

# HOW RESEARCH CAN HELP TRANSFORM THE CONSTRUCTION INDUSTRY

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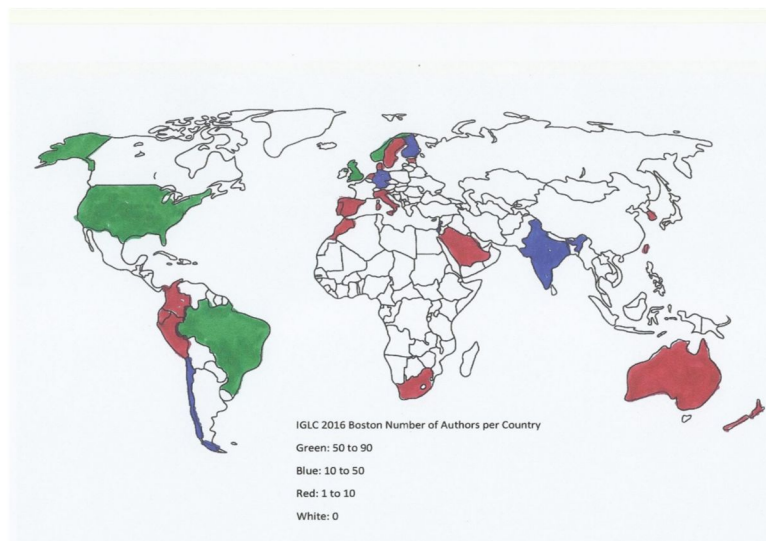
## 1 BACKGROUND

The International Group for Lean Construction has understandably directed its efforts largely to generating new knowledge about how to apply the lean philosophy to construction projects and the organizations involved in those projects. Some research has been focused on the obstacles to lean transformation of the industry itself. This paper is a call to direct much more effort in this direction, and proposes what needs to be done.

## 2 RESEARCH AIM AND METHODOLOGY

This is a concept paper, calling for action in the world. As such, it is neither descriptive nor explanatory research, nor does it report on experiments.

## 3 RESEARCH FINDINGS



The lean transformation of the construction industry is far from complete. Relative lean activity is indicated in the above world map, which reveals that fully 9 out of the 20 developed countries have virtually zero lean presence. When overlaid with a map of countries dominated by corruption, there is a high degree of match of countries with the least lean development.

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Corruption is quite obviously a barrier to lean, with its demand for transparency and for waste reduction. Those who live off the waste want no part of either.

But there are other barriers, including educational institutions and paradigms concerning the nature of reality. Last, but given the goal of transforming the construction industry, hardly least, there is what may be a fundamental barrier; namely, our lack of knowledge how to go about it.

## 4 NEXT STEPS

The next step is to direct research to removing these obstacles. Examples of what needs doing:

- Transformation Processes

How have organizations and entire industries fundamentally changed their cultures?

- Paradigms

Is it true that “Trust is for suckers”?

Is it true that “If you don’t bid it, you pay more?”

Is it true that “Win-win is hogwash”?

Is it true that: “The best risk management strategy is shifting risk to someone else”?

Is it true that: “Project management does not include management of production”?

- Education

How to accelerate the incorporation of lean philosophy, principles and methods into the educational system?

Are alternatives outside the traditional educational system viable; e.g., an internet Lean University?

- Corruption

What are the facts about corruption in the construction industry?

Is corruption best fought through increased oversight and regulations, or through open books, aligning interests and collaborative contracting?

