



CRC Construction Innovation  
Clients Driving Innovation  
Conference

## Sources and Effects of Uncertainty in the Management of Construction Projects

Agustin Chevez Bernaldo de Quiros

Wednesday 27 October 2004



## Introduction: Construction Projects

- Earliest construction projects (dwellings at Terra Amata, France) date from the Palaeolithic period (Fletcher, 1996)



Dwellings built to specifications using limited resources and completed within a time frame.

- Time;
- Cost;
- Quality

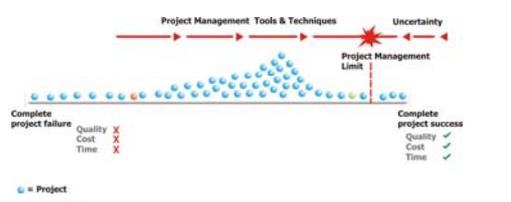
Terra Amata Dwellings (Fletcher, 1996, p.213)



## Uncertainty & Project Management

*Still, on-time completion of projects has always been an irritating concern in project management (Hormozi and Dube, 1999)*

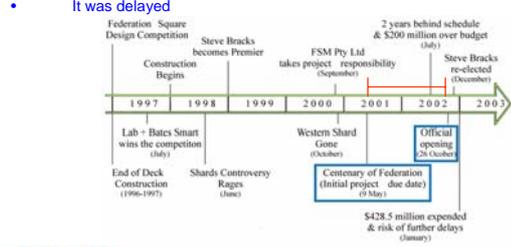
If construction projects have been done for quite long time and are so relevant to our economy and culture, why we have not yet mastered a technique to finish construction projects on time?




## Federation Square

**Federation Square** was chosen as Study Case because it is:

- A contemporary and high profile project;
- An Australian Project; and
- It was delayed




## Questionnaire

Questionnaire sent to 31 persons form diverse project groups:

- Civil / Structural (Hyder Consulting, Connell Wagner);
- Services (AHW Consulting);
- Architecture (Lab Architecture, Bates Smart);
- Quantity survey (WTP Melbourne);
- General Constructor (Multiplex)

Source: <http://archrecord.construction.com>



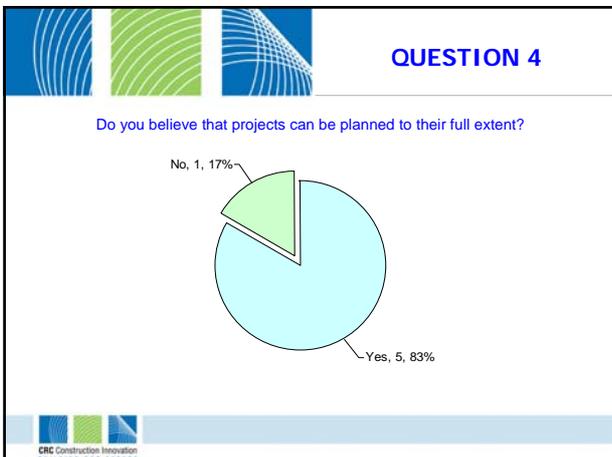
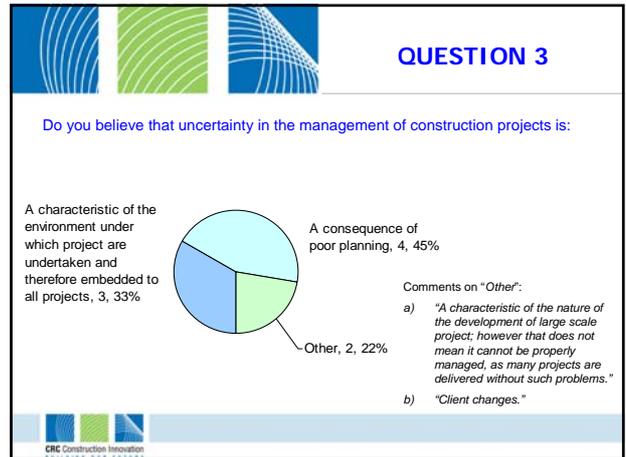
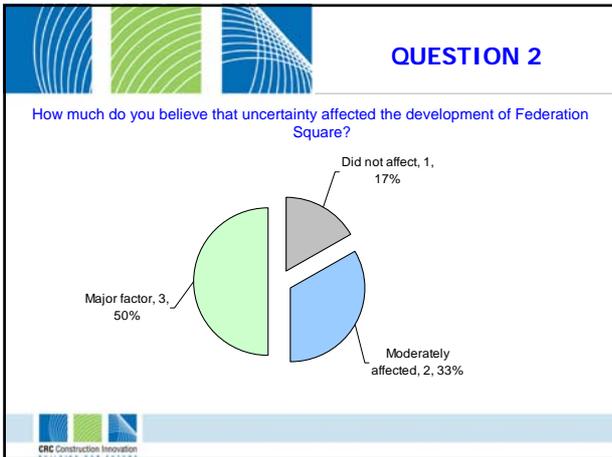
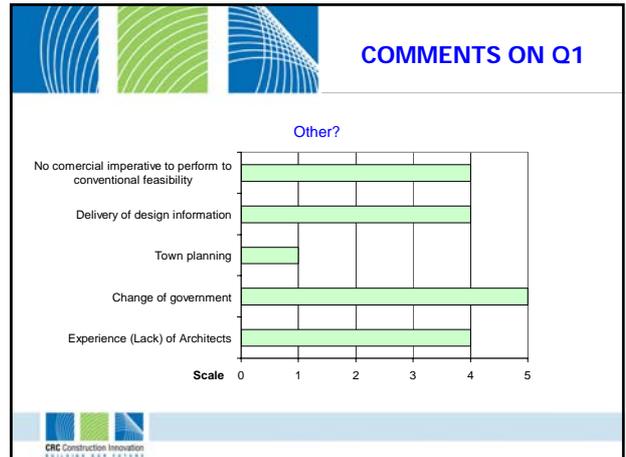
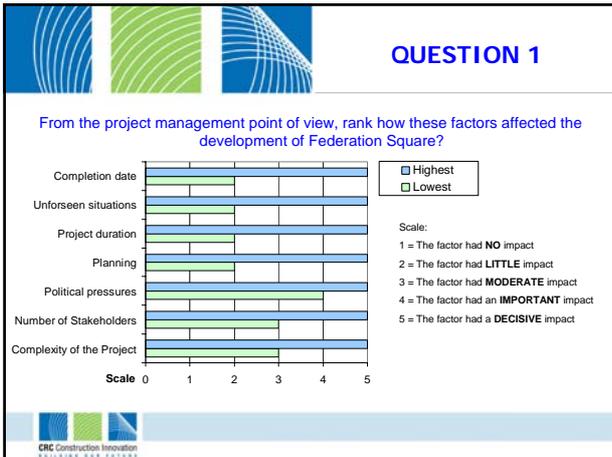
## Response

From 31 sent questionnaires:

- 6 were answered;
- 15 were return unanswered (employee does not longer work in the company);
- 10 (30%) did not reply.

Amongst those who responded were from the area of:

- Civil;
- Architecture; and
- Quantity surveyor



### CONCLUSION

It is obvious that mankind has found its way to overcome uncertainty and materialise construction projects long time ago, way back before the words "project" and "management" were put together.

However, whilst projects are under the responsibility of project managers they are exposed to an uncertain environment.

Uncertainty will always shape the fate of a project, but by understanding its sources and effects the project management practice, specially that of the construction industry, will be greatly benefited.

CRC Construction Innovation