Software Business Models

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Contents

- Presentation of the SBM Study on Software Business Models
- What is a business model?
  - Definitions
  - Elements of a business model
  - Sample profiles of case companies
- Exploring Business Model Life Cycles
- 4 Reference models of software business
- Summary
Background for research on Business Models

- “The term business model is widely used but rarely defined.”
- Research has focused product development, finance and publication cycles, or, the industry as a whole
- There is a need for tools that help understanding and managing the bounded variations of sw businesses

Research Focus

- The concept of business models
- The architecture of product and service — product and service proposition
- The essential elements of business models
- Stakeholders utilities and roles in software businesses
- Existing combinations of different elements of business models (=bounded variations)
Research Questions

- What are the basic elements of business models?
- What kind of business models exist in the software business?

Software Business Model Framework

- identification of the elements of business models
- a framework for interpreting business models of divergent businesses
- conceptual tools to support management work and stakeholder’s decisions
- basis for evaluating the effects of key factors (drivers) in business development
What is a Business Model?

Framework and contents

Anchoring the Concept of Business Models to related concepts

- **Business Idea**
  - What?, To Whom?, How?
  - (Image?)

- **Business Strategy**
  - Means for achieving strategic objectives?
  - With what resources / input factors?

- **Business Plan**
  - A written description of the basic concepts how a company is aiming at putting its business idea & business strategy into operation.
  - Includes description of markets, (+development trends), competition, customers’ needs & their development, marketing plan, finances, product development plan, risks, strengths, opportunities & threats, etc. (see different templates of business plans in the Internet)
A Business Model is about

- how does a business operate in practice?
  - The manifestation of both business idea and business strategy in practice
  - How the business is adding value to its customers and stakeholders?
  - What is the combination of various elements of business?

- how does the business gain money?
  - Sources of revenue (vs. stakeholders’ utilities)
  - Pricing & cost structure
  - Lock-in effects
  - Network economies

Some Definitions

Timmers (1998)

- “An architecture for product, service and information flows, including a description of the various business actors and their roles; and

  a description of the potential benefits for the various business actors; and

  a description of the sources of revenue.”
Definitions (cont’d)

Mahadevan (2000)

- "..a unique blend of three streams that are critical to a business:

  The **value stream** for the business partners and buyers,
  the **revenue stream**, and the **logistical stream**."
Definitions (cont’d)

Chesbrough & Rosenbloom (2000)

- The functions of a business model are to define
  (1) the value proposition,
  (2) a market segment,
  (3) the value chain within the firm,
  (4) the cost structure,
  (5) the position of the firm within the value network, and,
  (6) the competitive strategy.
Stakeholders’ Roles & Utilities

When examining a business from the perspectives of various stakeholders, we could say that a good business model interconnects:

- A profitable investment for owners
- A beneficial service for customers
- A rewarding and knowhow–favorable work organization for employees
- Competitive business strategy compared to competitors

(Räsänen 1996)

Factors Affecting Business Models
Elements of a Business Model

**Product strategy**
- describes the focus of product development and the core product and service proposition of a software business. In addition to this, it describes the way the product development work is organized.

**Revenue logic**
- describes the way the software business generates its revenue and profit.

**Distribution model**
- describes the way the marketing of the product and service offering has been organized and who are the sellers and marketers. The sales model also characterizes the sales process and its outcome, i.e. the agreement between the vendor and a customer about the characteristics of the solution delivered.

**Services and implementation model**
- describes the essential services of the business and how the product offering will be dispatched to the customers as working solutions.
## Elements of a Business Model

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<thead>
<tr>
<th>Product development focus</th>
<th>Customised project or solution</th>
<th>Product Platform</th>
<th>Uniform core product</th>
<th>Modular product family</th>
<th>Standardised on-line service</th>
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<td><strong>Services &amp; Implementation</strong></td>
<td>IT Consulting or Customer-specific system work</td>
<td>System integrating</td>
<td>Software deployment</td>
<td>Outsourcing / ASP</td>
<td>Self-service</td>
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<td>Direct contact with customers</td>
<td>Reseller or agent model</td>
<td>Republisher / OEM model</td>
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<td>Partner network</td>
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<td><strong>Revenue logic</strong></td>
<td>Effort-, cost-, or value-based pricing</td>
<td>License sales and royalties</td>
<td>Revenue sharing</td>
<td>Hybrid models and Loss leader -pricing</td>
<td>Media model</td>
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### Sample Profiles

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### Sample Profiles

- **Arrak Software, en|chrome**
- **Benefect**
- **Synera**
Life Cycle Examination of Business Models

- Business in the shifting sands -

Pressures for Change

- Competititon
- Customers’ needs
- Business Strategy
- Revenue Logic
- Marketing & Sales Model
- Servicing & Implementation model
- Product Development model
- Resource availability
- Profit targets
- Product / Service Offering
### Product Marketing Life Cycle

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<th>Introduction</th>
<th>Growth</th>
<th>Maturity</th>
<th>Decline</th>
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<tr>
<td>Type</td>
<td>Brand development</td>
<td>Brand reinforcement</td>
<td>Brand repositioning</td>
<td>Brand modification</td>
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<td>Objectives</td>
<td>Establish market position</td>
<td>Expand target market</td>
<td>Seek new market segments</td>
<td>Prepare for re-entry</td>
</tr>
<tr>
<td>Product strategy</td>
<td>Assure high quality</td>
<td>Identify weaknesses</td>
<td>Adjust size, package</td>
<td>Modify features</td>
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<tr>
<td>Advertising objectives</td>
<td>Build brand awareness</td>
<td>Provide information</td>
<td>Differentiate from competition</td>
<td>Educate on changes</td>
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<tr>
<td>Distribution</td>
<td>Build distribution network</td>
<td>Solidify distribution relationships</td>
<td>Maintain distribution</td>
<td>Re-establish and deliver new version</td>
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<tr>
<td>Price</td>
<td>Skimming or penetration strategy</td>
<td>Meet competition</td>
<td>Use price deals</td>
<td>Maintain price</td>
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Source: Adapted from Cravens 1987

### Challenges at Different Phases

- **Profitability**
- **Scale**
- **Visibility**
- **Liquidity**

Source: Moore 2000
Innovators

Early Adopters

Early Majority

Late Majority

Laggards

Core (technology) Product

Whole Product

Fully integrated, commoditized whole product

Skimming or Loss-leader pricing

Various alternatives for Licensing & Hybrid / Media model

Support selling, Accessorizing, Brand licensing, Franchising, etc.
Business Model Life Cycle

Marketing & Sales

- Innovators
- Early Adopters
- Early Majority
- Late Majority
- Laggards

Direct Sales
Recruit Partners
Eliminate Partners
Find caretakers

Adapted from Moore 2000

Business Model Life Cycle

Servicing & Implementation

- Service Content in Whole Product
- Lot of custom service
- Product-related services
- Whole product-services

Adapted from Moore 2000
Reference Models

4 Generic Examples of Software Business Models

Software Publishing

- "Ohjelmistokustantamo"
- Perustana copyright -ajattelu
- Julkaisijat antavat tyyppillisesti käyttäjille rajoitetun oikeuden tuotteisiin
- Valtit:
  - Uudelleenkäytettävät ohjelmistokomponentit, tuotteistetut palvelut, dokumentointi ja erilaiset spesifikaatiot
  - soveltamismallit, vaatimusmäärittelyt, prosessikuvaukset
  - suorituskysymallit, aikataulut, budjetit, työsuunnitelmat ja testit
- Tuotteen ja palveluiden arkkitehtuuri on avainasemassa avainhyötyjen kokoamisessa
**Application Service Provisioning**

- "Sovelluspalvelu" (vs. pelkkä sovellusvuokraus)
- ASP:n luonne ymmärretään ehkä parhaiten erottamalla hinnoittelu sekä toteutus- ja palveluelementit toisistaan
- Riippumatta " hypestä" sisältää vähän uutta palvelukeskusmalleihin verrattuna
- **Ydinpalvelut**
  - Käyttövalmiuteen liittyvät palvelut
  - Käyttöönnottoon →
  - Globaalit tukipalvelut
  - Käyttäjien ja transaktioiden hallinnan automatisointi
- **Euroopan markkinat reagoineet hitaasti**

**Customized Solution Provisioning**

- "Räätälöidyt sovellukset”
- Tyypillinen konsultointipainotteisille liiketoiminnolle
- Voi perustua tuotekonseptiin, mutta tuotteiden sijaan puhutaan usein ratkaisuista
- **Ratkaisut toteutetaan usein asiakasprojekteissa**
- **Ongelmat**
  - Ratkaisut rajoittuneet usein varsin kapealle alueelle
  - Tekniset ratkaisut toteutettu asiakasprojektien myötä
    - harvoin skaalautuvia tai laajennettavia
  - Liiketoiminnan kasvattaminen vaikeaa, koska osa tietämyksestä julkilausumatonta (tacit knowledge)
- **Edut**
  - Asiakkaan tarpeiden syvempi ymmärrys → Lock-in
Open Source Software (OSS)
–based models

- “Avoimen lähdekoodin mallit”
- Perustana copyleft –ajattelu
- Pyrkimykset
  - Lähtökohtana ohjelmistokehityksen malli
  - IPR:n hallinta
  - Hyöty eri projekteihin osallistuvista ihmisistä -> yhteisöt
- Edut
  - Rinnakkainen debuggaus
  - Edullinen teknologian esittely/tutustuminen
  - Sosiaaliset rakenteet (meritokratia) tarjoavat verkostohyötyjä
  - Osan julkaiseminen avoimena (tai ainakin laajennusmahdollisuuksien tarjoaminen) generoi ulkoisia innovaatioita, jotka voivat parantaa suljettuihin järjestelmiin tehtyjen investointien tuottoja

Revenue Logic in the
OSS –based models

- **Support sellers** — The revenue comes from selling books, manuals, CDs and services such as support and training.
- **Loss-leader** — The software is made free by hoping that is will stimulate demand for a related offering the company has.
- **Widget-frosting** — The company’s main business is hardware. By making the needed drivers open the vendor can ensure that they are debugged and kept up to date. This is similar to the loss-leader model.
- **Accessorizing** — These businesses do not participate in the development but offer the software incorporated into their goods that inform and educate users about the open source products.
- **Service enabler** — The software enables the use of online services, which are the actual source of revenue. This is, again, close to the loss-leader model.
- **Sell it, Free it** — means changing the licensing of the software over time.
- **Brand licensing** — A company makes the product itself open source, but retains an exclusive right to the brand name.
- **Software franchising** — A successful support seller sells other companies the right to use its brand in other geographical areas or vertical markets.
Summary

The Conceptual Study on Business Models

- develops a conceptual basis and framework for analyzing the businesses of software firms, including four generic (procedural) elements of business models
- presents a balanced model of essential elements in software product and service propositions

...has practical implications

- supports the modeling of a holistic view of businesses options based on schemes of things combining product development, marketing, sales, revenue logic, services and implementation
- helps understanding and piecing together the role of a software firm in its value networks
- helps understanding the competitive advantage of a firm compared to competitors, and, its abilities to act as a partner to other companies

Further Considerations...

The results of the study can be used

- as a basis for making and crystallizing business plans
- to understand and describe the outcomes of key business decisions
- in balancing the product and service portfolio of a software firm
- when analyzing chances of success and required efforts
- in search of fitting business partners and financiers

Even consultants and financiers may find the framework useful

- e.g. when analysing the potential of new products or start-up businesses
References

A report of the SBM study has been published in the series of Technology Review of Tekes: