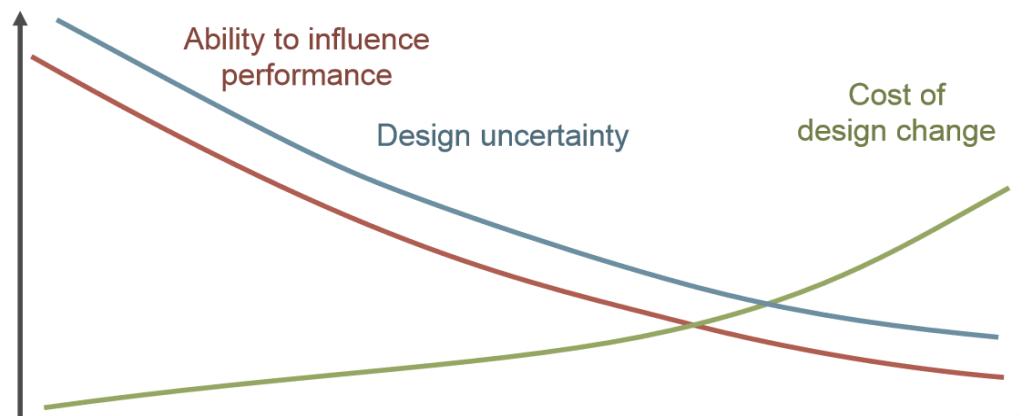


Uncertainty in the Energy Cost Metric

- ▶ Looking solely at structural systems, accounting for up to 50% of total embodied energy
 - ▶ Assuming there is no associated in-use energy
- ▶ Three groups of uncertainty: design (quantities/types of materials), cost and embodied energy
- ▶ Building an understanding how the uncertainty of each contributes to the overall metric and changes through the stages of the project



Source: Hester, Gregory and Kirchain (2017)

Information Gathering

- ▶ Online survey (10 mins) to elicit professional opinions and understanding of project estimates
- ▶ QS reports through stages of a number of projects (minimum 3)
 - ▶ Total quantities of concrete and steel, and unit prices
 - ▶ All data can be anonymised
- ▶ Follow up interviews to gain further insight into the estimation process and interpretation of reports

If you are interested in providing any information, please contact
afh36@cam.ac.uk