

Review:

Peter Fingar, Dot.Cloud. The 21st Century Business Platform Built On Cloud Computing, Meghan-Kiffer Press, 1st edition (Amazon Kindle edition), Tampa/Florida, 2009, ISBN-13: 978-0929652498

Imagine the current owner of a business process being a frog, sitting in a pot of water with the fluid's temperature increasing ever so slightly. Leveraging its unique capabilities, the frog keeps adjusting its comfort zone with the rising water temperature. Nothing seems to change, short-term memory creates the impression that the environment inside the pot is as stable as it has always been. At some point, however, the frog's body physics have to succumb to the rising water temperature and the physics of heat: To the frog's own surprise, it is too late to jump out of the pot as it ends up being boiled to death.

Jump the pot early, is what Peter Fingar tells us in his book “Dot.Cloud. The 21st Century Business Platform Built On Cloud Computing”, take the risk to explore the world outside the pot, even if you have to leave a comfortable environment that seems stable and you do not know what to expect. After all, if you are managing a business, your jumping will decide whether that business will survive or not. Getting comfortable and resisting change while living in a world of change, change that often is of disruptive nature, will ultimately lead to your business' demise, if you do not use both your investments and resources to fully embrace the change.

In his book, published in February 2009, Fingar describes the profound impact that he sees “Cloud Computing” having on the worlds of technology and business. He does not hesitate to compare the changes approaching (and their possible impact) to the advent of the internet itself or to any other of the true technological revolutions of the past.

The person interested in this book must be made aware, however, that it is not exclusively a technical book focusing on the technologies of Cloud Computing. More importantly, it deals with the interaction between technology and business and it describes in detail the significant repercussions on the business side that are resulting from the fundamental changes happening on the side of technology, namely in the area of Cloud Computing.

Even though the term “cloud computing” currently can only be described as “hot” and is being used frequently and ubiquitously (often with contradicting or inconsistent definitions), Fingar does not assume on the side of the reader a pre-

existing definition for this or any other popular terms (like Web 2.0, Saas, Crowdsourcing, Mash-ups, etc.). Instead, he goes through the exercise of defining all common key terms used in the context of his book himself and to go deeper or broader wherever needed. For example, he provides a very important clarification of the term Cloud Computing itself through differentiating three aspects of it: the core *cloud computing infrastructure*, the tools and components, comprising the *cloud platform*, and the resulting delivery model, the *cloud services* [(Kindle Location) KL 592-98]). This general approach to create a consistent vocabulary while ensuring clear definitions can be observed throughout Fingar's book and is very commendable in itself already.

There are a number of reasons why Fingar's unique book deserves praise as a true *tour d'horizon* across the landscape of today's evolving technologies, their impact on the way business is being done, and the complex interdependencies between both:

- In addition to crisply describing the relevant technologies around Cloud Computing and putting them into perspective, Fingar also connects those - in the same "reader-friendly" way - with terms and models of the business world which are undergoing significant changes because of the former. That way, he provides valuable insight for the business-interested person into technological areas often out of sight or invisible. *Vive versa*, he does the same for the technology-oriented reader who is keen on learning about business and business processes.
- Fingar is almost artistically building upon the latest research or publications and includes his findings in the book. By connecting dots that usually seem randomly scattered and have not been lined up in this particular way before to underscore the message of the book, he is able to paint a bigger picture, proving the relevance of the subject discussed. In addition, the context he is creating around Cloud Computing and the business based on it, offers multiple "entry points" for readers with different interests. He includes, for example, aspects of the current economic crisis and many current or historic examples for companies that either failed or succeeded in anticipating or quickly reacting to change.
- Fingar is able to draw a direct and convincing line all the way from describing "unanimated" technology to how these will change human interaction, business management, and the way people will organize and manage themselves in new ways as teams "in the cloud". Showing this interdependence between emerging technologies and human business interaction might well be the single most important aspect of his book.

From the review author's admittedly subjective and selective perspective, there are some findings that deserve particular highlighting as they exemplify the

dimensions of change that we likely can expect from the transformations described in Fingar's book:

1) *While in some areas still the privilege of big enterprises ("monolithic", as Fingar calls them) that are in a position to own a complete infrastructure for large-scale cloud-computing-like services, Cloud Computing itself will more and more become a service in itself: Offered by several big providers and free for companies of all sizes or even individuals to buy, it will increasingly be leveling the playing field and provide a scalable, fast, and failsafe platform for development and deployment to be used by many more entrepreneurs than are able to access it today.*

Thus, with no limiting factors based on size or geographic location, competitive pressure will increase and opportunities will become available to an increasing number of businesses, tapping into the Cloud Computing infrastructure from anywhere.

In fact, the implications of Cloud Computing being accessible from any location on the globe are begging the question which opportunities will be provided to the emerging economies of the BRIC (Brasil, Russia, India, China) countries, allowing them to accelerate their process of industrial "catching up". Already today, we are hearing about a "blowback" effect, where products or ideas originating in the industrialized countries are being adopted by emerging markets and in some cases find their way back into the source economies. Fingar lists the 70-Dollar PC, the 10,000-Dollar luxury or the hybrid cars, and solar technology products as examples. [KL 329-32 & KL 1754-62]

2) Expanding on the item above, *it seems worthwhile to look at what Fingar calls the "greatest shift since the Industrial Revolution", namely globalization". [KL 354] Clearly, this shift represents a huge challenge for almost all established companies of the industrialized countries. Increasing the size of their addressable markets, provided by the developing global economy, is now a must for those companies in order to survive. They are required to carry their business into the single biggest remaining market: the world.* In addition to creativity, this requires quite some flexibility in the area of product design, pricing, messaging, and more, all of which may be difficult to deliver given the widespread and generally accepted goal to maximize revenue. Here, though, the common paradigm to base investments and measure success on the "return-on-investment" (ROI) can become an obstacle to long-term success and may actually need to shift to increasingly consider a "return-on-opportunity" (ROO) that takes into account an investment's overall benefits (market presence, raising brand awareness, etc.) versus the benefits solely measured based on revenue.

Looking at it from the other side, a company located in an emerging economy might ideally be equipped with a highly motivated and educated workforce, available on a relatively lower salary level. The products themselves, designed for the domestic market, might also be subject to a lower pricing for a local market. When comparing this scenario to that of a competitor from an industrialized country, all factors combined are likely to result in a better “business launch pad” for a company of an emerging economy. Such a company might quite literally be able to thrust its business forward as soon as it decides to actively pursue the opportunities available through leveraging a global cloud computing infrastructure and platform.

If, in addition, such a company is able to establish values which Fingar calls “generatives” [KL 1186-91: A generative value is a quality or attribute that must be generated, grown, cultivated, nurtured. A generative thing can not be copied, cloned, faked, replicated, counterfeited, or reproduced.], it seems obvious who will be the winner of the contest.

3) *With the advent of Cloud Computing, new “business operations platforms” will emerge that will force companies to re-assess and potentially change their business models.* [KL 456-63] The Cloud will be the space where users can go anytime from anywhere to look for services. Services which are not dependent on an application installed somewhere on a local machine, but are, at the same time, faster, safer, and more reliable. Here, emailing, online backups, and other services are just the beginning. Increasingly, business processes and services will also be provided and managed in the Cloud.

As a result, users will go through a new experience which will differ vastly from the one they are encountering when performing work (plus installation, maintenance, managing security and safety) on a local computer or device. It also seems safe to assume that the new experience will in most cases be superior to the traditional one, or at least, it will be perceived as superior. Fingar considers this improvement in the user experience to be the “big disruptor over the next several years”. [KL 646-50] In other words, a few years from now, there will only be one way left of doing things, the other way will have ceased to exist. Probably much faster than is being assumed today, global competition will help immensely to accelerate this transition.

It all seems logically consistent: The Internet will be replaced by the “Intercloud” (remember, it was Fingar’s book where you may have read it first!), being a federation of all kinds of clouds, much in the same way that the Internet is a network of networks. [KL 772-76] The Intercloud will also provide the perfect home for “Web 3.0” technologies where (after the “read-only” Web 1.0 and the “read-write” Web 2.0) smart agents will be performing “read-write-execute”

actions, performing their tasks as learned or as instructed by the user. [KL 1270-76]

It is just one more step to transfer this concept into the business world and assume that “business events in the Cloud are like thunder and lightning”. When “an ‘event’ happens (lightning) - an order is placed, an order is cancelled, a supply truck goes into a ditch - all process Clouds hear the signal (thunder) simultaneously and adjust in real time”. [KL 1613-30] The reviewer assumes that we will be there sooner than we think.

4) Last, but not least, *Cloud Computing will provide the infrastructure and platforms on which new ways of organization and collaboration – both internal and with customers or external partners - will thrive. Improvements in coordination and decision making will result in new discoveries and workflows, as well as innovations, all of the above resulting in significantly enhanced operations.* [KL 178-81]

At the end of Fingar’s elaborations, the type of change mentioned above will be nothing short of disruptive or truly ground-breaking since management will have to adapt to the specifics of the Cloud. Fingar claims that this will result in “management structures and styles to become organic networks rather than hierarchical, function-divided monoliths”, where “leaders don’t give commands, they transmit information, trusting the team members’ competencies and gaining accountability through transparency” and where “true leadership is about cooperation, not control”. [KL 2500-2512]

Consistent with the notion of an organic structure of the Cloud or the Intercloud, Fingar references the terms “starfish organization” [KL 2113-30] and “bioteams” [KL KL 2739-48]. The former being the metaphor an enterprise capable of re-growing lost limbs within a short time, while not blocking the whole organization during the recovery process. The latter being a self-managed and autonomous organization that blooms through heavy participation of the team members, with “multiple leaders, yet no leader”. Since these two types of organizations have adapted best to the specifics of the Cloud and are able to use its tools with virtuosity, they will ultimately be most productive and are likely to lead their business to success ... or survival.

Although some of Fingar’s claims or propositions sound futuristic at times, it becomes obvious upon closer inspection that he may be using appropriate words for a reality already in existence. Already today, multinational companies are, for example, developing software around the clock and around the globe while employing bioteams in starfish-like organizations. Throughout his book, one can not fail to notice that Fingar is describing a future that has already started.

More importantly, he succeeds in convincing the reader that - in times of groundbreaking technological changes and of traditional “monolithic” business management and processes being torn down - it is better to get into the game early and to become part of the change. When he writes “the sky’s the limit for the Cloud as a platform for business innovation.” [KL 3120-24], the reader tends to agree whole-heartedly. And, finally, with the help of Fingar’s visionary advice, it may well be that the lives of many frogs will be saved.

Author: Dirk Meyer

Dirk Meyer is a product manager for internationalization technologies and world-readiness at Adobe Systems, based in San Jose, California.

In this role within the company’s globalization group, Mr. Meyer provides guidance to internal teams on how to improve a product’s international functionality, contributing to make Adobe’s products “world-ready” and capable of supporting a truly global customer base. As the so-called “Web 2.0” technologies have started to make their profound impact on the software business in general, Mr. Meyer is particularly interested in the challenges and opportunities those technologies are presenting in the area of internationalization and how they are affecting development processes and workflows within software companies. In the past, as a member of Adobe’s Type department, Mr. Meyer’s tenure included working on CJKV fonts and researching Asian encoding standards. He was among the first to describe and assess the impact of the Chinese standard GB 18030. In addition, he has played an important role in the successful integration of shared technologies into several versions of the Adobe Creative Suite product family, working with teams that spanned time zones and cultures. Mr. Meyer has also supported Adobe’s Learning Resources group as a program manager for online documentation and help content projects.

Mr. Meyer studied in Germany and at Beijing University, China. He holds a masters degree in Chinese Studies and East European History from the University of Tübingen, Germany.