Building Information Modeling &

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Overview:

- Introduction
- Traditional to Digital Copyright
- Omissions in Legal Protections
- Educational Institutions & BIM
- Conclusions & Future Research
- Questions & References
Introduction:

• Status of copyright protection in 1989
• Basis of digital copyright protection
• BIM as an emerging technology
• Challenges copyright faces
• Traditional constructability issues
• BIM to the rescue
Traditional to Digital Copyright:

- Copyright Act as of 1990

- U.S. Copyright Office *Circular 41* (updated 2010) states building design “created in any tangible medium of expression, including a constructed building or architectural plans, models, or drawings, is subject to copyright protection” (p.1).

- Client & design professional relationship
Omissions in Legal Protections:

- Are functional elements copyright protected?
  - Mechanical
  - Electrical
  - Plumbing
- Subcontractors and projects submissions
- Traditional error analysis (Light Box)
- Digital error analysis (Clash Detection)
- Protection for items not in project design?
Omissions in Legal Protections (cont.):

- Designs for regulatory requirements excluded?
- An example: Fire protection
- Non A/E copyright concerns
  - Designs not detailed in project drawings
  - Contractor
  - Subcontractor
Omissions in Legal Protections (cont.):

- What about fair use and trade secrets?
- Traditional methods vs. digital
  - Light box
  - Digital analysis
- Two A/E trade secret scenario concerns
  - Sharing data with owner
  - Sharing data general contractor / subcontractor
- Could the A/E be competitively vulnerable?
Omissions in Legal Protections (cont.):

• Is BIM challenging the construction industry?
  • Changes in project participants
  • Legal actions and claims

• The future is the unknown
Educational Institutions and BIM:

• Academic for industry goals
  • Conduct research to further define the BIM criteria
  • Integrate legal concerns into curriculum
  • Promote undergraduate awareness
  • Encourage graduate research on the topic

• These goal need to be met for the industry!
Conclusions & Future Research:

- Educate project parties
- Development of contract language
- Research should examine “what if” scenarios!
References:


References & Questions:


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