exchange of paper, 2-D design representation	Simple 3-D design representation	Information-rich object modelling

Source: Building Design Partnership - modified

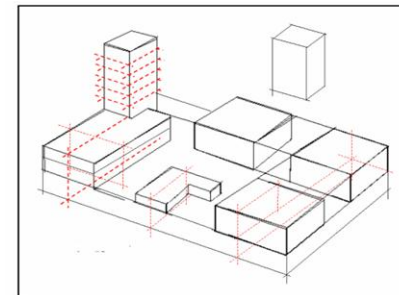
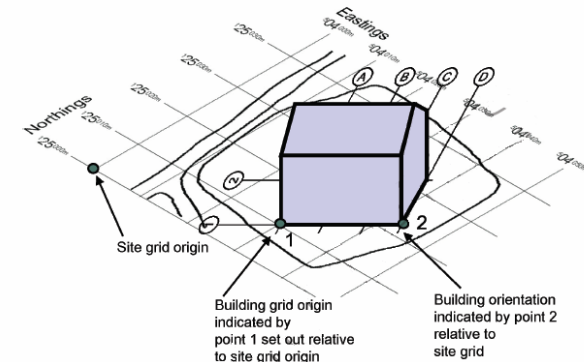
# Principles of the Avanti approach

## Information Standards

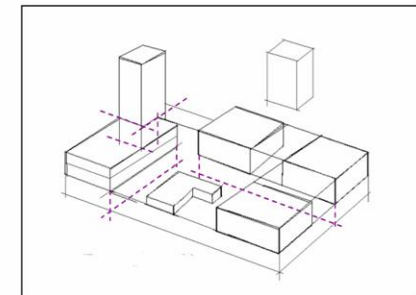
- Compatibility of information
- Accuracy of information
- Information structure
- Status, purpose and revision
- Information sharing

## Design Process Management

- Roles & responsibilities
- Information planning
- Performance and resource monitoring
- Interface management
- Managing changes to information
- Information review, checking and approval



Fire Compartment zones

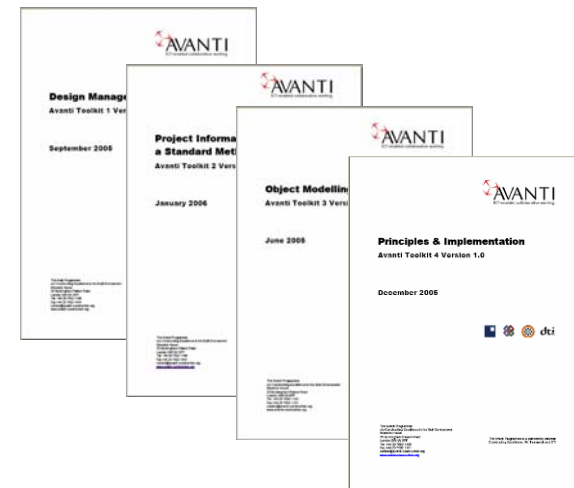


Movement/Expansion joints generate zones which are structurally isolated



# How is the approach delivered?

## 1. Guidance & procedures



## 2. Expert facilitation & mentoring



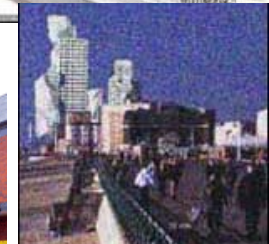
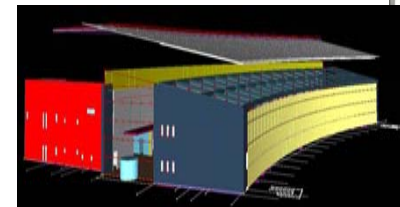




# Avanti Projects

Over 30 projects, including:

- Farnborough business park
- PalaceXchange retail development, Enfield
- St Helens & Knowsley Hospitals
- Thames Water design framework
- Redhill community centre
- St Alfred Centre, Hove
- Voyager Park, Portsmouth
- Welsh Health Estates framework agreement
- Somerfield store, Kenilworth





# Impacts of the Avanti approach

- Early commitment shown to offer 80% saving on implementation cost on medium size project
- 50-85% saving on effort spent receiving information and formatting for reuse
- 60-80% saving on effort spent finding information and documents
- 75–80% saving in effort to achieve design co-ordination
- 50% saving on time spent to assess tenders and award sub-contracts
- 50% saving on effort in sub-contractor design approval

# Some specific impacts

- Full compliance with the Avanti approach shown to save equivalent of one full-time CAD technician
- Rigid compliance with the Avanti approach shown to have potential to save >£88K by removing design rework
- Time saving in preparing information for issue: shown to be 20 man-weeks in just one area of a medium size project
- Savings calculated at £500K in remedial works avoided through use of the Avanti approach



# Avanti Success Stories

**Halcrow**



**CAPITA SYMONDS**



**WELSH HEALTH ESTATES  
YSTADAU IECHYD CYMRU**



- Halcrow implement elements of the approach in their construction business.
- Costain put in place training programme for their Design Managers and implement the approach on further projects.
- Reid Architecture implement the approach on their projects.
- Capita Symonds put in place programme to adopt the approach company-wide.
- Taylor Woodrow start to roll out the Avanti approach on Schools projects.
- Thames Water roll out the approach into their eight design framework partners.
- The Avanti approach features in architect's training at Oxford Brookes University.
- Welsh Health Estates encourages bidders on its 'Designed for Life: Building for Wales' framework programme to adopt the Avanti approach.
- RICS preparing training in the Avanti approach for its members.
- A community of industry practitioners comes together to share experiences.
- DTI rate the development and implementation of the Avanti approach sufficiently highly that they provide further funding to put a new business model in place.