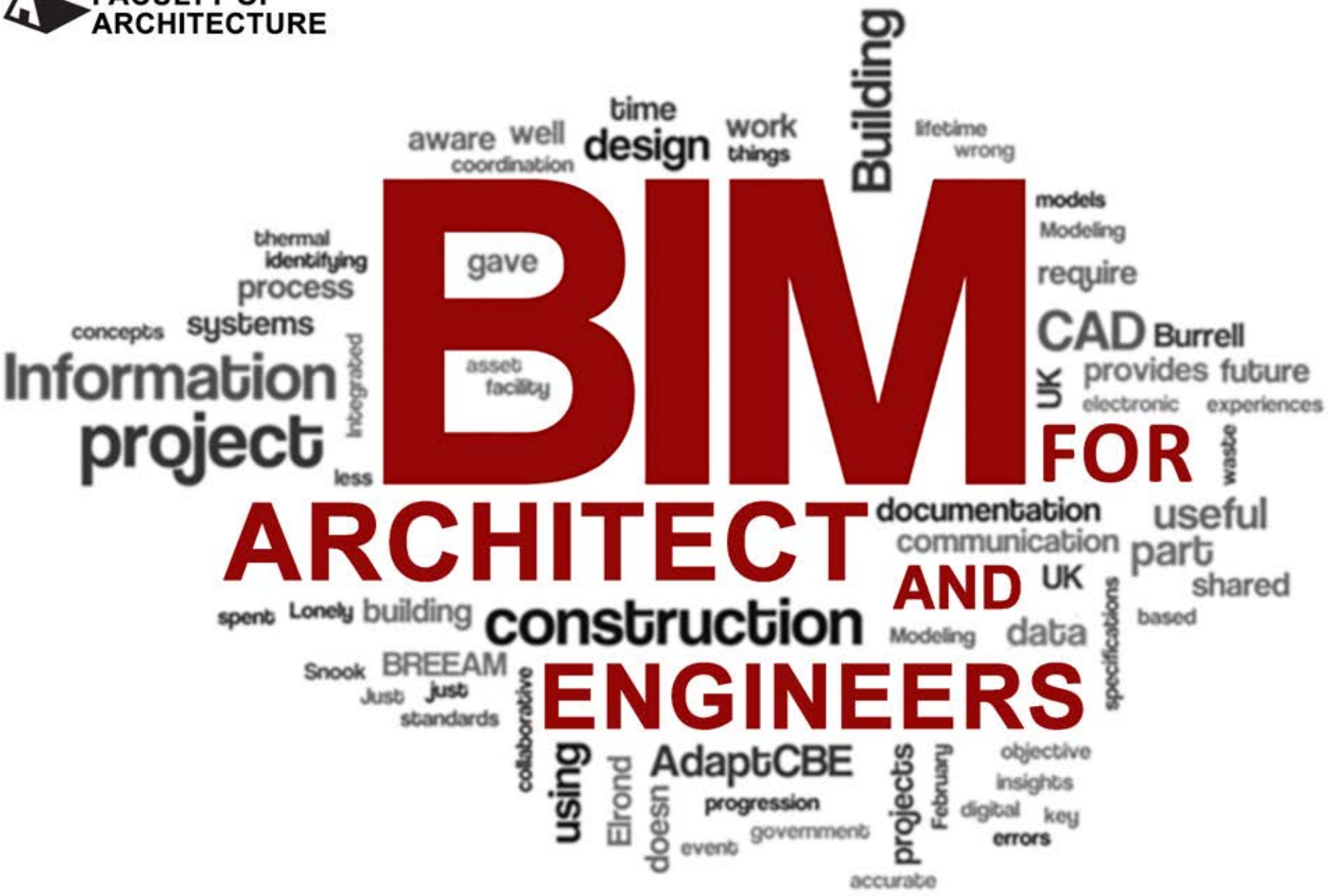
UNIVERSITY OF BELGRADE
FACULTY OF ARCHITECTURE



Fiori Domenico

NEW SCENARIOUS

INTELLECTUAL TRANSITION

NEW APPROACH TO DESIGN

INCREASE COMPLEXITY OF THE BUILDING PROCESS

DIFFERENT INFORMATION MANAGEMENT

DIFFERENT DIVISION OF COMPETENCES

MORE INTERACTION BETWEEN DIFFERENT PROFESSIONALS

CHANGE OF STAFF

	PROJECT HOURS		
Professional grade	Pre-BIM	Post-BIM	Change
Principal	32	32	0%
Project manager	128	192	33%
Project architect	192	320	40%
Architect 1	320	192	-67%
Intern architect	320	96	-233%
Total	992	832	-19%

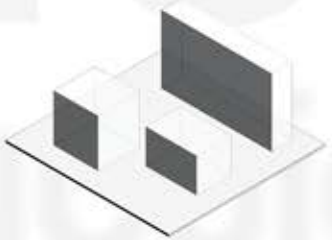
NEW FIGURES

- BIM Manager
- BIM Coordinator
- BIM Specialist

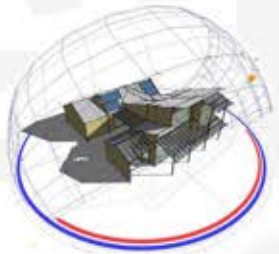
NEW DESIGN TOOLS

DESIGN-CONSTRUCTION INTEGRATION

CONCEPTUAL DESIGN



ANALYSIS AND SIMULATION



CONSTRUCTION BUILDING MODELS

DESIGN-CONSTRUCTION INTEGRATION

- Facilitating identification of the issue
- Reducing the difference betwen the C.M and the building
- Reducing of cycle time for fabrication
- Reducing coordination errors betwen sistems

CONSTRUCTION BUILDING MODELS

- LV 1
- LV 2
- LV 3

CONCEPT → PRELIMINARY DESIGN → DETAILED DESIGN → CONSTRUCTION DOCUMENTATIO

CONCEPTUAL DESIGN

- 3D Skatching
- Volumes
- Orientation
- Preliminary analysis

ANALYSIS AND SIMULATION

- Solar analysi
- Cost estimation
- Structural analysi
- Lighting analysi
- ...

OBJECT INFORMATIONS MENAGEMENT

BIM
(Building information modeling)

BOM
(Building Object modeling)

2S OR 3D GEOMETRY

MATERIAL

PARAMETRIC GEOMETRY

CONNECTION WITH OTHER SYSTEMS

PERFORMANCE SPECIFICATIONS

THERMOPHYSICAL FEATURES

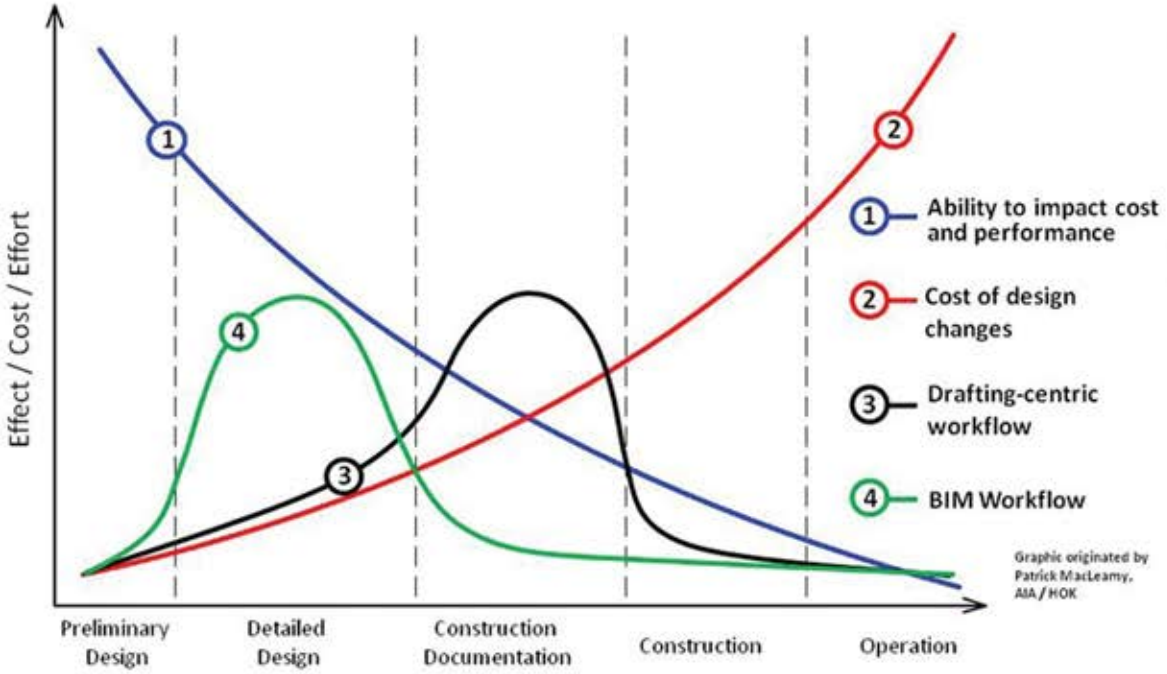
GRAPHICS FEATURES

LUMINOUS INTNSITY DISTRIBUTION CURVE (for ligth fixtures)

LINK TO PRODUC DISTRIBUTION CHANNELS

WHY BIM?

COSTS BENEFITS



TRDITIONAL DESIGN

- More efforts during the Construction documentation phase
- Costs increase during the construction phase

BIM DESIGN

- More initial efforts
- Costs decrease during the construction phase