

# Chapter 5

## Cloud Tools for the Development of Project Management in SMEs

**Rafael Ignacio Pérez-Uribe**  
*EAN University, Colombia*

**Daniel A. Torres**  
*Colombian Air Force, Colombia*

**Sandra Patricia Buendía Jurado**  
*EAN University, Colombia*

**Diana Mendoza Prada**  
*EAN University, Colombia*

### ABSTRACT

*The purpose of this chapter is to determine the amount of knowledge that students who worked in SMEs (in this case, subject matter experts) of the specialization in project management at EAN University in the semester I and II of 2016. It is examined how their knowledge of the tools and solutions in the cloud and the percentage of use of such tools in the management of their projects. Five specific objectives were achieved: 1) Explain the concept of the cloud, advantages and disadvantages of its implementation. 2) Establish the level of information that entrepreneurs and SME workers had about the cloud and its management tools 3) To present some of the tools available in the cloud for the management of projects in SMEs, 4) To determine the preferences regarding the cloud tools used for the management of their projects and 5) To identify the advantages and disadvantages observed by Entrepreneurs - students, when using the tools offered by the cloud.*

DOI: 10.4018/978-1-5225-3543-0.ch005

## BRIEF THEORETICAL FRAMEWORK

### Educational Sector

This sector has been affected by the advance of new technologies and TIC<sup>1</sup> tools, that make students and entrepreneurs have faster and more efficient access to information, by challenging their educators daily (Irimia-Diéguez, Di Pietro, Vega & Blanco, 2014; Gómez, 2013). This is why new strategies have been designed in the management of educational innovation, and project management has been implemented as a complement and effective tool to have better results in their teaching actions. In same way these good practices make possible for students to see the results in their projects in an easier way (Williamson, Callaghan, Whittlesea & Val Heath, 2010; Pollard, 2005).

Some technologies have penetrated very strongly in the academic environment, like:

1. 'Blogging' - a contraction of the term 'web logging' - is perhaps best described as a form of micro-publishing. The blog as 'the latest disruptive technology', the 'killer app' that has the capacity to engage people in collaborative activity, knowledge sharing, reflection and debate, where complex and expensive technology has failed (Williams & Jacobs, 2004);
2. Smartphones with its technological applications.

*The convergence of communication and computing for mobile consumer devices is on the evolutionary course to bring interoperability and leverage the services and functions from each and every industry. In this process of convergence the Smartphone's are the leading devices taking the front end and playing the role of universal mobile terminal. As a marketing strategy the Smartphone term was introduced in the market, referring a new class of mobile phones that provides integrated services from communication, computing and mobile sectors including voice communication, messaging, personal information management (PIM) applications and wireless communication capability (Sarwar & Soomro, 2013; Selwyn. 2002, p.129);*

3. Computers:

*The use of information and communication technologies (ICT) in education is becoming a major consideration as developing countries focus on improving the quality of education. Investment in ICT use in education has grown steadily over the past decade in developing countries, even in the some of the most challenging environments in some of the least-developed countries. Several countries are determinedly expanding the supply of computers in their schools and universities in the belief that will benefit from the use of the new technologies and that students need to be exposed early (Barrera-Osorio & Linden, 2009).*

4. Of the three previous points is born Mobile learning (m-learning) in the form of podcasting, involves downloading a series of audio or video broadcasts (files) onto a digital media player, via a computer. These can then be watched or listened to when, where and as often as students choose (The use of digital media players, popularised by Apple's iPod, is widespread amongst undergraduate students) (Evans, 2008).

24 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/cloud-tools-for-the-development-of-project-management-in-smes/202617](http://www.igi-global.com/chapter/cloud-tools-for-the-development-of-project-management-in-smes/202617)

## Related Content

---

### How Can Accessibility for Deaf and Hearing-Impaired Players be Improved in Video Games?

Robert Costello, Murray Lambert and Florian Kern (2019). *International Journal of R&D Innovation Strategy* (pp. 16-32).

[www.irma-international.org/article/how-can-accessibility-for-deaf-and-hearing-impaired-players-be-improved-in-video-games/234351](http://www.irma-international.org/article/how-can-accessibility-for-deaf-and-hearing-impaired-players-be-improved-in-video-games/234351)

### A Case for Objectivist Ethics in the 21st Century: A Review

Edward M. Slover (2020). *International Journal of Responsible Leadership and Ethical Decision-Making* (pp. 19-31).

[www.irma-international.org/article/a-case-for-objectivist-ethics-in-the-21st-century/273057](http://www.irma-international.org/article/a-case-for-objectivist-ethics-in-the-21st-century/273057)

### Ethical Negotiations: A Trust-Building Approach to International Negotiations

Francisco A. Espinoza and Norma E. Velasco (2019). *International Journal of Responsible Leadership and Ethical Decision-Making* (pp. 13-24).

[www.irma-international.org/article/ethical-negotiations/227743](http://www.irma-international.org/article/ethical-negotiations/227743)

### Engaging Customers and Managing Customer Relationships: Strategies and Initiatives

Pratap Chandra Mandal (2023). *Journal of Business Ecosystems* (pp. 1-14).

[www.irma-international.org/article/engaging-customers-and-managing-customer-relationships/322405](http://www.irma-international.org/article/engaging-customers-and-managing-customer-relationships/322405)

### Is Construction of Timber Focused Exchange Traded Fund Plausible in SAARC Countries With Reference to India?

Nivedita Mandal and Rituparna Das (2020). *Handbook of Research on Managerial Practices and Disruptive Innovation in Asia* (pp. 147-170).

[www.irma-international.org/chapter/is-construction-of-timber-focused-exchange-traded-fund-plausible-in-saarc-countries-with-reference-to-india/236905](http://www.irma-international.org/chapter/is-construction-of-timber-focused-exchange-traded-fund-plausible-in-saarc-countries-with-reference-to-india/236905)