

The new rules of technology

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Abstract

Purpose – *This viewpoint aims to review the book Consumption Economics: The New Rules of Tech, by J.B. Wood, a volume supported by the technology service industry.*

Design/methodology/approach – *The paper provides an overview of the book, key messages and implications for the future.*

Findings – *The shift to the cloud will change the needs for enterprises to purchase and maintain expensive hardware/software changing the business model for companies that sell and service these systems. The book fails, though, to explore how the shift by their client, the users of these systems, will impact their relationship with their clients. Education is a good example.*

Practical implications – *Front end capital costs will be amortized over the long term by the ability of former owners to pay incrementally, micro transactions, MT, which may yield similar revenues but shift the burden of capital onto the providers/service companies affecting revenues, commissions, fees and working relationships.*

Originality/value – *Business models will change, new partnerships and uses of information will emerge and knowledge will more easily flow across geo/political and enterprise boundaries.*

Keywords *Cloud, Information, Education, Economics, Micro transactions, Business models, Information technology*

Paper type *Viewpoint*

Wood, J.B., *Consumption Economics: The New Rules of Tech*, Point B. Inc, Seattle, WA, 2011

This volume is published under the auspices of the Technology Services Industry Association, TSIA, whose members are composed primarily of those individuals and companies, which provide the digital systems, which support modern industry by managing their information flows. Its focus is the emergent shift in how such software/hardware are bought, managed and supported.

The defining element causing the shift is the arrival of the “cloud”, the very large banks of servers that are scattered around the world and managed by such companies as Google, Amazon and a host of smaller providers and which provide very large storage capacity for users and increasingly lower cost/bit of stored information, data processing and information transfer around the planet at the click of a mouse.

The basic focus is to paint a picture of what is or soon will impact on those companies, which sell sophisticated software systems to large enterprises, corporations, non-profits, including government and education. As the cloud becomes ubiquitous, familiar and comfortably stable for traditional clients, these applications will move into the cloud, eliminating major front end capital investments and ongoing, onsite support. The business model then shifts to a fee-for-services for activities including such simple applications as word processing and spreadsheets, or, as Wood labels it, micro-transactions, MT. The providers may realize the same long term net revenues but these will be cumulative over time. This inverts the cash

flow from an initial front end sale/installation and tapering support revenues to a cumulative income stream based on usage.

Companies providing these applications will find that their business model shifts, needs for capital become very different and all personnel who depend on the large sales for commissions will find that their performance pay will also change. The book essentially walks us around the new model, carefully detailing how the players, management, and economics change with the introduction of new players, the owners of the clouds, and their support infrastructure.

How roles will change within the industry is pointed out in great detail. Where the book fails is to make the same walk around the model from the end user perspective or the clients of their clients. These shifts are disruptive and transformational and can be understood in models, which have been put forward in the business world by such authors as Clayton Christensen and George Land. All the diagrams in *Consumptive Economics* can, perhaps, be more readily recast and, more easily understood in either Christensen's or Land's terms.

In the past corporate IT departments were concerned that their system would come crashing down if they didn't control every access and device on the system. Today, the ubiquitous nature of "smart" personal devices which can readily access most IT applications has caused the departments to capitulate and accommodate the individual with their "smart" phones and similar portable electronics.

As support moves into the cloud, IT, at the extreme, could be reduced to a tech center for employee tablets, net books and smart phones. Open source applications by third parties significantly change the economics of technology management. Changes in management, such as security, also represent shifts since much is shifted outside of the corporate and institutional walls.

One of the rationales for this volume is to alert those in the technology services arena of the changing economics, particularly the cash flow. Costs for development, payments from clients affect all parties including the sales force. Again, the volume is almost silent on what this means for the clients. Education, for example is finding that its heavily loaded front end in physical infrastructure as well as all its personnel from grounds keeper to faculty represent costs, which the cloud shifts or significantly reduces. In fact, knowledge industries may find their models change more than those who traditionally provide goods and materials where production/delivery becomes more efficient.

In education, for example, there has been a major emphasis on e-learning where classes or only portions of classes are delivered electronically. Most of this has been of incremental cost or savings through technology. Today, in the United States' secondary schools, there is a process called "flipping", (<http://tinyurl.com/3jyrbwy>) where the teachers provide lectures online which turns the brick-spaced classes into tutoring and study sessions which changes who could/should deliver lectures and who provides tutoring and how the entire enterprise is managed. It also starts to look more like the open access courses being delivered primarily to post secondary students.

The next step is course sharing and eventually how students learn and advance while reducing the need for significant front-end capital and individual investments in delivery systems. The rapid development of very low cost tablets such as that from Raspberry Pi, (www.raspberrypi.org/), makes accessing knowledge systems in the cloud equivalent to having a powerful desktop computer in the palm of one's hand.

The primary focus of the volume is business-to-business, where technology service providers are, today, selling large systems to clients who serve their corporation, institutions and their customer base. Putting systems into the cloud changes relationships among all parties. For example, Onlive, (<http://desktop.onlive.com/>), puts Microsoft Office and related applications onto tablets, turning these hand held devices into the equivalent of the old, desk top, work stations attached to mainframes where the latter is, today, the cloud. At about USD 5/month, that workstation and all the applications are accessible, globally, with a minimum of 1 mbps of speed. Thus, the relationships start to shift between hardware/software/service providers and their current clients, which use these systems for their own clients to including these recipients via a short circuit through the cloud. Even systems as rigid as education will find that institutions will need to re-examine their models for providing knowledge and certification for their students.