

5-1-2010

The mobile lab

Sarah Huggett
Elsevier

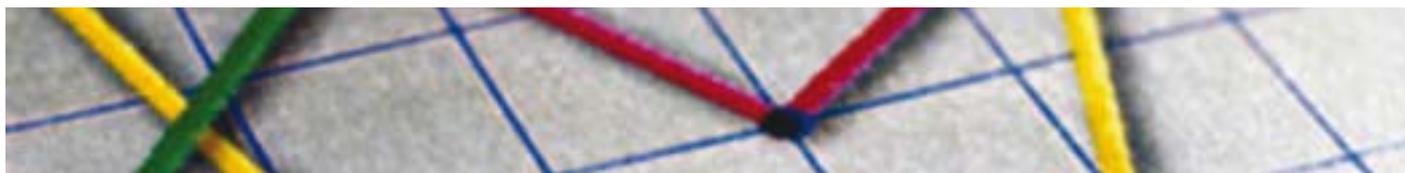
Follow this and additional works at: <https://www.researchtrends.com/researchtrends>

Recommended Citation

Huggett, Sarah (2010) "The mobile lab," *Research Trends*: Vol. 1 : Iss. 17 , Article 3.
Available at: <https://www.researchtrends.com/researchtrends/vol1/iss17/3>

This Article is brought to you for free and open access by Research Trends. It has been accepted for inclusion in Research Trends by an authorized editor of Research Trends. For more information, please contact r.herbert@elsevier.com.

Research trends



The mobile lab

SARAH HUGGETT

The growing prevalence of mobile devices cannot be ignored: cell phone subscriptions worldwide have reached 4.6 billion and this figure is expected to increase to five billion this year (1). With a global population of around 6.8 billion (2), this means that approximately two-thirds of people now own a cell phone (3).

Between 2000 and 2008, the cell phone industry boomed, recording average year-on-year subscriber growth of 24%. Scholarly publications on the subject kept pace during this period, rising 18% per annum (see Figure 1, reflecting data 1996-2008).

In more recent years, the industry has expanded to include smart phones and other mobile devices, and many of us now expect to be able to access the information or services we need anytime, anywhere.

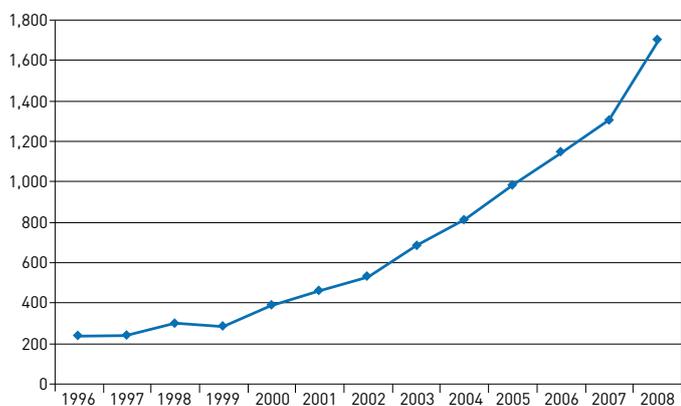


Figure 1: From 1996 to 2008, scientific literature (articles, reviews and conference papers) with variants of "cell/mobile/smart phone" in their titles, abstracts or keywords shows an annual growth of 17%. Research output was relatively stable in the late 1990s but started climbing steadily after 2000, with a jump of more than 30% between 2007 and 2008.

Source: Scopus



Continued on page 7

Continued from page 6

Academic apps

The mobile boom has led a growing number of actors in the Science, Technology and Medicine (STM) community – from academics and universities to publishers and database providers – to ensure their services are easily accessible from handheld devices. Academia's uptake has been swift, and applications designed specifically for researchers and health professionals (see box, right) have mushroomed. This is significant, especially as the market is still in its infancy – online app stores only began to emerge about two years ago.

As more apps are released, we are in danger of seeing an "app" overload hit the market, and busy academics will need help choosing the best apps for their needs. User reviews, visibility, popularity and usefulness will, therefore, play a part in determining the success or failure of various science apps. Among the early adopters, some will prove successful and others will fade away, but it is certain that scientists' interest in mobile apps is set to continue.

References:

(1) [February 2010] "Number of Cell Phones Worldwide Hits 4.6B", *CBS News*.

(2) United States Census Bureau.

(3) Wray, R. [September 2008] "Half world's population 'will have mobile phone by end of year'", *Guardian*.

APPLIED science: mobile apps for researchers on the go

Atom in a Box: an iPhone app that aids in visualizing hydrogenic atomic orbitals in quantum mechanics.

Chemical Touch: an iPhone app for detailed periodic and amino acid tables.

Epocrates: the Rx version is a free comprehensive handheld drug guide for Palm, Windows Mobile, iPhone and BlackBerry.

iCut DNA: this iPhone app allows users to search the Restriction Enzyme Database for enzymes and DNA nucleotide sequences.

MD Consult Mobile: designed for use with the iPhone, BlackBerry and other smartphones, MD Consult Mobile gives access to an extensive library of medical content.

Molecules: an application for the iPhone and iPod touch that allows users to view and manipulate three-dimensional renderings of molecules.

Netter's Anatomy Flash Cards: an iPhone app to navigate more than 300 anatomical flash cards. Neuroscience and other versions are also available.

PubSearch Plus: a free iPhone app that allows users to navigate and search the biomedical literature database PubMed.

Papers: an iPhone app dubbed the "iTunes for literature" allowing purchase and storage of journal articles.

Scopus Alerts: an iPhone app enabling users to search and save searches in the Scopus literature database, set up and view alerts, and annotate and share documents.

Starmap: a sophisticated interactive iPhone app claiming to be a "portable planetarium".