

Cloud Computing and Project Management

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Although surrounded by much hype, most analysts agree that cloud computing – software applications and data accessed through and stored within the internet – has the potential to be a paradigm-shifting advance as significant as the advent of the internet.

One research firm expects the global cloud computing market to grow from £24 billion in 2010 to £76 billion in 2015, at a rate of 26% per annum [1], but like the internet, it will take time for consumers to understand how best to leverage its potential.



What is Cloud Computing?

Cloud computing describes ‘ondemand’ IT, with infrastructure, applications and data distanced from users and held on remote internet servers. It represents a new consumption model, where software is accessed directly through a web browser as if it were installed conventionally on the user’s computer.

Leading edge IT firms including Sales force, Google Apps and Microsoft Online Services are offering cloud ‘software as a service’, hoping to prompt organisations to embed online applications into existing operations.

Project management tools are becoming part of the cloud revolution, with an array of specialist firms offering project management cloud computing toolkits. So what could cloud computing mean from a project and programme management (PPM) perspective?

Storing the PPM toolkit in the cloud

Sophisticated PPM-centric organisations have complex, mature project and programme tools, containing the standard software methodologies, and approaches necessary to initiate projects/programmes per organisational standards.

Storing these toolkits in the cloud makes them accessible and updatable in real-time by all project/programme managers. For those managers at remote locations the time and cost associated with project start-up could dramatically reduce, with access to best-practice methodologies and prior experience enabling progression of the project from mandate to initiation swifter than ever before.

Cloud enables the standardisation and continual improvement of the PPM toolkit to occur centrally, such as within an enterprise PMO. Organisations could build customised cloud applications, replacing today’s IT project management tools with organisation-specific PPM software applications that are accessed through a browser.

Updates and additions to the PPM toolkit could be immediately rolled-out to all project teams. Enhanced functionality to be made available across all geographies, and to any internet-enabled device; making a tablet PC equally as useful as a laptop.

This creates opportunities for smaller organisations that historically may have been unable to capitalise on the use of sophisticated PPM tools that were the preserve of large firms with mature project management functions.

The hazards of the cloud

Adopting the cloud approach will take time for many organisations. Holding essential and potentially highly sensitive project data on remote servers increases the security threat, and empowering a third party to provide a constant service will require trust.

A critical success factor in the use of tools will be in the ability to frame decisions based on context. Elements of a toolkit may be irrelevant to some projects; and an unnecessary tool is an administration burden. Ensuring the effective use of tools for the right application will be key.

Cloud represents a 'levelling of the playing field', enabling the possibility for all project team members to access live PPM documentation, therefore increasing the requirement for deep understanding of the methodologies underpinning best-practice PPM and use of the tools.

Access controls will be required, ensuring the requisite PPM skills, knowledge and experience to edit project data; hence in a cloud-enabled programme environment, the requirement for PPM capability is heightened. As ever, disruptive technologies such as cloud computing require careful integration to realise the potential whilst avoiding the pitfalls.

Real-time access to project information

Project and programme plans, dashboards, reports and other management information could be held within the cloud and amended/updated by managers, creating a new direction of real-time information provision. For example, project teams in geographically dispersed locations on a global programme could aggregate information to the Programme Management Office instantaneously simply by updating a document held within the cloud.

Extending key PPM status information (such as progress against programme plan, earned value, benefits realised) to stakeholders outside of the core project/programme team could be huge reporting advantages. An immediate examination of status, along with agreed control gates, could be provided and decisions/actions required from Senior Responsible Owners and leadership teams expedited upon that basis.

The downside however could be of 'information overload', where critical external stakeholders are given the false indication of project failure due to a temporary, recoverable error. Choosing when, how and to whom to display project status information from the cloud will be critical to effective stakeholder management.

Sophisticated tools represent only a tiny part of the solution, the fundamental element of project success remains the clear articulation of requirements and the effective management of personnel. Tools can be an enabler to these but not a replacement.

Leveraging the benefits of cloud

The benefits to more effective PPM through cloud computing exist in the ability of organisations to centralise, update and manage the PPM toolkit more effectively and readily; along with the generic cloud benefits of not having to design, build and maintain applications.

In today's workplace, project managers have a range of tools acquired from experiences that are called upon when needed in new situations. The cloud will enable an organisation's PM function to be the central repository for all new tools, to manage upgrades and to hold information centrally for access by selected stakeholders, creating one standard deployment kit for all the organisation's projects and programmes.

This could significantly reduce the time taken to invoke project management functions. For example, a PMO could be established in greatly reduced timeframes using the tools available from the cloud.

Summary

Awareness of cloud computing is growing beyond the hype of the past several years, but the future remains uncertain. It will certainly not provide all the answers for project managers and, initially at least, may generate more effort expenditure in converting to the new way of working.

Early adopters of cloud project management could leverage increased toolkit standardisation and greater programme transparency, particularly across geographically disparate programmes.

[1] Markets and Markets: Cloud Computing Market - Global Forecast

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