Vision: “Virtual Building” = BIM < IDD

Mission: Bring BIM into common practice for the design and realization of buildings by enabling model-based workflow integration through innovative IT solutions.
Coordination of Stakeholders

- Architects
- Structural Engineers
- HVAC Designers
- Energy Experts
- Urban Planners
- Interior Designers
- Property Owners
- Clients
- Builders
- Surveyors
- Construction Managers
- Facility Managers
Key factors for succeeding

PEOPLE

TECHNOLOGY

PROCESS

IDD
GRAPHISOFT Solution Ecosystem

- BIM Authoring Tool: ARCHICAD
- BIM Data Access: BIMx
- BIM Data Management: BIMcloud Basic, BIMcloud Pro
- RHINOCEROS
- OPEN BIM™
GRAPHISOFT Worldwide

108 Countries
85 Distributors
11 Subsidiaries
Uninterrupted BIM

BIM data

Concept  DD  CD  PD

BIM model

BIM data
Uninterrupted BIM

Unleash Creativity

Integrated Design

Digital backbone for Information

Building Information Model
ARCHICAD is the leading Building Information Modeling (BIM) software application used by architects, designers, engineers and builders to professionally design, document and collaborate on building projects. ARCHICAD’s focus on architecture, design, and creativity, combined with cutting-edge technology and innovation, allows architects to do what they do best: design great buildings.
ARCHICAD
Complete Design Workflow Support

- MEP Modeling
- Mass Modeling
- Structural Modeling
- Quantity Take-Off
- Energy Analysis
- BIM Documentation
- Rendering Animation
- Mass Modeling
- Rendering Animation
Expert in BIM

Veneto Precinct, Dubai Waterfront, UAE
Fender Katsalidis
Mirams Architects
Australia
www.fkmarchitects.com

Metropol Parasol
J. MAYER H. Architects
www.jmayerh.de/
Photo © David Franck

Mokuzai Kaikan
Tomohiko Yamanashi,
NIKKEN SEKKEI
Architectural Design,
Tokyo, Japan
Photo: Harunori
Noda/Gankosha

Melbourne Convention & Exhibition Centre, Australia
A Plenary Group Public Private Partnership
Architects: Woods Bagot and NH Architecture
Photographs © Peter Bennetts.
DESIGN WORKFLOW
The Rhino-Grasshopper-ARCHICAD connection is the first two-way real-time interaction tool that makes it possible to combine algorithm based design with BIM.

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Rhinoceros® and Grasshopper® are registered trademarks of TLM, Inc., doing business as Robert McNeel & Associates.
Live connection
Bi-directional connection
Case Studies

3* and 4* Hotel

AEDAS Singapore Pte Ltd
Case Study

Streamlining the Workflow
Typical - Without BIM

Concept Sketch → Free-form 3D Modeling → Documentation → Presentation + Submission
Case Study

Streamlining the Workflow
Typical - Without BIM

Concept Sketch → Free-form 3D Modeling → Presentation + Submission → Documentation
Visualizing complicated architectural shape rules by ArchiCAD

Case Study

Streamlining the Workflow
Implementing Free-form, Algorithmic Design, BIM

Free-form Modeling

Concept Sketch
Algorithmic Design
Archicad Live Connection
BIM
3D Model
Presentation
Submission
2D Documentation
Traditional Algorithmic design workflow
Alternative optimized workflow

DESIGN PHASE

FLEXIBILITY, DESIGN CONTROL

DOCUMENTATION, INFORMATION MANAGEMENT
Regulations
Time, money
Genius Loci
Function
Client
Environment
Etcetera
NURBS vs. Polygons

NURBS

Polygons
Case Studies

Loop City

Enzyme APD
Loop City - China

http://www.weareenzyme.com
Loop City - China

http://www.weareenzyme.com
Loop City - China

http://www.weareenzyme.com
BIM Documentation

Publisher, Revision Management

- Comprehensive
- Import/export
- CAD
- BIM Based
- Intelligent
- Cost Saving
BIM Documentation 30-50% Faster
BIM Documentation 30-50% Faster
BIM Documentation
30-50% Faster Workflow
BIM Documentation  “Textured plans”
VISUALIZATION OUT OF THE BOX

Internal Rendering
Realistic & Sketch
Movies, Sun
Third-party Solutions

Curt Cline, Modern House Architects, www.modernhousearchitects.com

CINERENDER

GRAPHISOFT
A NEMETSCHEK COMPANY
BIM Documentation “Renders”
BIM Documentation  "Renders"
OPEN Workflow

OPEN BIM™

EXPORT MODEL TO ANY AR APP
BIMx

BIMx and BIMx Pro are the ultimate, interactive BIM presentation and coordination apps for clients, owners and constructors, running on mobile devices.

Download on the App Store

Google Play

ARCHITIZER A+AWARDS
WINNER 2018
Industry Segments

- Consultants
- Clients

- Construction team
- Facility management
BIMx – a new interface for the BIM data
ARCHICAD supports the most frequently used 3D, 2D and documentation file formats such as PDF, DWG, DXF and IFC. The open nature of the application allows smooth collaboration with other project stakeholders.

Open BIM is a universal approach to the collaborative design, realization, and operation of buildings based on open standards and workflows.
Online Content
Find the Objects You Need

10,000+ built in

&

Direct Access
Manufacturer
Free Objects
BIM example – Nikken Sekkei

Architecture
- Design
- NURBS Modeling for Windows
- Grasshopper
- Karbona
- T-Splines
- evolute
- DIVA

Visualization/Checking
- 3DS MAX
- V-ray
- LUMION
- SOLIBRI

Rationalize/Paneling
- Digital Project

Optimization
- mode FRONTIER

Structure
- Model/Doc.
- SATWE
- ETABS
- Building3D *
- midas Gen

Analysis
- MEP

Model/Doc.
- CADWe’ll Tfas
- AutoCAD

Visualization/Checking
- Volume/Area
- Shadow
- Performance
- MassPlan
- SOLIBRI

People
- MassMotion
- SimTread
- Viswalk

Air
- STREAM
- FlowDesigner
- WindPerfect

Lighting
- lumicept
- DIALux

Sound
- SoundPLAN 

Digital Project
- Best THERMO

Energy
- LPER *

* = Nikken Sekkei’s original software
▶ = Nikken Sekkei’s original converter
Puskás Ferenc Stadium
Közti, Hungary
BIM Goals

- 3D model driven documentation
- Design Analysis
- Quality Assurance
- Quantity Take-off
Federated Model

ARCHICAD
Tekla
Allplan
3D Rendering
Animation
BIMx
Sun Study
Wind Analysis
Lighting
Camera Position
3D Model Driven Documentation
Quality Assurance - Clash Detection
Construction Tracking
Digital Transformation with IDD, 27 Apr 2018

Source: Mr Cheng Tai Fatt, Deputy Managing Director, BCA Academy
This is only one solution...

PEOPLE

TECHNOLOGY

PROCESS

IDD

Explore
THANK YOU!

GRAPHISOFT

www.graphisoft.com