

Abstract

There is no doubt that we have seen a lot of commoditization on the hardware side of the computer industry the last two decades or so. Currently there are also clear signs of value chain industrialization in the software industry, with more options for customers to buy from different vendors for each part. This is driven by forces such as open standards, alternatives from open source software and service oriented architectures. The Internet trend with "fatter pipes" all the way to the end user goes on with full strength and globalization is still enabling long tail markets and global niches, even delivering on some of the failed promises from the dotcom years.

The Web 2.0 approach of using Internet as a platform, with user contributed content, in applications that harness network effects by design, is shaping the software industry of today and tomorrow. The lines between data, applications, software and services can sometimes be blurry. In a few years time, this might just seem natural.

I have studied the history and innovations in business models in the software industry. Even if the concept of business model is more widely used than defined and understood, it is an important topic to discuss and in this thesis I have indicated some trends in business model innovation that can be seen as a response to the above changes of the business landscape:

- The appliance model, where the user buys the hardware and gets the software and service included in the fee
- Different approaches to commercial Open Source business models
- Vertical integration and total customer solutions to capture margin
- Advertisement-based revenue models
- Software as a Service, often abbreviated SaaS – subscription-based software delivered over the web

I have found that there is a lot of entrepreneurial activity regarding SaaS and that subscription-based pricing has increased its popularity, especially among young companies. I also show how the appliance model with a total user experience enabled Apple to command high prices in a market normally characterized by very low margins.

I have also found the SaaS model, when implemented in a good way, to be perfect for mass customization. If a vendor follows the best practice in enterprise marketing of offering naked solutions with flexible options and combine that with a flexible multi-tenant architecture and centralized hosting model, the up-selling of features for a particular customer should be as easy as toggling a switch.

For the pragmatic business leader, I will particularly recommend the business model selection funnel in section 6.2.2 and the simple formula in section 4.4.4.1 for comparing subscription and traditional licensing, that relatively easy can be expanded for usage in a real business. For instance if a customer is hesitant on assuming they will use a particular software longer than three years and the seller knows the actual churn rates show an average lifetime of seven years, the difference in value can be at least 30% over the seven years. It might even make the initial sale happen in the first place, as the customer avoids the lump sum upfront and the customer's IT department is less likely to stop the deal because it is hosted externally anyway. Even more progressive pricing schemes exist, such as pricing based on business metrics of some sort. A word of caution, though: At this point, the vendors are actually more enthusiastic about pricing based on usage metrics than their customers are!

Although the main conclusion is that there is no "one size fits all" for business models in the software industry, if I had to place one bet on which business model innovation that will have most impact based on my findings, my decision would be clear: My money would be put on SaaS – on-demand subscription based software. Predicting paradigm shifts is a risky business, and especially so with shifts that have been predicted similarly without really happening before. Nevertheless, my take is that enough enabling factors have changed so even if it will not replace the traditional license, it may radically change the way software is sold, distributed and developed the coming years. The findings point to a possible new-market disruption, and for some application types the low-end disruption pattern also fits well.

It is exciting times in an exciting, and very much changing, market. It remains to be seen what the landscape looks like in five years time and what business models that will dominate then. You may not find the answer to that question by reading the rest of this thesis, but I hope you will gain some insight that can help you form your opinion. Enjoy.