Chapter 5.8 Investing in Open Source Software Companies: Deal Making from a Venture Capitalist's Perspective

Mikko Puhakka Helsinki University of Technology, Finland

> Hannu Jungman Tamlink Ltd., Finland

Marko Seppänen Tampere University of Technology, Finland

ABSTRACT

This chapter studies how venture capitalists invest in open source-based companies. Evaluation and valuation of knowledge-intensive companies is a challenge to investors, and while many methods exist for evaluating traditional knowledge-intensive companies, the rise of open source companies with new hard-to-measure value propositions such as developer communities brings new complexity to deal-making. The chapter highlights some experiences that venture capitalists have had with open source companies. The authors hope that the overview of venture capital process and methodology as well as two case examples will provide both researchers and entrepreneurs new insights into how venture capitalists work and make investments.

INTRODUCTION

In the traditional view, the evolution of a technology-based new company is seen through separate consecutive stages. Business is based on creating tangible real assets; and in the end, the value of a company is also based on real assets. First, the technology is developed, which is followed by setting up the organization. Once the organization has reached a sufficient scale, internationalization is started. Finally, the value of the company is estimated with potential venture investment or through realization either through an initial public offering (IPO) or a trade sale.

However, due to the increased complexity of products and services, time-to-market tends to lengthen. In order to maintain sufficient resources until the company reaches profitability, external financing is needed. The time needed to turn a company's cash flow positive varies considerably. A long product development phase and slow market penetration prolong the period of negative cash flow. Simultaneous internationalization drains resources at an even higher rate. Since start-ups do not usually have collateral to secure bank loans, equity financing is the most evident form of financing. Venture capital funding is usually sought in order to get business development support in addition to plain financing.

New business ideas are increasingly more knowledge intensive, driven in part by the application of ICT as an enabling technology across industrial sectors. Also, the nature of business has changed: times-to-market are faster, development stages are no longer consecutive but can be simultaneous or even skipped, and companies are born global. Distinct from yesterday's industrial companies, today's knowledge-intensive companies' values are not based on their real assets but rather on their intangible assets such as knowledge, networks, and brand. Needless to say, intangible assets are considerably more challenging to value. The previous is even truer in the case of open source software (OSS) companies, since part of their business (and value) relies on open source (OS) communities in which people contribute their time and knowledge voluntarily into projects. Contributions are real but take place without formal contracts or incentive mechanisms, and people can easily abandon the community.

Furthermore, OSS companies that build their businesses on OS products (e.g., Google, JotSpot) have huge savings in time and licensing fees; they get to market faster and cheaper. This sets even greater challenges for those valuating OSS companies. In theory, these free contributions should yield in higher valuations. On the other hand, the uncertainties involved should have the opposite effect.

The mission of this study is to compare traditional IT companies and their valuations and evaluations to those of OSS companies from the viewpoint of the venture capitalist. This is further divided into several subquestions:

- What are the special issues to be taken into account when evaluating OSS companies?
- Do venture capitalists assign a positive, negative, or no value to OSS companies and their communities when compared to traditional IT companies?
- Is there hype around OS?

Data for recent valuations of OSS and traditional IT companies were gathered from the VentureOne database. VentureOne (2005) is one of the leading venture capital research firms offering information on the venture capital industry. To better understand the investment decisions made and valuations paid for OS companies, and in order to get insights into what are the specialties in evaluation of OSS companies, two case studies were carried out. When designing the case study, based on the authors' initial understanding of the issues at hand, a pattern of interview questions was constructed. In addition to these semistructured interviews, data were gathered from publicly available sources. The interviewees were key managers of the case companies. Both of the cases present seed/early-stage venture capitalists that have been active in investing in OS companies. In addition, the case studies were backed up with several interviews with venture capitalists and entrepreneurs as well as feedback gathered from Internet online communities (for the questionnaire used, see Puhakka & Jungman, 2005).

BACKGROUND

Earlier Research on Evaluation and Valuation Theory

Venture capitalists evaluate their investment opportunities based on certain criteria. It is widely accepted that the three key investment decision 7 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/investing-open-source-software-

companies/29486

Related Content

Multi-Object Tracking Using Gradient-Based Learning Model in Video Surveillance

Mohana Priya D. (2021). *International Journal of Software Innovation (pp. 1-17).* <u>www.irma-international.org/article/multi-object-tracking-using-gradient-based-learning-model-in-video-</u> <u>surveillance/289168</u>

Single-Rate Discrete-Time Signals and Systems: Background Review

Ljiljana Milic (2009). *Multirate Filtering for Digital Signal Processing: MATLAB Applications (pp. 1-22).* www.irma-international.org/chapter/single-rate-discrete-time-signals/27210

I2C Interface

(2017). *Microcontroller System Design Using PIC18F Processors (pp. 263-282).* www.irma-international.org/chapter/i2c-interface/190454

Technical and Economic Evaluation and Development Policy Suggestions of LNG Power Plants: Evaluation and Development Policy

Jiaojiao Liand Linfeng Zhao (2022). International Journal of Information System Modeling and Design (pp. 1-14).

www.irma-international.org/article/technical-and-economic-evaluation-and-development-policy-suggestions-of-Ing-powerplants/303130

Information Theoretic XSS Attack Detection in Web Applications

Hossain Shahriar, Sarah North, Wei-Chuen Chenand Edward Mawangi (2018). *Application Development and Design: Concepts, Methodologies, Tools, and Applications (pp. 972-987).*

www.irma-international.org/chapter/information-theoretic-xss-attack-detection-in-web-applications/188243