

Improving and modelling the knowledge regarding failure and performance in building projects

Various types of failure may affect buildings and constructions works, either during their erection, their service life or their demolition.

These problems concern every country. Their are particularly acute in countries like China or India where the conjunction of high speed development, economic pressure and uncontrolled risk factors may have deleterious consequences. All types of works (bridges, tunnels, skyscrapers, dams...) may have similar problems. A higher quality of construction works and a better safety for workers and users is thus a key challenge.

The topic of the research project is to elaborate a model of causes which can contribute to construction failure and/or success. The analysis will focus on the causal system which may lead to failure. This work will take profit of two PhDs who are analyzing (in the same research team) Project Risk Management in Construction Projects and are listing risk and/or success factors and their interactions. The model will be developed in parallel with a database gathering a high number of accidents, both recent and well-known ones drawn from international scientific literature. A specific attention will be paid to the knowledge modelling, since the database will be designed for future use by construction engineers, teachers and students.

Who can apply?

All civil engineers may apply. Curiosity and ability to work with databases and/or statistics will be welcomed.

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Application:

Please send application form and materials to Mr. Yvon VELOT

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