

Daniel M. Hall

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EDUCATION

- | | |
|-------------------------|---|
| June 2017
(expected) | Stanford University, Stanford, California
PhD Civil & Environmental Engineering |
| 2012 – 2014 | Stanford University, Stanford, California
MS Civil & Environmental Engineering
Sustainable Design & Construction |
| 2003 – 2008 | California Polytechnic State University, San Luis Obispo
BS Architectural Engineering |

DISSERTATION

- (in process) **Assessing the Impact of Project Integration Strategies on Systemic Innovations**

Abstract: Innovations in the construction industry tend to diffuse slowly especially when they cut across discipline and supply chain boundaries. Cross-cutting innovations – termed integral innovations – are especially difficult to implement in a fragmented industry because they cross professional and trade specializations, redefine how work is done, and break craft administration standards. As a result, integral innovations are three times less likely to be implemented than modular innovations that fit within existing discipline and supply chain boundaries. However, it is possible to increase adoption of integral innovations through project integration strategies such as BIM, colocation, and early involvement of stakeholders. My research measures the different combinations of project integration strategies used for the construction of twenty-five new hospitals and medical office buildings in California. Using a Fuzzy Set Qualitative Comparative Analysis, my work will link the presence of integral innovations with certain sets of project integration strategies.

Advisor: Professor Raymond E. Levitt

Committee: Professor Martin Fischer; Professor Carrie Sturts Dossick

RESEARCH PROJECTS

- 2014 **Research Assistant**
Managing Construction Parts – From Manufacturing to Construction
Center for Integrated Facility Engineering, Stanford, CA
Principal Investigators: Dr. Martin Fischer, Dr. Calvin Kam
- 2013 **Research Assistant**
Integrated Virtual Parts Library – Parts List Definition
Center for Integrated Facility Engineering, Stanford, CA
Principal Investigators: Dr. Martin Fischer, Dr. Calvin Kam
- 2013 **Research Assistant**
Assessing the Impact of Integrated Project Delivery on the
Adoption of Innovations Related to Energy Efficiency
Global Projects Center & Center for Integrated Facility Engineering, Stanford
Principal Investigators: Dr. Raymond E. Levitt, Dr. Martin Fischer

FELLOWSHIPS & FUNDING AWARDS

- 2016 **Seed Funding Awards**, Center for Integrated Facility Engineering
Which Project Integration Strategies Deliver High Performance Projects?
- 2014 Managing Construction Parts – From Manufacturing to Construction
- 2013 Integrated Virtual Parts Library – Parts List Definition
- 2014 **Charles H. Leavell Fellowship**, Stanford Civil Engineering

TEACHING EXPERIENCE

- 2016 **Adventures in Design Thinking – a Stanford d.school experience**
Teaching Team, Stanford Graduate Summer Institute
- 2016 **CEE 144 Design and Innovation for the Circular Economy**
Teaching Affiliate, Civil and Environmental Engineering Department
- 2016 **CEE 324 Industrialized Construction**
Teaching Assistant, Civil and Environmental Engineering Department
- 2014 **CEE 48N Managing Complex, Global Projects**
Teaching Assistant, Civil and Environmental Engineering Department

2013 **CEE 242 Organization Design for Projects and Companies**
Teaching Assistant, Civil and Environmental Engineering Department

RELEVANT WORK EXPERIENCE

- 2015 **Production Engineering Intern**
HerreroBoldt, San Francisco, CA
Member of Sutter Health’s \$300 million St. Luke’s Replacement Hospital project using Integrated Project Delivery (IPD) with a seven-party Integrated Form of Agreement contract. Responsible for implementing lean tools such as the Last Planner System, Production Tracking, and Takt Time Planning. Also responsible to survey project culture and track monthly project goals.
- 2010 – 2012 **Project Engineer**
CB2 Builders, San Francisco, CA
General Contracting Firm specializing in high-end design-build projects including critical data centers and commercial tenant improvements ranging from \$100,000 US to \$4,000,000 US. Responsible for contract administration, design and trade coordination, cost estimating, submittal review, and field supervision.
- 2008 **Project Engineer**
HGE Construction, Atascadero, CA
Concrete contractor specializing in seismic retrofit projects, concrete pier and helical anchor installation, and concrete infrastructure for public highways.

PUBLICATIONS

Journal Articles

Hall, D. and Scott, W. Richard (in review). “Early Stages in the Institutionalization of Integrated Project Delivery.”

Conference Proceedings

Hall, D. and Scott, W. Richard (2016) “Early Stages in the Institutionalization of Integrated Project Delivery. *EPOC 2016 Conference Proceedings*. Engineering Project Organization Society, Cle Elum, Washington, USA.

Lavikka, R., Lehtinen, T. and **Hall, D.** (2016) “Co-Creation of a Digital Service for Facilities Management.” *EPOC 2016 Conference Proceedings*. Engineering Project Organization Society, Cle Elum, Washington, USA.

Bekdik, B., **Hall, D.** and Aslesen, S. (2016) “Off-Site Prefab: What Does It Require from the Trade Contractor?” *IGLC 2016 Conference Proceedings*. International Group for Lean Construction, Boston, MA, USA.

Hall, D., and Lehtinen, T. (2015). “Agile Cost Shifting as a Mechanism for Systemic Innovations.” *EPOC 2015 Conference Proceedings*. Engineering Project Organization Society, The University of Edinburgh, Scotland, UK: 1–15.

Hall, D., Algiers, A., Lehtinen, T., Levitt, R. E., Li, C., and Padachuri, P. (2014). “The Role of Integrated Project Delivery Elements in Adoption of Integral Innovations.” *EPOC 2014 Conference Proceedings*, P. Chan and R. Leicht, eds., Engineering Project Organization Society, Devil’s Thumb Ranch, Colorado, 1–20.

PRESENTATIONS & INVITED LECTURES

“How Project Integration Strategies Impact the Adoption of Systemic Innovations,” Centre for Systems Engineering & Innovation Lecture Series, October 2016, Imperial College, London, UK, Invited Lecture.

“Integrated Project Delivery and Nordic Shipping Alliancing: a comparison of the early stages of institutionalization,” Industrial Management Group, September 2016, Åbo Akademi University, Turku, Finland, Invited Lecture.

“Early Stages in the Institutionalization of Integrated Project Delivery,” SimLab, September 2016, Aalto University, Helsinki, Finland, Invited Lecture.

“Early Stages in the Institutionalization of Integrated Project Delivery,” Construction Research Congress, May 2016, San Juan, Puerto Rico, Poster Presentation.

“Integrated Project Delivery in the Wild,” Global Architecture/Engineering/Construction Class, April 2016, Center for Integrated Facility Engineering, Stanford University, Stanford, CA, Invited Lecture.

“Qualitative Comparative Analysis Methodology,” CEE 316 Research Methods in Civil Engineering, February 2016, Stanford University, Stanford, CA, Invited Lecture.

SERVICE

2016 **Journal Reviewer**
 Construction Management & Economics (1 Review)
 Journal of Construction Engineering & Management (1 Review)

2014, 2016 **Planning Team and Forum Organizer**
Industrialized Construction Forum, Stanford University

2014 – 2015 **Team Leader**
2013 – 2014 **Team Member**
Engineers for a Sustainable World, Stanford University
Parkwood Primary School Technology Centre Renovation
Cape Town, South Africa

ACADEMIC EXCHANGES

2016 **Visiting PhD Student**
Imperial College London
Centre for Systems Engineering and Innovation

2015 **Berkeley / Stanford Scholar Exchange Program**
University of California - Berkeley
CE 268A Lean Construction Concepts and Methods

AWARDS

2014 **Best Proposal**
Welcome Home to Savings: Distributed Generation in Multifamily Housing
Hall, D., Nowacki, C., Srivastava, C., Velez, J.
Better Building Case Competition
Department of Energy, Washington, D.C.