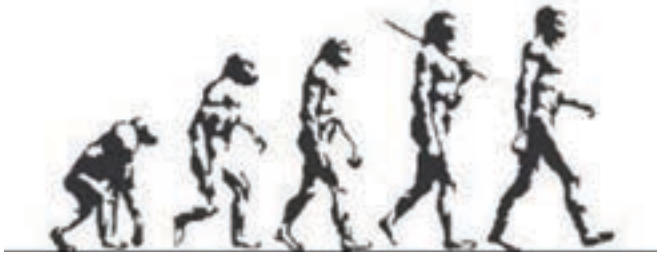
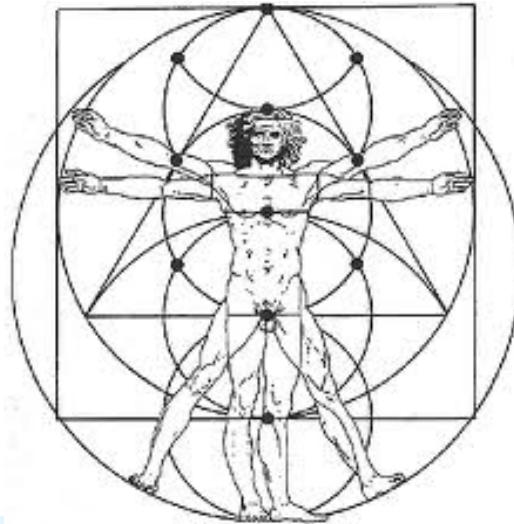


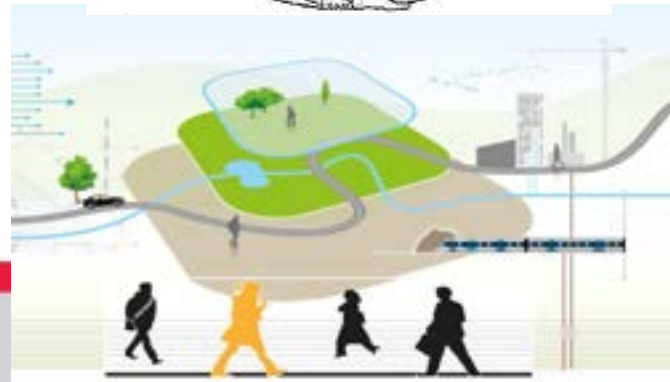
THE WHOLE PICTURE



BIM Maturity



FM System Project



Government Soft Landings (GSL)

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THE WHOLE PICTURE

CAPITAL PROJECTS AND MASTERPLANNING



EXISTING ESTATES PORTOFOLIO



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COLLABORATION FROM WITHIN

DESIGN

CAD/BIM TEAM

Strategy

EIRs

Quality

Assurance

As Built Records -

Model and

information

management

Electronic asset

tagging (use of

intelligent labels)

PROJECT TEAM

Project

Management

Procurement

Compliance

Finance

MAINTENANCE TEAM

MTC

Management

Planned

Maintenance

Reactive

Maintenance

Asset register

format

TECHNOLOGIES TEAM

FM set up

Links to
drawings and
models

Space, asset and
asbestos

databases

Maintenances

SLAs and

reporting

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COLLABORATION - PROJECT TEAM



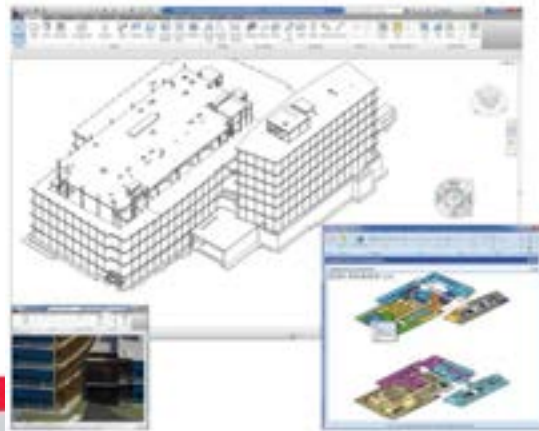
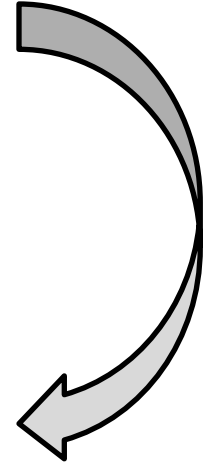
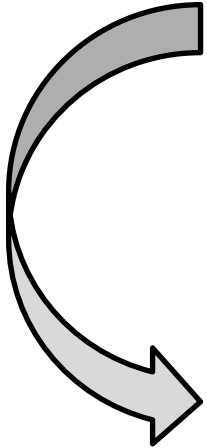
STRUCTURE



ARCHITECTURE



SERVICES



MODEL

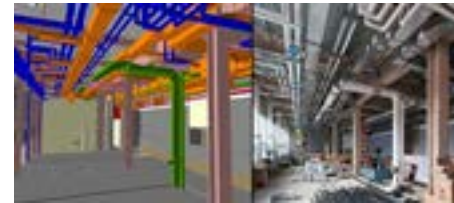
+

DATA

=

FM

INFORMATION



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PROJECT TEAM - COLLABORATION

COMPETENCY: FITNESS LEVEL

- Technical ability
- Social skills
- Resilience
- Self-confidence
- Continuous development
- Clear communication

REFEREEING: PROJECT INFORMATION MANAGEMENT AND QUALITY ASSURANCE

- Quality control: responsibilities, validation process and achieving quality targets



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COLLABORATION



Team resilience is as strong as the weakest part

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COLLABORATION – PROJECT TEAM THE PRIZE



BENEFITS

- Enhanced design and construction process
- Resolved clashes and design hurdles
- Tried and tested construction programme and logistics
- Upskilled professionals and marketable design and construction services
- Complete, fully confederated and clash resolved As Built model ready to plug in FM tool at handover
- No more O & M paper folders

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SETTING THE RULES OF THE GAME

RIGHT INFORMATION AT THE RIGHT TIME IN THE RIGHT FORMAT

- Integrated Project Delivery and BIM Execution Plan
- Clear contractual arrangements including Intellectual Property rights to model content and data
- Consistent level of capability and approach within the design team, University estates team, contractor and supply chain
- Concise deliverables at every work stage.
- Clear programme for model and information deliveries: time allowances for decision making process
- Robust templates and format for information content. Inclusion of early and precise labelling for accurate costing from concept stage
- Revit as a basic software platform to secure interoperability
- Clear roles and responsibilities



University of the
West of England

bettertogether

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BIM EXECUTION PLAN – PROJECT SPECIFIC

- Confidential
- Liability
- Publishing and copyright
- Agreement
- Define targets and responsibilities: timely delivery
- Define exchange of information
- Handover to client

BIM MANAGEMENT AND CO-ORDINATION

- BIM Standards and References
- Roles and responsibilities
- Requirements
- Model management strategies
- Model authorised users

MODEL SPECIFICATIONS

- Level of Development
- Naming protocols
- Origin and direction
- Master documents index

INFORMATION EXCHANGE AND SPECIFICATIONS

- Data Management
- Common data environment: distribution groups
- Data archiving
- Processes and data management
- Surveys and extra information

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PARTNERING

DESIGNERS/CONTRACTORS



- Reduce duplication and
- One source of information
- Coordinated fully clash resolved
- FM ability: Capability of
- ultimate goal: BIM O&M
- on FM tool from day one
- Marketing and enhanced



FACULTY OF ENVIRONMENTAL TECHNOLOGY



Recognised and
programmes:
and whole
sites including some
working with our
economy,
communities and
ers

Estates staff support in teaching activities

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CAFM – THE ULTIMATE GOAL

Strategic Planning and Maintenance

PPM and RM Management

Asset Management

Database linked with O&M manuals, Building Logs, H & S, PPM and RM

Space Management

Space database, reporting, room bookings, timetable link, wayfinding, moves and space planning

Adaptability

Exploring building flexibility, change of use, energy efficiency improvements, refurbishment decision making

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Morrell, Paul (2010)