

## Chapter 54

# Research-Based Insights Inform Change in IBM M-Learning Strategy

**Nabeel Ahmad**

*IBM Center for Advanced Learning, USA*

### ABSTRACT

*Although mobile phones have become an extension of the workplace, organizations are still exploring their effectiveness for employee training and development. A 2009 joint collaborative study between Columbia University (New York, USA) and IBM of 400 IBM employees' use of mobile phones revealed unexpected insights into how employees use mobile applications to improve job performance. The findings are reshaping IBM Learning's mobile technologies strategy for networking, collaboration, and skills improvement. This chapter reveals the study's results and IBM's new direction for m-learning, highlighting IBM's preparedness for a shift in its organizational learning model potentiated by ubiquitous access and mobility.*

### INTRODUCTION

Half of the world owns a mobile phone (Hanlon, 2008). The mobile phone is shaping society in new ways and has become as indispensable to many as money and keys. In organizations, mobile phones are increasingly being used for business purposes. While mobile phones have broadened the boundaries of the workplace, there is inadequate information on how they can best be used

to enhance training and development. IBM is a global technology company with over 400,000 employees focusing on the manufacturing and selling of computer hardware and software. IBM and Columbia University conducted a study to understand how IBM employees use their mobile phones in the workplace and where to focus its efforts to improve employee performance and productivity. Known commonly as mobile learning, or m-learning, the focus of this chapter revolves around the shift in IBM's m-learning strategy resulting from research-based insights.

DOI: 10.4018/978-1-60960-042-6.ch054

Chapter highlights:

- How mobile phone adoption affects IBM
- How mobile phones impact the way IBM helps its employees
- How mobile phones affect internal collaboration
- New business models that exhibits IBM's m-learning strategy

## **BACKGROUND**

Companies and organizations are taking advantage of multi-function mobile phones by offering their employees mobile solutions that are integrated into daily job functions. Mobile phones are used for far more than voice calls and exceed the original extent of mobile phone use in the workplace (O'Connell & Bjorkback, 2006). Mobile phones now encompass a greater role in workplace activities. M-learning, capitalizes on learning and performance improvement opportunities made possible by mobile technologies and arises in the course of interpersonal mobile communication (Nyiri, 2002). Given a well-designed system based on appropriate theory, a mobile phone affords ways to increase access to resources, improve communication and decrease response time to complete tasks.

M-learning has some similarities to e-learning, which includes an expansive range of applications and processes like web- and computer-based learning and virtual classrooms. Both definitions of e-learning and m-learning vary across organizations and contexts (Mayer, 2003), leading to a proliferation of views and perspectives. Mobile technologies have the power to make learning and performance improvement even more widely available and accessible than previously thought in existing e-learning environments (Yuen & Yuen, 2008).

## **MAIN FOCUS OF THE CHAPTER**

### **The Research Study**

Over the past decade, IBM developed numerous mobile applications for use by their workforce. These include services that allow one to check stock prices, access the latest breaking news, gather more information on recent mergers and acquisitions, and find other IBMers, to name a few. However, given all of these services, there was not extensive research that indicated what IBMers use their mobile phones for, and to what extent they could provide new services that meet their needs. Only six percent (25,000) of IBMers have smartphones, namely the BlackBerry, officially registered with the company network, though the number is rapidly accelerating each month. The service, which incurs a nominal monthly fee paid for by the employee's department, allows access to corporate email, calendar and intranet. The ability to conveniently access this information at any moment to help IBMers serve the needs of themselves and their clients justifies IBM's mobile infrastructure investment.

In 2009, IBM conducted a joint research study with Columbia University (New York, USA) to better understand how IBMers use mobile phones and how their use of mobile applications affects job performance (Ahmad, 2009). Specifically, the study examined the mobile web-based application Mobile BluePages, which serves as IBM's internal company directory. IBMers can easily find other IBMers while on-the-go using Mobile BluePages as it provides instant access to expertise through peers and subject matter experts. IBMers locate other specialists by name, phone number, email address and job responsibility. They can view each employee's hierarchical connection via their reporting chain. Mobile BluePages gives the same information as the desktop version of BluePages.

The study garnered significant results from 400 IBMers through detailed questionnaires and

8 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/research-based-insights-inform-change/50629](http://www.igi-global.com/chapter/research-based-insights-inform-change/50629)

## Related Content

---

### A Distributed M-Tree for Similarity Search in Large Multimedia Database on Spark

Phuc Doand Trung Hong Phan (2020). *Handbook of Research on Multimedia Cyber Security* (pp. 146-164).

[www.irma-international.org/chapter/a-distributed-m-tree-for-similarity-search-in-large-multimedia-database-on-spark/253030](http://www.irma-international.org/chapter/a-distributed-m-tree-for-similarity-search-in-large-multimedia-database-on-spark/253030)

### Opportunities and Challenges from Unlicensed Mobile Access (UMA) Technology

Ioannis Chochliouros, Anastasia S. Spiliopoulou, Stergios P. Chochliourosand George Agapiou (2009). *Encyclopedia of Multimedia Technology and Networking, Second Edition* (pp. 1112-1121).

[www.irma-international.org/chapter/opportunities-challenges-unlicensed-mobile-access/17525](http://www.irma-international.org/chapter/opportunities-challenges-unlicensed-mobile-access/17525)

### Illumination Independent Moving Object Detection Algorithm

(2014). *Video Surveillance Techniques and Technologies* (pp. 1-14).

[www.irma-international.org/chapter/illumination-independent-moving-object-detection-algorithm/94119](http://www.irma-international.org/chapter/illumination-independent-moving-object-detection-algorithm/94119)

### Mobile Web Services for Mobile Commerce

Subhankar Dhar (2009). *Encyclopedia of Multimedia Technology and Networking, Second Edition* (pp. 950-956).

[www.irma-international.org/chapter/mobile-web-services-mobile-commerce/17503](http://www.irma-international.org/chapter/mobile-web-services-mobile-commerce/17503)

### Information Technology and Virtual Communities

Chelley Vicianand Mari W. Buche (2005). *Encyclopedia of Multimedia Technology and Networking* (pp. 417-423).

[www.irma-international.org/chapter/information-technology-virtual-communities/17278](http://www.irma-international.org/chapter/information-technology-virtual-communities/17278)