AS13737-R – AutoCAD to Revit and Beyond: An Introductory Guide for Architects and Engineers

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This class is a roundtable discussion on the integration of Revit for small to mid-sized engineering firms working in building construction. By sharing our own experiences we hope to gather insights that will be useful for companies making the transition from CAD to BIM.
At the end of this class, you will be able to:

- Be prepared to handle the problems of transferring from CAD to BIM, and their solutions.
- Understand the use of Revit by a small to mid-sized engineering firm.
- Use Revit efficiently to develop construction documents for any sized project.
- Use collaborative technologies such as Autodesk 360 in developing interdisciplinary Revit projects.
Consulting Firm Established in 1959

- Structural Discipline
- Clients - architects, owners, and contractors
- Primary focus is building design:
  - Health Care
  - Research
  - Academic
  - Commercial
  - Residential
- Typical services:
  - Analysis & Design
  - Laboratory
  - CA
  - Museums
  - Feasibility
  - Municipal
  - Parking
  - Commercial
  - Evaluations
  - Parking
  - Expert witnesses
  - Healthcare International (Scotland)
  - Peer reviews
  - Municipal
  - Parking
**Souza True’s path to BIM Adoption**

**2007 - Adoption Begins**
- Driven by client adoption
- Need to remain competitive
- Respond to increasing demands
- Develop skills and services

**The Learning Curve**
- Start-up and Implementation
- Project Management
- Long-term Development

**Reaching the Goal**
- Adapt Workflow
- Renewed Collaboration
- Changing the Office
Getting the process started:

Why make the jump to REVIT and BIM?
- Client Adoption – required for continued business
- Marketing – benefit your company profile
- Expand Skills – increasing complexity, better coordination
- Expand Services – pre-con. services, take-offs, estimation

What are the initial hurdles to success?
- Infrastructure Costs – hardware, storage, network capability
- Software – licensing, subscription, cloud services
- Training – Autodesk University, 3rd party training, certifications
- Communication – learning the lingo, conveying information
Project Management:

What are the challenges to a successful BIM project?

- Schedule
- Level of Development
- Transferring Information
- Coordination

How do you overcome these challenges?

- Workflow – Modeling vs. Engineering
- Stakeholder Responsibility – AIA G202, element ownership
- A360, BIM 360 Glue, on-line meetings
- Clash Detection, Fabrication, Phasing
Long-Term Transition:

What happens to the business?

- Measuring Impacts – man-hours, COR, RFI, SKS
- Standardization – BIM management, library of details
- Customization – family files, add-ons
- Contracts – cost of BIM delivery
- Multiple Models – Analysis vs. Detailing, interoperability
- Employee Responsibility – drafters and designers
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