

Cloud Computing in the Irish Construction Industry

Sam Stewart

Problem Description

- In the construction industry there is a constant change of workers. Also new jobsite locations are frequently being setup.
- Workers need access to company data without delay and with a well-supported decision making process, whilst working in the field.
- The main office needs to do invoices, financial reports, payroll, and plan logistics, whilst offsite workers need to be able to update information to support these processes, no matter where these workers are located.

Objectives

- To allow workers to tap into back office information and have reporting functionality from any location and in a secure and timely manner, instead of needing to be at the main office to allow for this functionality. Also, to allow management to restrict certain sensitive data from workers, where necessary.
- To remove the need to process heavy amounts of paperwork at the main office.
- To allow for greater collaboration for team members working in a team together.

Proposed Solution

- To use cloud computing which is where virtual servers are used to allow users to access stored data through an internet connection. This means that workers can access company data, working from any location where internet can be accessed. Information can be accessed easily from satellite offices, job sites or customer locations.
- This also means that workers can collaborate more easily working as a team.
- This also means that SMEs would have access to software that previously would have been only available to larger companies, since they have the opportunity to rent software rather than buy it.
- Additionally, mobile devices such as smart phones and tablets may be used by on-site workers. These allow workers to report and carry out administrative tasks from the field.

The cloud BIM prototype

- This is an example of cloud computing working in the AEC Industry. The same system can be used by consultancy, an architect company, an engineering company and building management, allowing for greater collaboration

