

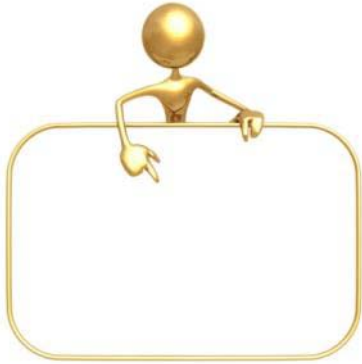
User Group Meeting, Copenhagen, Wednesday 8 September 2010
IDM – introduction, status and plan

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IDM Coordinator

Introduction

- **Information Delivery Manual (IDM)**
 - Information needed in specific business cases – in order to support a fully ICT supported workflow
- **Why/what**
 - Communication
 - Sender/receiver
 - Support automatic digital interpretation of data
 - Computers have a low level of tolerance regarding data
 - Ordinary software products require well defined data sets
 - IDM are made to solve these problems for the construction!

Introduction



Information
Delivery Manual
(IDM)

Certification

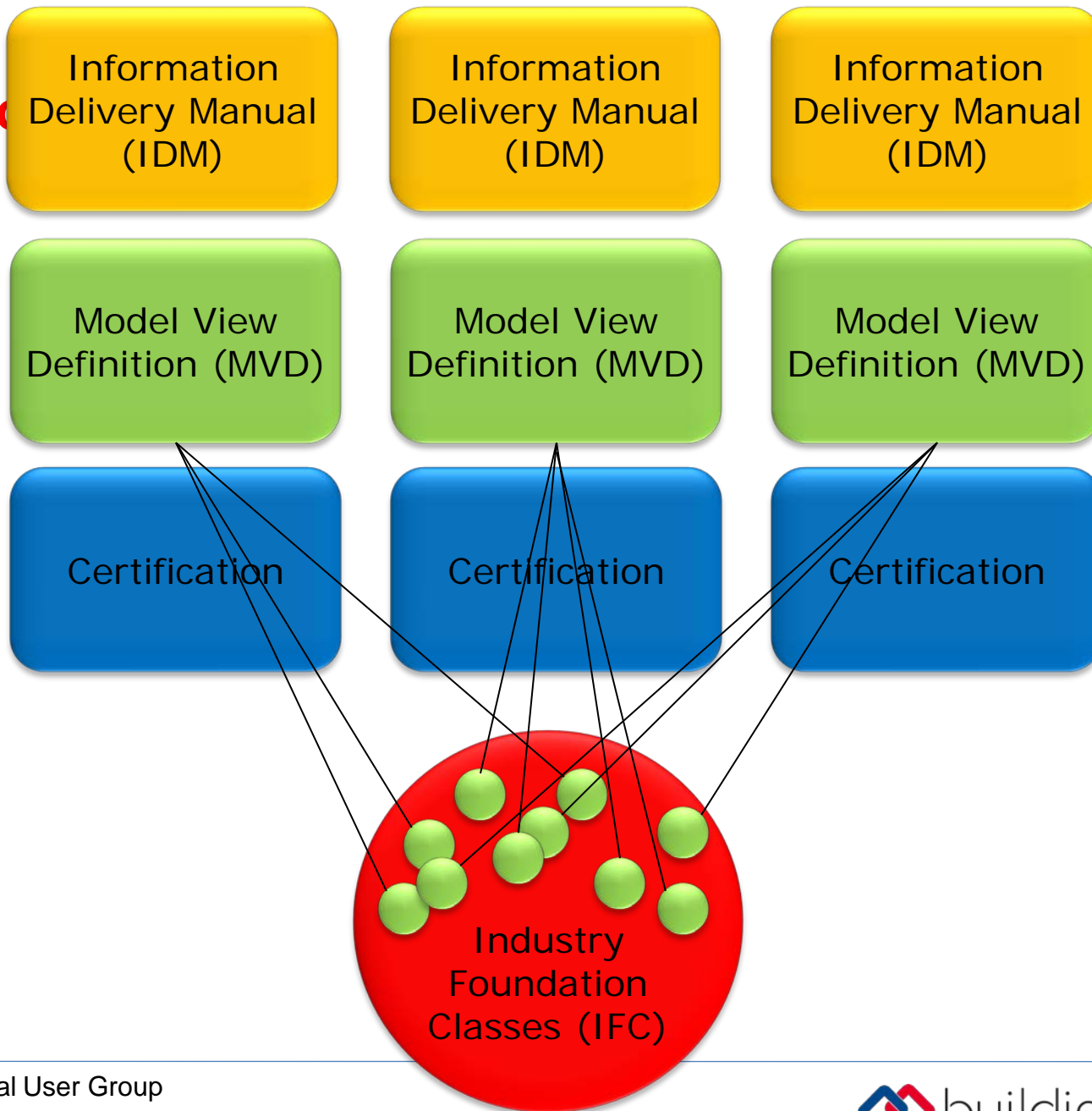


Model View
Definition (MVD)

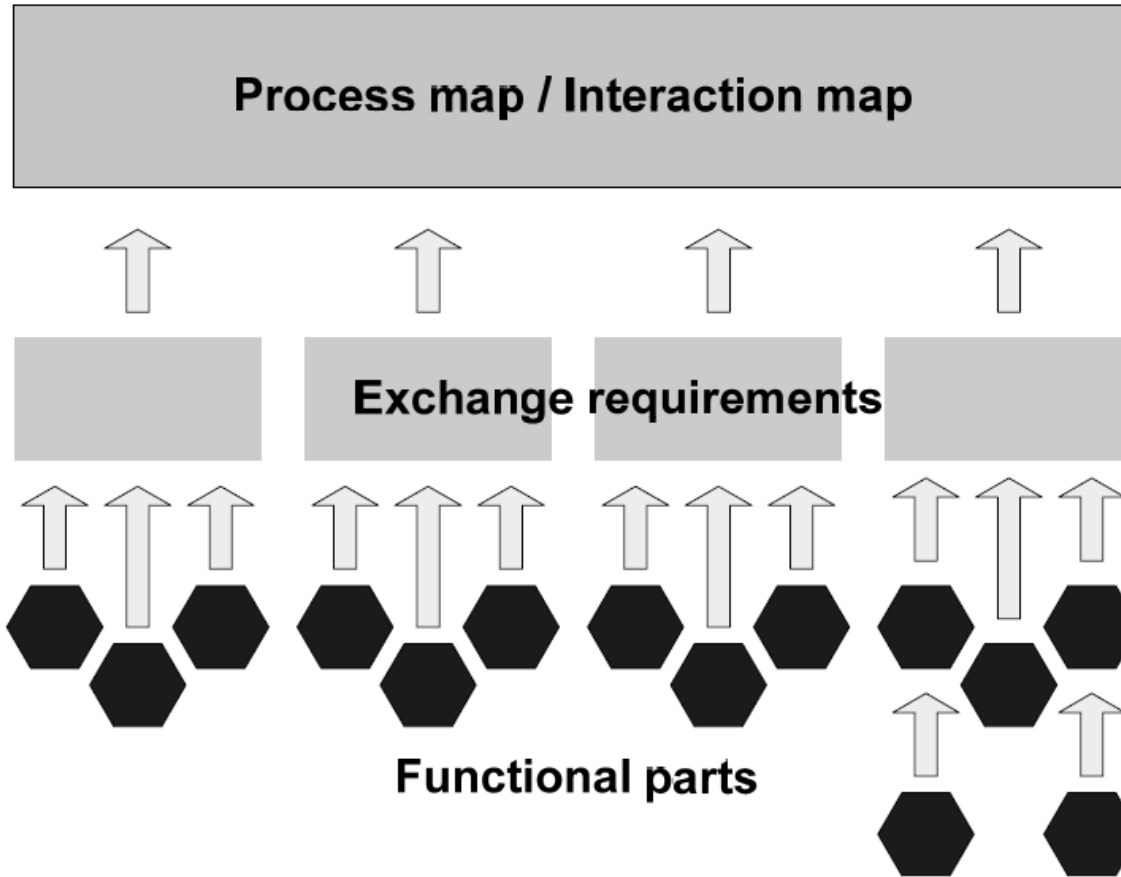
Software
development

Industry
Foundation
Classes (IFC)

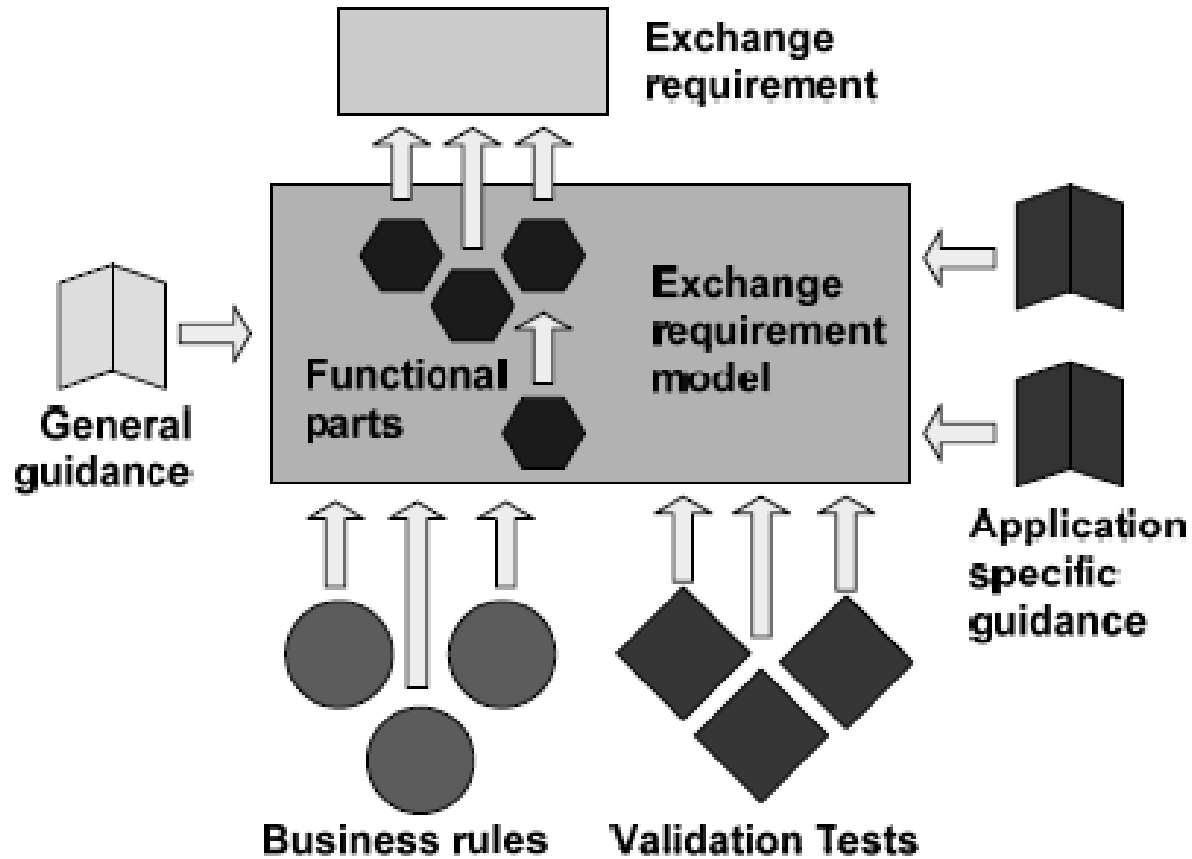
Intro



Introduction



Introduction



Introduction

- **Magnitude of an IDM project**
 - Making an IDM for a 100% well defined existing process with well defined data is not too difficult
 - Existing exchange between ICT systems
 - In most cases
 - Processes have to be defined
 - Data have to be defined
 - Business rules have to be defined
 - Making an IDM after this will be “straight forward”
- **Making IDM for the whole construction is a huge task**
 - Think about the changes in the financial section the last 40 years going
 - When I was a child withdrawing money in a bank required two signatures
 - Users are transferring money between accounts using the Web today
 - How is the approval process of drawing in your national construction industry?
- **Identify the right business cases**
 - Add business cases step by step
 - Remember that all the ingredients have to be ready (incl. software)

Introduction

- **Different types of IDM**
 - “Perfect” IDM
 - Ideal situation
 - May need new processes
 - May new roles
 - May need extensions of the IFC specification
 - May need update of software and software certification
 - Long term solution
 - “Pragmatic” IDM
 - Limit IDM to include what is possible today (model, software)
 - Short term solution
- All should be aware of which level they are working at

Status – Countries

- **IDM/MVD activities**
 - Australia
 - Denmark
 - Finland
 - Germany
 - Korea
 - North America
 - Norway
 - UK

Status – IDM projects

- **IDM projects – to be used in construction projects**
 - Few IDM are completed, published and implemented
 - Many IDM are still in draft status
 - Many IDM lack of support from existing software products with IFC interfaces
 - Few IDM are supported by software certification
 - None of the IDM are supported by certification of processes carried out in projects/organisations
- **Model View Definition (MVD)**
 - Some MVD contain IDM components

Status – WIP IDM

- **Korea**

- Development Team of Open BIM Information Environment Technology for Super-tall Buildings under Super-tall Buildings Research and Business Development Center
 - IDM between architectural design and free-form structure in Super-tall Buildings
 - IDM of energy analysis simulation based on free-form shape
 - IDM of architectural evacuation and vertical circulation
- Virtual Construction
 - IDM between architectural design and architectural design activities
 - IDM between architectural design and cost-estimation activities
 - IDM between architectural design and scheduling activities
 - IDM between architectural design and MEP design activities
 - IDM between architectural design and structural engineering activities

Status – WIP IDM

- **Norway**
 - Geo referring
 - Clash detection
 - ...
- **Denmark**
 - Area management

Status - IDM

- **Controls Engineering (PM)**
- **Cost Modelling (PM)**
- **Electrical Engineering (PM)**
- **Energy Analysis (PM)**
- **Facilities Management (PM)**
- **HVAC Engineering (PM)**
- **Piping Engineering (PM)**
- **Structural Engineering (PM)**
- **Cost modelling**
- **QTO_MEP Aquarium**
- **Generic AEC/FM BIM View Specification**
- **IDM for BuildingProgramming**
- **FM_handover**
- **Nordic_energy**
- **Georeferencing**
- **Area management**
- **IDM between architectural design and free-form structure in Super-tall Buildings**
- **IDM of energy analysis simulation based on free-form shape**
- **IDM of architectural evacuation and vertical circulation**
- **IDM between architectural design and architectural design activities**
- **IDM between architectural design and cost-estimation activities**
- **IDM between architectural design and scheduling activities**
- **IDM between architectural design and MEP design activities**
- **IDM between architectural design and structural engineering activities**

International User Group

Status – IDM/MVD

- **Architectural Design to Circulation/Security Analysis**
- **Architectural design to landscape design**
- **Architectural design to quantity take-off - level 1**
- **Architectural design to quantity take-off - level 2**
- **Architectural design to quantity take-off - level 3**
- **Architectural Design to Spatial Program Validation**
- **Architectural design to structural design**
- **Architectural design to thermal simulation**
- **Architectural Programming to Architectural Design**
- **Basic HandOver to Facility Management**
- **Design to Code Compliance Checking (ICC 2006)**
- **Design to Energy Performance Analysis**
- **Design to Quantity Takeoff**
- **Extended coordination view**
- **Extensibility**
- **Indoor climate simulation to HVAC design**
- **Landscape design to road design**
- **Precast Concrete Exchanges**
- **Road design to landscape design**
- **Space Requirements and Targets to Thermal Simulation**
- **Structural design to structural analysis**
- **Structural Design to Structural Detailing (ATC-75)**

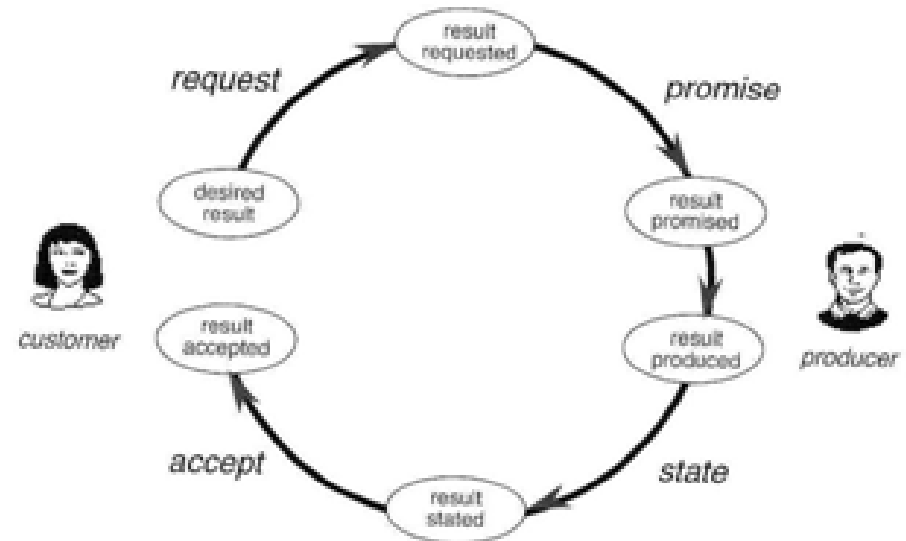
Status – Activities

- Meetings/Dialogue
 - Denmark (State clients and industry)
 - ISO TC59/SC13/WG meeting in the Netherlands
 - Norway (IDM and User Group Meeting)
 - North America (phone/Skype NA IDM contact person and MVD Coordinator)

Status - methodology

- IDM accepted and publish as ISO 29481 part 1
 - Building information modelling - Information delivery manual –
Part 1: Methodology and format
- ISO 29481 part 2
 - Part 2: Management Communication
 - Based on VISI from the Netherlands
 - Work in progress

- Organisation
 - TC59/SC13/WG10



Status

Regional IDM contact person

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Plan

- IDM Projects: Continue dialogue with existing IDM projects in order to identify the state and find opportunities to complete ongoing projects.
- Common understanding of IDM, MVD, IFC, software implementation and certification
- Update and transfer IDM Web sites to www.buildingsmart.com.
- Establish an IDM Network
- Consistency: buildingSMART would be more trustworthy if the only official software certification within buildingSMART had a corresponding IDM for the Coordination View.
- Aquariums: Collect information on completed and ongoing aquariums and take actions in order to initiate aquariums if requested.
- Define a methodology for approval of IDM within buildingSMART
- Involve/harvest results from projects
 - InPro
 - Roles, processes and exchange requirements
 - GreenConServe