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EU-BIM, Leadership and Strategies

CEN, ISO and buildingSMART and IFC





Aarhus University Hospital 500.000 m²
Construction costs (2007-2022)+ billion Euro/+8 billion DKK



20171201 ACE-BIM, Peter Hyttel Sørensen Danish Association of Architectural Firms

BIM Leadership in Europe, "The players"



EU BIM Taskgroup, supported by the European Commission,





CEN TC 442, European Committee for Standardization ISO, International Organization for Standardization



buildingSmart, Network, IFC standard owner, Lobby organisation



Liaisons to CEN TC442;
ACE, Architects Council of Europe
EFCA, European Federation of Engineering Consultancy Association
+ other organizations and ISO standards

BIM Leadership in Europe, Savings with BIM production?

Source: "EU BIM Taskgroup"

Handbook for the Introduction of Building Information Modelling by the European Public Sector;

"BIM is not new, but it is a global trend that is growing. Reports forecast that the wider adoption of BIM will unlock 15–25% savings to the global infrastructure market by 2025. And it is the technology-led change most likely to deliver the highest impact to the construction sector" [[] [] [] []

Source; Proposed revised Business Plan from CEN/TC 442/WG 1 Building Information Modelling; "A recently published UK Cabinet Office report shows capital cost savings of 19.6% due to use of BIM, saving £840m on £3.5bn of construction spend in the 2013/2014 financia

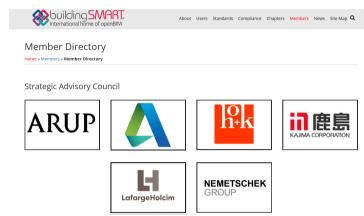
Numbers come from McKinsey&Compagny 1.600.000.000.000.000.000

Lagging construction productivity costs the global economy \$1.6 trillion a year.



BIM Leadership in Europe, BuildingSmart – CEN - EU Taskgroup





buildingSMART is the worldwide authority driving the transformation of the built asset economy through creation & adoption of open, international standards

BIM-IFC and The confusion of concept and definitions

BIM ??

Business Model or Digital Tools



BIM-IFC and The confusion of concept and definitions

Interoperability (software) = "language of mathematics" It's comparable to file container for graphic and data

Methodology (process) = "semantics and language" It's comparable to classification, alphabets, grammar

IFC is a combination of the above
In early 90's it was given the name "The end of Babel"
IFC is a file and data format
IFC is not a business model



BIM – IFC Interoperability

Control functions (Collision, quantity take off) Visual understanding

Integration with other database technology Exchange format for production

Seamless round-tripping of data!

Always Data loss! Compared to (proprietary formats)



BIM - Methology "the business model"

Only a fraction of project information can be handled in IFC IFC models are not 1:1 representations of projects to be built

"The business model"

Is an additional set of process rules and programming standards that finally make up the BuildingSmart BIM business model



Since BuildingSmart is the authority of IFC and other standards,

ACE must ask the question; Does Europe have influence on the digital future?

BIM - Questions for ACE to consider

Since the "big save" by using BIM is of hypothetical/political origin
The CEN BIM concept must be analysed in our own European context
Strategy made by the EU Taskgroup and CEN must be evaluated by a third eye

Business models must be technology neutral and independent Adoption of a single solution is discriminatory

Higher cost for data producers due to BIM / ICT demands; IT infrastructure, hardware, software & licensing, education, data security and liability

Clients ready to pay for these BIM services

Are clients ready? are we?

CEN/BuildingSmart BIM in current version must NOT be mandatory in EU BIM technology are "for now" just digital tools



Thank you