

BUILDING INFORMATION MODELLING RESEARCH AND APPLICATIONS



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🚧 Dr. Henry Abanda

- ❑ CEng & Senior Lecturer in Construction IT
- ❑ Interest in Semantic Web, Big Data and **BIM**
- ❑ **Sustainable Construction**



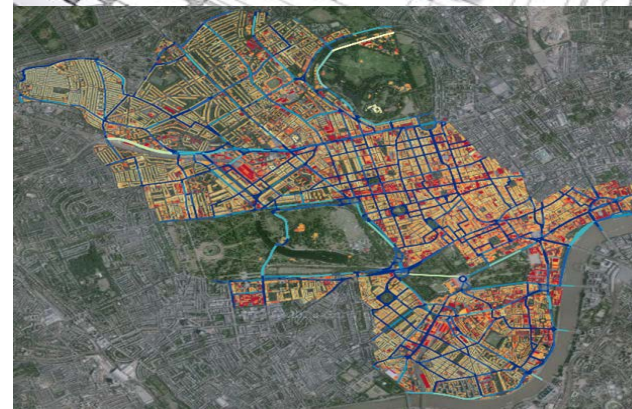
School of the Built
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Oxford Brookes University
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BUILDING INFORMATION MODELLING (BIM): WHAT IS IT?

The UK CIC defines BIM as ...

“an innovative and collaborative way of working that is underpinned by digital technologies which support more efficient methods of designing, creating and maintaining the built environment” .

BIM & RELATED CONCEPTS



- CIM (City Information Modelling)
- CIM (Civil Information Modelling)
- UIM (Urban Information Modelling)
- GBIM (Geotechnical Building Information Modelling)
- BrIM (Bridge Information Modelling)
- IIM (Infrastructure Information Modelling)




BIM APPLICATIONS

- 📁 Virtual assessment of alternative performance parameters of projects
- 📁 Visualisation
- 📁 Lifecycle management of projects
- 📁 Project collaboration
 - 📁 Quantity take-offs
 - 📁 Cost and affordability
 - 📁 Project planning
 - 📁 Sustainability

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RESEARCH PROJECTS/COLLABORATION

-  Brookes Central Research Funds
 -  Santander
 -  Oxford Brookes' 150th Anniversary PhD studentship
 -  EPSRC
 -  International Labour Organisation, Intergovernmental Panel on Climate Change
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- Most of the above funded projects have focused on applications in developed countries
 - Recently made a shift to BIM for construction in developing countries

RESEARCH IMPACTS



- ❑ UN-Habitat III, Quito-Ecuador
- ❑ Was the only on BIM
- ❑ => 100 participants
- ❑ Very positive feedback especially from government officials from developing countries
- ❑ Visit twitter @Utconnect
- ❑ Peer-reviewed publications (Last REF and future REF)

RESEARCH IMPACTS



urbantransformations @UTconnect - Oct 19

Henry Abanda @oxford_brookes
presenting current + ideal mobile #BIM
workflows for participatory upgrading
#UTQuito



urbantransformations @UTconnect - Oct 19

Henry Abanda Fonbeyin @oxford_brookes "#BIM =
process+technology+people.. 'Building' as a verb" #UTQuito #Habitat3



FUTURE INTEREST

- ✚ Really interested in working with anyone in the built environment especially on projects in developing countries
- ✚ Any project provided I understand

THANK YOU!

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