

Heads in the 'Cloud'? Is our world turning upside down?

Many say we are in the midst of another 'dot com' boom, with Facebook recently being valued at 70 billion US dollars. The current 'dot com' boom is based on *cloud computing*. It enables network access to all the resources that, in the past, had to be stored on local hardware. Using *cloud computing* allows the user to be agile, not constrained by location, and can access variable computing capacity and capability completely on demand. *Cloud computing* is revolutionising the IT arena and driving a period of rapid change. Companies like Facebook and Linked In have learned to exploit the new technology to huge advantage.

On the other hand, flag-ship pharmaceutical companies are struggling to grow and several of them, such as Pfizer, Roche or GSK, to name a few, are closing whole geographic sites.

Can we learn something from these two phenomena?

Pharma Industry analysts, IMS, have forecast pharma to continue growing, but only at 5-7% globally. However, the growth is being driven primarily by the pharma emerging markets (15-17%) and China (25%) (1). Pharma R&D last year grew by only 2.3% (2), whilst the pharmaceutical contract research sector is growing at 10% per annum (3). This differential between the growth rates indicates that it is not only pharma that is paying for R&D. In the US, NIH funds more, early R&D (as far as Phase II) than pharma itself (4). In all regions, universities, small investors, venture capital and governments are now funding substantial proportion of research before phase II. This turns the traditional model, where early research is almost all done in big pharma, upside down. In addition, CRO and biotech sectors have become the delivery systems, by which the data and intellectual capital to generate new products are provided. Big pharmaceutical companies are therefore buying in R&D pipelines, and then outsourcing, at almost every stage of further drug development and post-licensing operational work. As a result, experienced innovators are leaving top pharmaceutical companies (often becoming freelance consultants). So, increasingly, the big pharmas are doing less and less fundamental R&D, buying in late phase products and subcontracting various clinical development activities for their own products. Many types of organisations, big and small, are now involved in developing drugs ranging from single freelancers to the megalithic pharma with thousands of employees. This new set-up is pharma's version of the *cloud* but it appears that pharma have not yet learned to adapt to it and still maintain its profitability and growth.

So what can we do? Current standards and ways in which we work, may not be appropriate for less affluent smaller units than the vast big pharmas for which they were designed. We need to review our whole approach to standards as they may not work efficiently in this environment. Some processes may need to be tightened up, some potentially made more efficient and some radically changed. We need appropriate leadership and innovation to be shown by all the stakeholders in the process.

The 'dot com' boom of 2011 is much less risky, much more efficient and adapts more rapidly to the new environment than the last one. The pharmaceutical industry must do the same and not just rely on the emerging markets and China to grow. New ways of working need to be introduced. TranScrip Partners is a Partnership owned jointly by all its consultants, all ex-big pharma, and it has a vision to lead and innovate in both methodology and practice as well as working with our clients to give their products the best possible chance of success by also providing basic hands-on operational work.

References

1. IMS Health
2. Report by Burrill & Company, PhRMA, NIH Office of Budget
3. Business Insights
4. Report by E. Zerhouni