# Communication: Megaprojects' Biggest Risk that No-one is Talking about

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## Abstract

Megaprojects are known to have larger and more complex communication networks than regular construction projects. From literature however, three out of four common causes of megaproject failure may be linked to communication risks.

This investigation shows that certain communication process areas have a strong impact on Client Satisfaction and a moderate impact on a construction project's Quality, Time & Cost outcomes. Communication during the Project initiation phase is seen to be most important.

This study also identifies a possible communication deficit related to increasing team knowledge over time.

"Communication" is thus classified as the biggest risk that modern megaprojects face.

**Keywords:** construction; megaprojects; communication; risk; civil engineering.

## 1 Introduction

Modern megaprojects are larger, more complex and subject to tighter productivity constraints (time, cost and quality) than ever before. Unfortunately, more than 50% of infrastructure and large building projects (and up to 90% of transport projects) are regularly completed late and/or over-budget [1].

Current practices often do not promote good communication networks, which leads to further difficulties such as internal/team conflict, deceit, scapegoating and even corruption. Literature refers to this as the Shadow in project management [2], which decreases the efficiency of project delivery even further.

From literature, it is found that megaprojects often fail due to:

1. Overly complex project management models [1]
2. The Shadow (i.e. negative human traits) in project management [2]
3. Poor communication networks [3]
4. Teams' inability to manage growing project complexities [4]

This situation is seen to worsen in the future as new materials, construction methods and innovative designs continue to be introduced. In addition, many routine human tasks may soon be automated: increasing complexity and stressing communication networks even further [5].

https://doi.org/10.2749/nantes.2018.s22-21
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