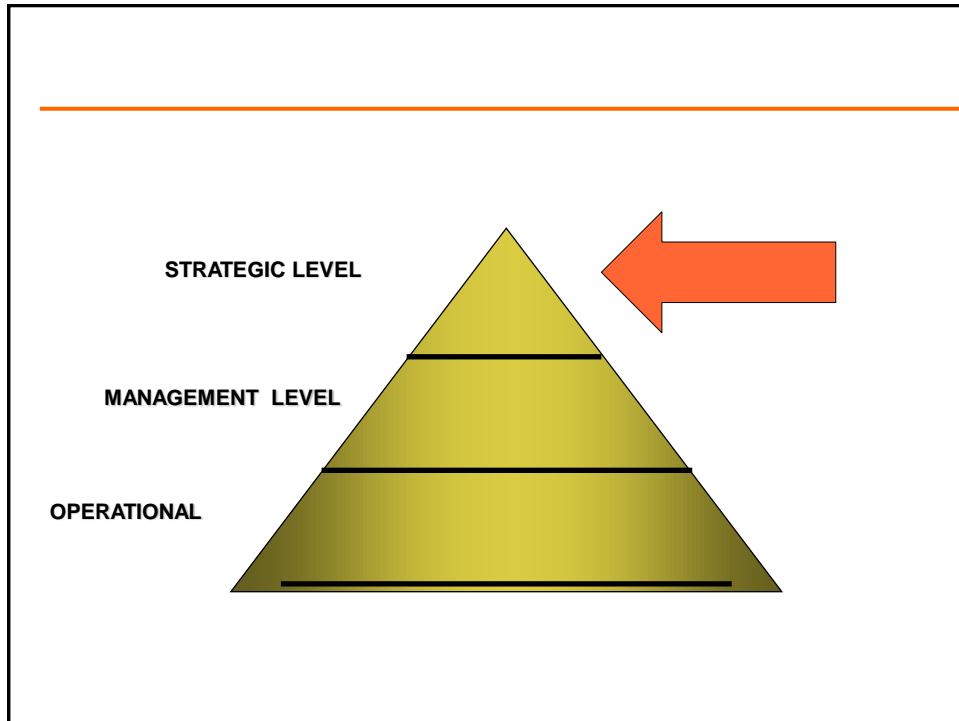


Strategy



-
- Deciding the goal (mission, vision) of an organization is the key decision that drives all other organizational variables
 - ♦ Structure, processes, IT support
 - The strategy has to constantly adapt to changes
 - Technology changes (innovation) are a key factor to decide the strategy



Strategy – definition and types

Strategy

- Military field
 - ♦ Strategy
 - Military art, with goal of prevailing on enemy, leading war (and peace)
 - war is made of battles, peace is made of wars
 - ♦ Tactic 策略
 - Military art about leading a battle

Company Strategy

- Definition of goals of company and of action plans to achieve them [Chandler]
- Definition of action plans to achieve the goals [Ansoff]
 - ♦ Goal definition not in strategy

Company goals

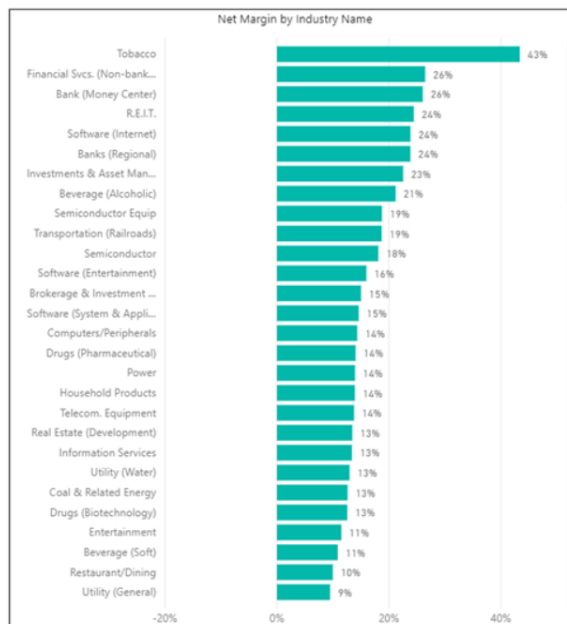
- Aims
 - ♦ Profit levels
 - ♦ Profit destination
 - profit no profit, family / public company
 - ♦ Interaction with social environment
 - ♦ Interaction with environment
- Business domain / business sector
- Means to achieve aims
 - ♦ Position wrt competitors
 - Number one or niche
 - Quality or cost

Business sectors Nace rev2 (EU)

A*38 code	ISIC Rev. 4/ NACE Rev. 2	Divisions
1 A	Agriculture, forestry and fishing	01 to 03
2 B	Mining and quarrying	05 to 09
3 CA	Manufacture of food products, beverages and tobacco products	10 to 12
4 CB	Manufacture of textiles, apparel, leather and related products	13 to 15
5 CC	Manufacture of wood and paper products, and printing	16 to 18
6 CD	Manufacture of coke, and refined petroleum products	19
7 CE	Manufacture of chemicals and chemical products	20
8 CF	Manufacture of pharmaceuticals, medicinal chemical and botanical products	21
9 CG	Manufacture of rubber and plastics products, and other non-metallic mineral products	22 + 23
10 CH	Manufacture of basic metals and fabricated metal products, except machinery and equipment	24 + 25
11 CI	Manufacture of computer, electronic and optical products	26
12 CJ	Manufacture of electrical equipment	27
13 CK	Manufacture of machinery and equipment n.e.c.	28
14 CL	Manufacture of transport equipment	29 + 30
15 CM	Other manufacturing, and repair and installation of machinery and equipment	31 to 33
16 D	Electricity, gas, steam and air-conditioning supply	35
17 E	Water supply, sewerage, waste management and remediation	36 to 39
18 F	Construction	41 to 43
19 G	Wholesale and retail trade, repair of motor vehicles and motorcycles	45 to 47
20 H	Transportation and storage	49 to 53
21 I	Accommodation and food service activities	55 + 56
22 JA	Publishing, audiovisual and broadcasting activities	58 to 60
23 JB	Telecommunications	61
24 JC	IT and other information services	62 + 63
25 K	Financial and insurance activities	64 to 66
26 L	Real estate activities*	68
27 MA	Legal, accounting, management, architecture, engineering, technical testing and analysis activities	69 to 71
28 MB	Scientific research and development	72
29 MC	Other professional, scientific and technical activities	73 to 75
30 N	Administrative and support service activities	77 to 82
31 O	Public administration and defence, compulsory social security	84
32 P	Education	85
33 QA	Human health services	86
34 QB	Residential care and social work activities	87 + 88
35 R	Arts, entertainment and recreation	90 to 93
36 S	Other services	94 to 96
37 T**	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	97 + 98*
38 U**	Activities of extra-territorial organisations and bodies	99*

- IT and other information services: 62, 63

Business sectors and profitability



US, incomplete list
[Campbell 2018]

Ex Nokia

- 1865 pulp mills
- 1922 rubber and cables
- 1967 electronics
- 1981 mobile phones
- 2014 mobile phones unit sold to MS
(mobile networks unit keeps on)

Strategies [Porter]

- Cost Leadership
 - ♦ Economy of scale, process improvement, marketing, advertising
- Differentiation
 - ♦ Product or service different from others
- Niche
 - ♦ Market niche + cost leadership
 - ♦ Market niche + differentiation

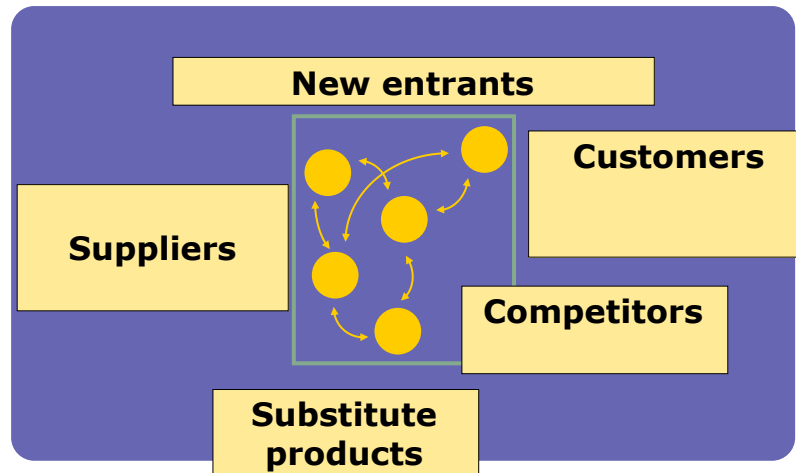
Strategies [Porter]



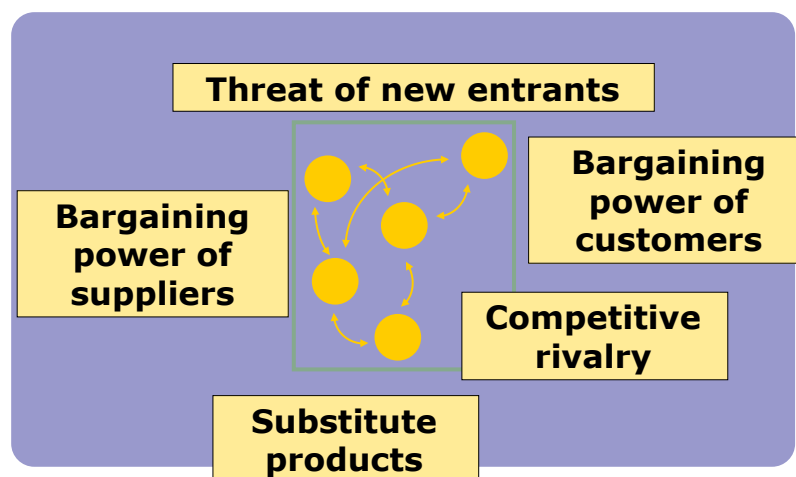
Ex Automotive



Actors in competition [Porter]



Strategy and actors



Bargaining power of customers

- Few customers /large volumes
- Customer buys interchangeable products
- Buyer price sensitivity
- Buyer switching costs

Bargaining power of suppliers

- Few suppliers
- Switching costs
- Supply competition (vertical integration)

加入者

New entrants

- Economy of scale
- Incumbent reaction
- Capital intensity
- Distribution channels, control of
- Barriers to entry / exit
 - ♦ Patents, rights

Intensity of rivalry

竞争

- Number of firms
- Low growth
- Low exit barriers
- High entry barriers

Substitute products

Automotive

self driving car as a service
(Apple, Google, Uber)

Music

analog music (Sony, Virgin..)
digital music (iTunes, Napster)
music as a service
(Spotify, Amazon)

Technology and strategy

- ♦ Technology includes IT and IS
- ♦ Technological innovation may hugely impact strategy
 - Product:
 - mp3 + broad band (Sony, EMC, Virgin)
 - Mobile phones
 - Digital pictures (Kodak, Fuji)
 - Quartz watch (swiss vs japan's watch industry)
 - Ms DOS + PC (IBM vs Microsoft)
 - Process:
 - Assembly line (Ford)
 - Digital publishing

Technology and strategy

- Kodak vs. Fuji
- Kodak:
 - ♦ Offer films
 - ♦ Offer printing services
 - ♦ Offer cameras
- Fuji:
 - ♦ Chemical products for pharmacy
 - ♦ Chemical products for other business

Tech innovation cycles

- Diffusion of innovation over time
 - ♦ Steam engine : 100 years
 - Invention (1712) , usage in factories and transport: 1800+
 - ♦ Electricity: 50 years
 - ♦ Radio: 38 years
 - From invention to 50 Million users
 - ♦ TV: 13 years
 - From invention to 50 Million users
 - ♦ Internet: 4 years
 - From invention to 50 Million users
 - ♦ Facebook: 2 years
 - 0 to 500 M

Knowledge doubling curve

- [Buckminster Fuller]

< 1900: 1000
years to double
< 1945: 25 years
< today: 13
months

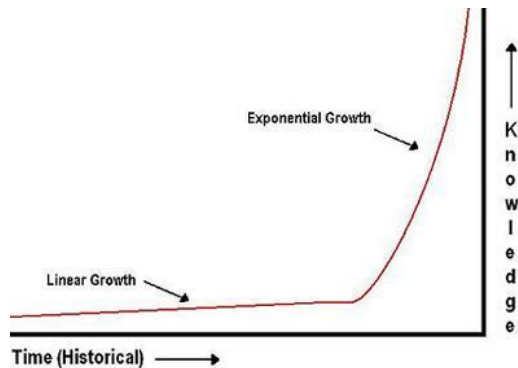
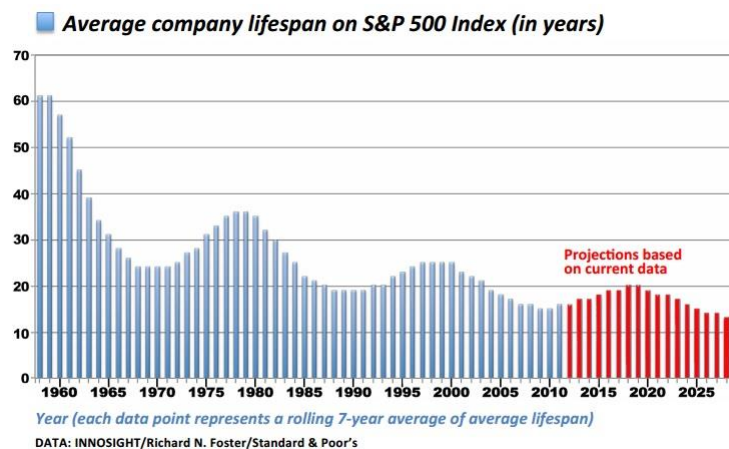


Figure 1 - The Knowledge Doubling Curve

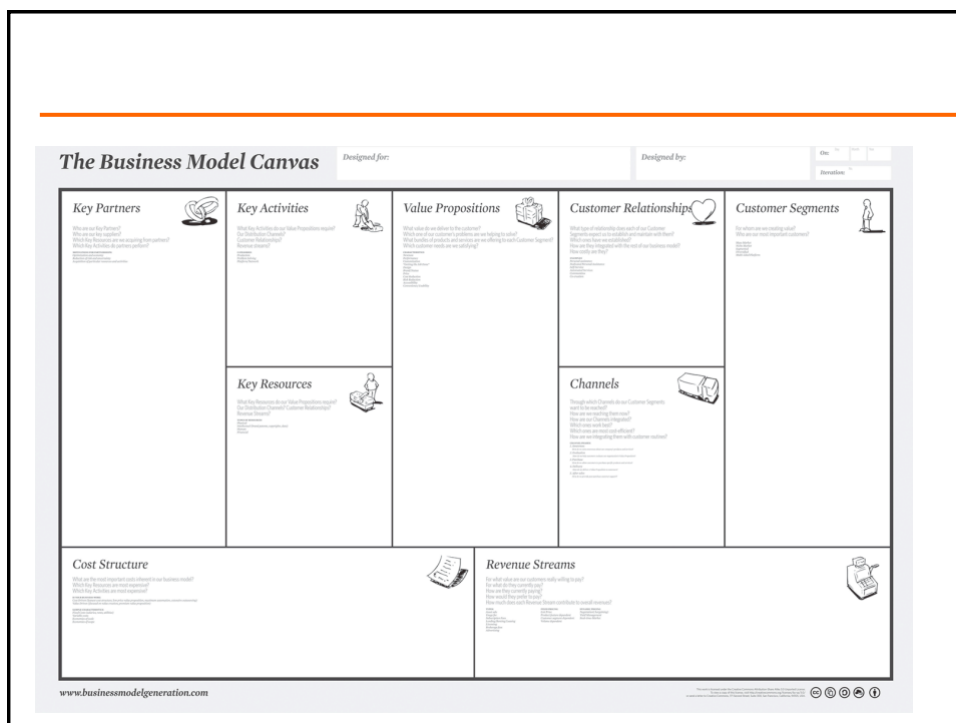
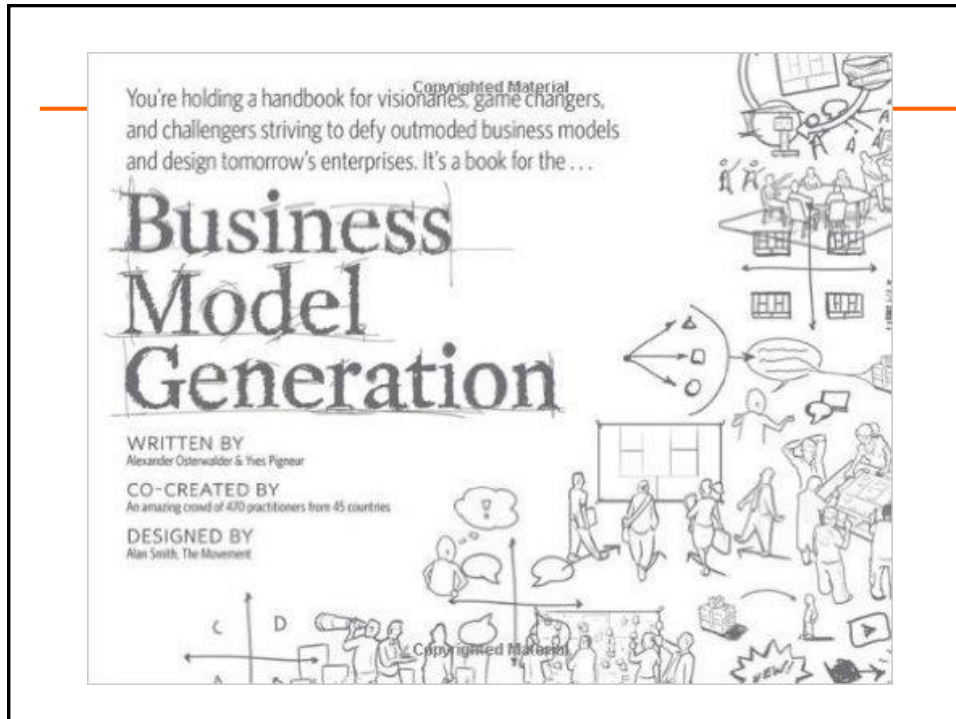
Technology and company's life span

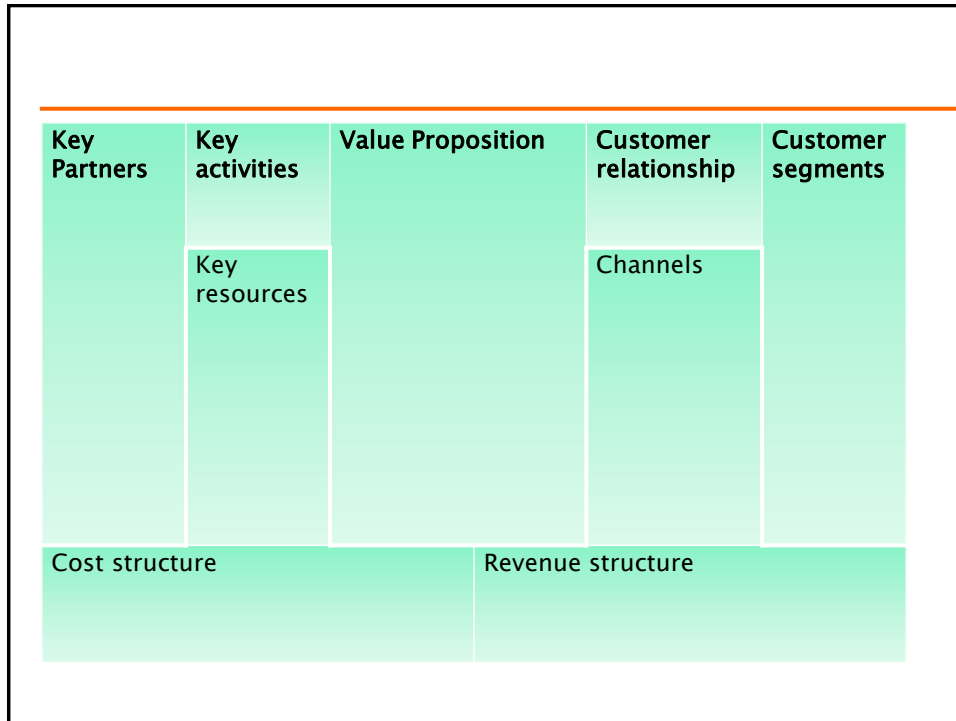


-
- Many factors impact life span
 - For sure technology is one of them
 - Strategy must consider all factors (and especially technology)

Business model canvas

- [Osterwalder & Pigneur 2010]
- A tool to express all essential strategic decision in an organization





Customer segments

- Group(s) of customers the organization is aiming to serve
 - ♦ And groups the organization willingly decides NOT to serve

-
- Segments are different if
 - ♦ Needs are different to the point they require different offers
 - ♦ Distribution channels used are different
 - ♦ Types of relationship are different
 - ♦ Profitabilities are different
 - ♦ Pay for different aspect of the offer

Customer segments

- Mass market (see later Porter model)
 - ♦ Ex consumer electronics
- Niche market (see later Porter model)
 - ♦ Ex luxury cars
- Segmented
 - ♦ Ex luxury car, normal cars (Toyota + Lexus, Nissan + Infinity)
- Diversified
 - ♦ Amazon, cloud services + books and items
- Multisided
 - ♦ Ex commercial TV, audience + advertisers

Value proposition

- The reason why a customer prefers product / service of a company vs another
 - ♦ Newness
 - Ex mobile phones in 1991 and before
 - ♦ Performance
 - Ex speed and storage in PCs
 - ♦ Customization
 - ♦ 'Getting the job done'
 - Ex outsourcing airplane maintenance for airline
 - ♦ Price
 - Ex low cost airlines, TATA car
 - ♦ Status
 - ♦ Design

Value proposition

- Cost reduction
 - ♦ Ex salesforce.com, CRM as a service
- Risk reduction
 - ♦ Ex insurance on engine break downs for used car buyer
- Accessibility
 - ♦ Ex NetJets, private jet co-ownership
 - ♦ Ex Mutual funds in finance
- Usability
 - ♦ iPod, Iphone

Channels

- How the organization reaches the Customer Segments to
 - ♦ Raise awareness about the organization
 - ♦ Explain the value proposition
 - ♦ Purchase the product / service
 - ♦ Deliver the product / service
 - ♦ Provide post purchase support
- ♦ (See later CRM, Customer Relationship Management)

Channels

own	direct	Sales force
		Web
partner	indirect	Own stores
		Partner stores
		Wholesaler

Customer relationship

- Type of relationship between organization and customer segment.
Main goals are
 - ♦ Customer acquisition 获得
 - ♦ Customer retention 保留
 - ♦ Upselling

Customer relationship

- Personal assistance
 - ♦ Face to face or via email or call center
- Dedicated personal assistance
 - ♦ Ex upscale financial services
- Self service
- Automated service
 - ♦ As self service but customized on customer
- User community
 - ♦ To share knowledge and support customers
- Co creation
 - ♦ Ex you tube, amazon book reviews (by customers)

Revenue streams

- How much and how customer segments pay for the product / service
 - ♦ Asset sale
 - One time payment for product / service (ex: car, book)
 - ♦ Usage fee (proportional to usage)
 - Telephone calls paid per duration, hotel room
 - ♦ Subscription fee (for amount of time)
 - Monthly fee per gym access, music download, ..
 - ♦ Renting/lending/leasing (exclusive use per a defined amount of time) 出租
 - Rental of car, flat ..
 - ♦ Licensing (copyright, right of using a copy)
 - Media content, software products

Revenue streams

- ♦ Brokerage fees (for intermediation service between two or more parties – as a % of the transaction value)
 - Ex real estate agent, booking.com
- ♦ advertising

P

Fixed pricing (based on static variables)		Dynamic pricing (prices change on market conditions)	
<i>List price</i>	Fixed price	<i>Negotiation</i>	Depends on discussion between two parties
<i>Product/feature dependent</i>	Depends on number of product features	<i>Yield management</i>	Depends on inventory and time of purchase (ex fruit, hotel rooms)
<i>Customer segment dependent</i>	Depend on type and characteristic of customer segment	<i>Real time market</i>	Based on demand and offer volumes (stock exchange)
<i>Volume dependent</i>	Depends on quantity	<i>Auctions</i>	Bidders compete

Key resources

- Physical
 - ♦ Facilities, buildings, vehicles, stores, point of sales (key in automotive, retail)
 - ♦ Platforms (credit card companies, stock trading,...)
 - ♦ Networks (ex amazon, logistic companies)
- Intellectual
 - ♦ Brands, patents, trademarks, customer data (key in IT companies, qualcomm, microsoft)
- Human
 - ♦ Workers, researchers, designers, sales force...
- Financial
 - ♦ Cash, credit lines, stock options ..

Key activities

- Design, production
 - ♦ Ex automotive, electronics
- Problem solving
 - ♦ Ex hospitals, law firms, consultancy firms
- Platform management
 - ♦ Ex credit card companies, stock trading,...

Key activities

- See existing models
 - ♦ Antony's pyramid
 - ♦ Application portfolio, SCORE
- Key activities are not outsourced, non-key activities could be outsourced
 - ♦ (see later outsourcing)

Key partnerships

- Relationships with other organizations like
 - ♦ Alliances between non competitors
 - ♦ Coopetition: alliances between competitors on specific products / services
 - ♦ Joint ventures for new businesses
 - ♦ Buyer supplier relationships
 - ♦ Outsourcing relationships

Key partnerships

- Goals of key partnerships
 - ♦ Economy of scale
 - Ex buyer /supplier: production facility of supplier
 - ♦ Reduction of risk
 - Ex coopetition to design / produce innovative product (ex blue ray)
 - ♦ Acquisition of resources / skills
 - Ex usage of platform (Intel, Android) in buyer / supplier
 - Ex usage of distribution network (for sales,)

Cost structure

- Costs related to the business model
 - ♦ and notably key resources, activities, relationships

Cost structures

- Cost driven
 - ♦ Ex ryanair, easyjet
 - ♦ CR: self service; KP: outsourcing
- Value driven
 - ♦ 7 star hotels
 - ♦ CR: personalized service

Cost structures

- Must consider
 - ♦ Fixed / variable costs
 - ♦ Economies of
 - Scale
 - Maximize utilization of resources to produce one product / service → increase volume of production
 - Scope
 - Maximize utilization of resources to produce many products/services → increase set of products/services
 - Ex share distribution channel between different products

Ex Ipod / I Tunes

KP Record companies. OEM	KA Marketing Hw design	VP Seamless music experience	CR Lovemark Switching costs	CS Mass market
	KR People, Apple brand, Ipod hw, Itunes sw, content and agreements		CH Retail stores Apple stores Apple.com	
C\$ People, manufacturing, marketing and sales			R\$ iTunes store, high hw revenues, low music revenues	

BM Patterns

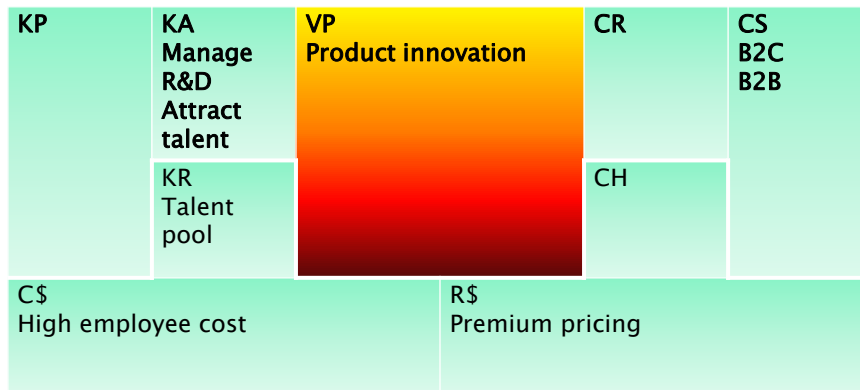
- Unbundling
 - ♦ Infrastructure focus
 - ♦ Innovation focus
 - ♦ Customer focus
- Long tail
- Multisided
 - ♦ Free
 - ♦ Freemium
 - ♦ Open

Unbundling

- Three types of businesses
 - ♦ Product innovation
 - ♦ Customer relationship management
 - ♦ Infrastructure management

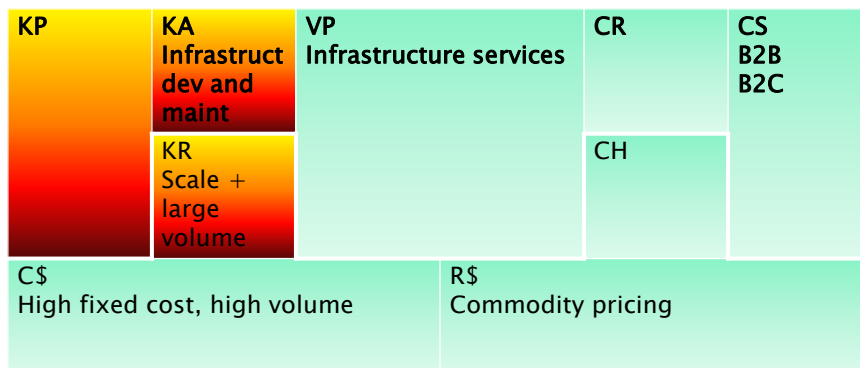
- ♦ Keeping them together in same company is not effective [Hagel and Singer 1999]

Product innovation



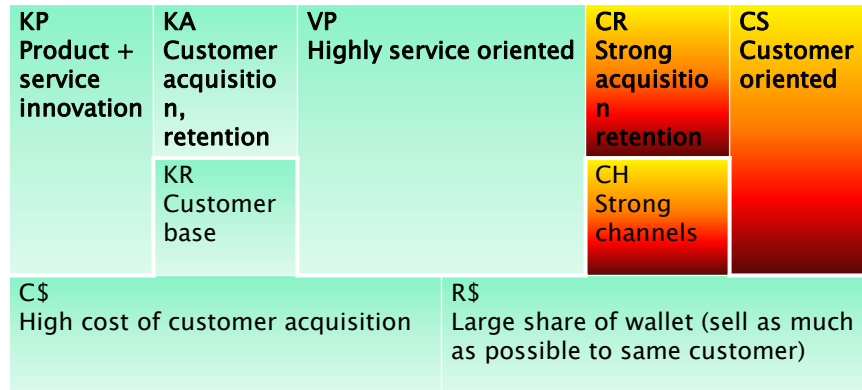
Ex: Mobile phones, cars

Infrastructure management



Ex Telco, Logistics
Economy of scale

Customer relationship



Ex banks, insurances
Economy of scope

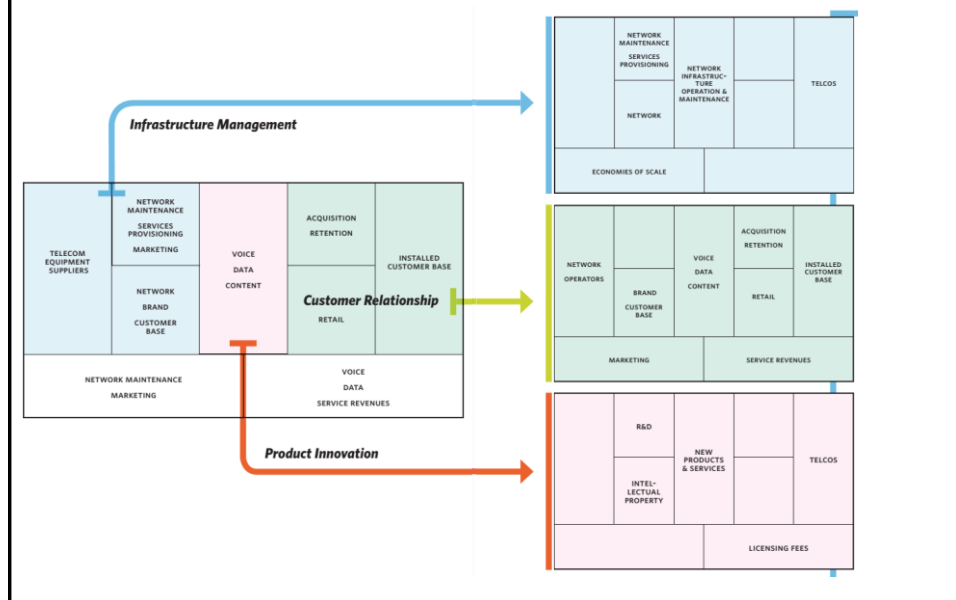
Telco operator – bundled

- Same company
 - ♦ Manages network infrastructure
 - ♦ Handles Customer relationship
 - ♦ Develops products / services

Telco operator – unbundled

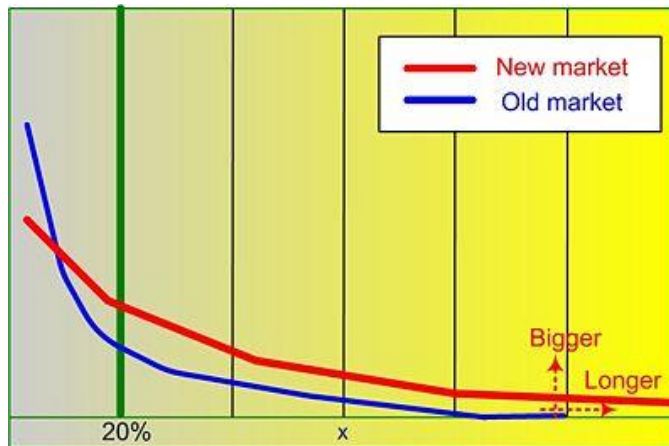
- Concept: CR is the core business of the company
- Network: managed externally
 - ♦ (Ericsson, Nokia – Siemens, Alcatel Lucent, Huawei)
- CR: focus of company
- Product and service creation
 - ♦ Strict links with small external companies

Bundled → unbundled



Long tail

- [Anderson 2004]



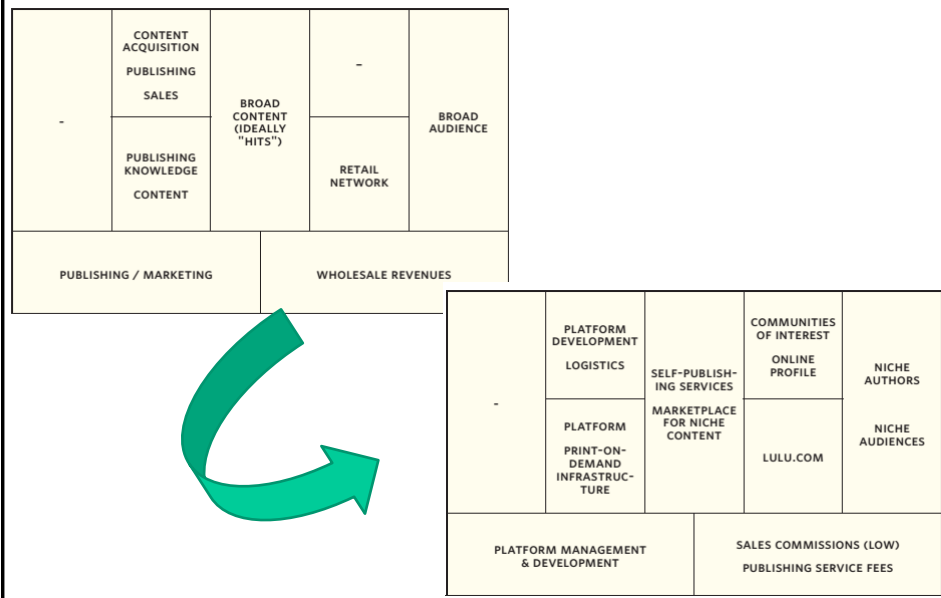
Long tail

- Traditional: sell large quantities of few items
- Long tail: sell small quantities of many items
- Long tail approach can be more profitable than traditional
 - ♦ Netflix, Ebay, ..
- Applies mostly to content industry (music, books, movies)

Long tail

- Conditions that made it possible
 - ♦ Democratization of tools of production
 - ♦ Democratization of distribution
 - Internet + digital content
 - Lower transaction and inventory cost
 - ♦ Better link supply – demand
 - Search engines, recommendation systems, reviews and communities

Ex.: Book industry



Multi sided

- [Eisenmann Parker 2006]
- [Evans Hagiu 2006]
- Multisided platform: brings together distinct but interdependent groups of customers (sides)
 - ♦ Ex: credit card: merchants and buyers
 - ♦ Ex: commercial TV, google: customers and advertisers
 - ♦ Ex: gaming console: game developers and players
 - ♦ Ex: operating system: hw developers and app developers

Multi sided

- Value of platform depends on size of sides
 - ♦ Bootstrap problem
 - ♦ Trend to monopoly
- Key decision is pricing for each side
 - ♦ Ex google, commercial TV: free (subsidized) for customers
 - ♦ Ex credit card: fee on both sides
 - ♦ Ex newspaper, traditional: fee on both sides
 - ♦ Ex newspaper, Metro: free for readers

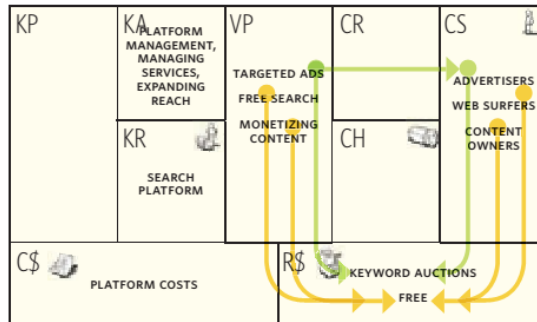
Ex Google

- Side 1: user of search engine | free
- Side 2: advertiser | fee
 - ♦ Using AdWords selects words, Ads are displayed when word is used in search
 - ♦ Auction model, advertisers bid on word (the more the word is used in searches, the more related ads are expensive)
- Side 3: content provider | fee
 - ♦ Using AdSense show google ads on content provider web site
 - ♦ Google shares fee from advertiser

Ex Google

- Need to maintain the largest pool of free users
 - ♦ Offer a variety of free services to keep largest possible community of users
 - Search
 - Gmail, gmaps, gcalendar

Ex. Google

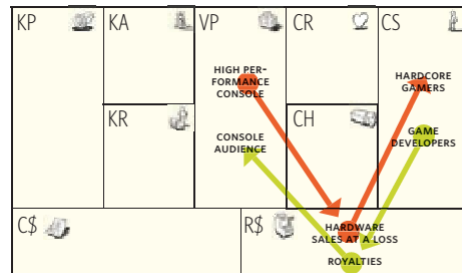


Ex game consoles

- Side 1: player
- Side 2: game developer
- Different BM: PsP/ Xbox vs Wii

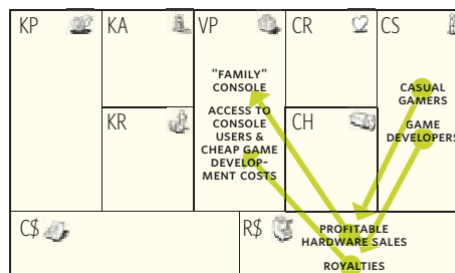
Ex. PsP / XBox

- Complex expensive console (speed, graphics) sold at loss
- CS: hardcore gamers
- Revenues from games
 - ♦ Developed internally (revenue from customers/players)
 - ♦ Developed by others (royalty from game developer)



Ex. Wii

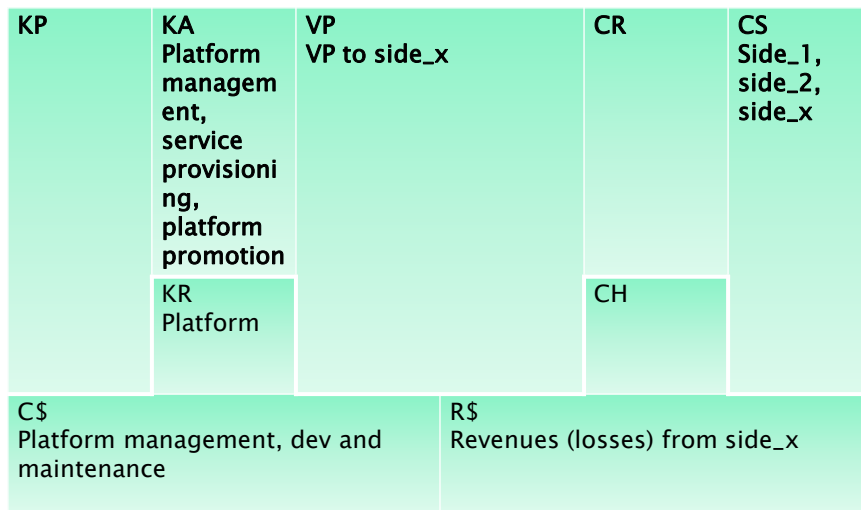
- Cheaper console sold with profit, sensor motion, sold at profit
- CS: casual gamers
- Revenues from games (internally / externally developed) + hardware



Ex Apple

- iTunes
 - ♦ Side 1 customer (pays for Ipod, pays for music)
 - ♦ Side 2 music provider (receives fee for each sale, minus Apple share)
- AppStore, (Playstore)
 - ♦ Side1 customer (pays for Iphone, pays for app)
 - ♦ Side2 app developer (receives fee for each sale, minus 30% Apple / Google share)

Multisided



Other multisided platforms

- Google Play
- Facebook, Instagram
- Travel services providers
 - ♦ airBnB, booking
 - ♦ Expedia, Opodo, eDreams ..
 - ♦ Uber, BlaBlaCar
- Retail
 - ♦ Alibaba, Ebay, amazon



	The world's largest taxi company owns no vehicles
	The largest accommodation provider owns no real estate
	The most popular media provider creates no content
	The most valuable photo company sells no cameras
	The fastest growing television network lays no cables
	The most valuable retailer has no inventory

None of these six companies existed twenty years ago

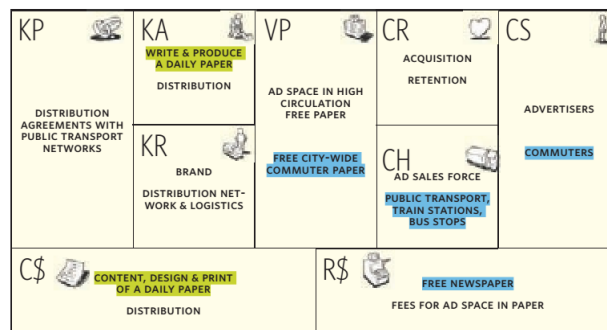
Free

- A variant of multisided
- One side is subsidized by others
 - ♦ Free journal
 - ♦ Commercial TV
 - ♦ Google services

«The demand you get at the price of zero is many times higher than the demand you get at a very low price» [Kartik Hosanagar]

Ex. Metro journal

Metro

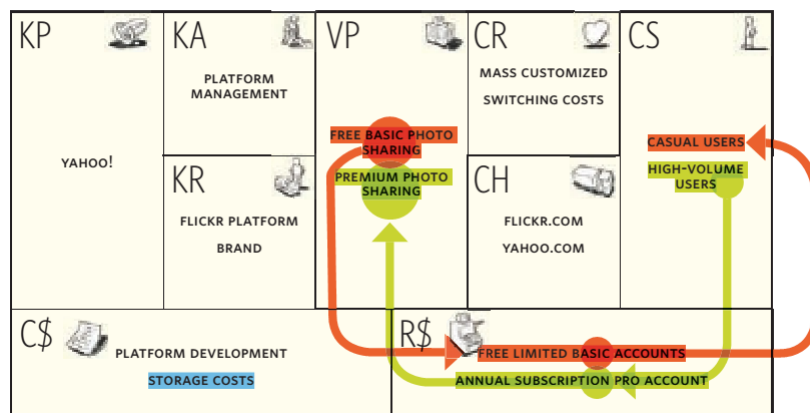


Freemium

- Basic service for free
- Premium service for fee
- Premium service fees pay for free service
 - ♦ Conversion rate free to fee: usually low (10%)
 - ♦ Works if marginal cost to serve a free user is low

Ex Flickr

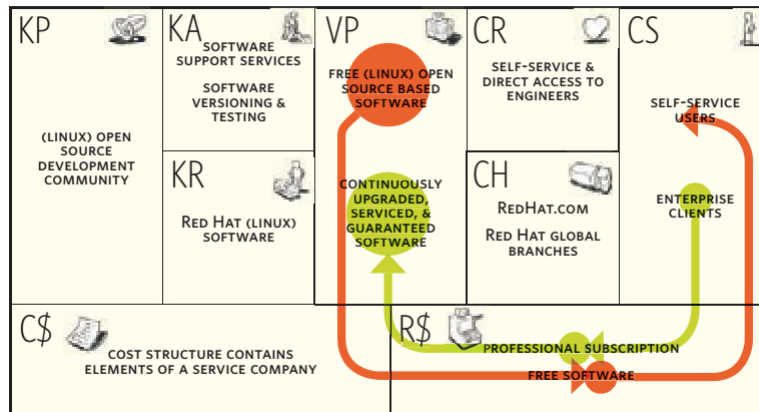
Flickr



- Red flow: free service
- green flow: fee
- Platform development fixed cost, storage variable cost

Ex Red Hat

Red Hat

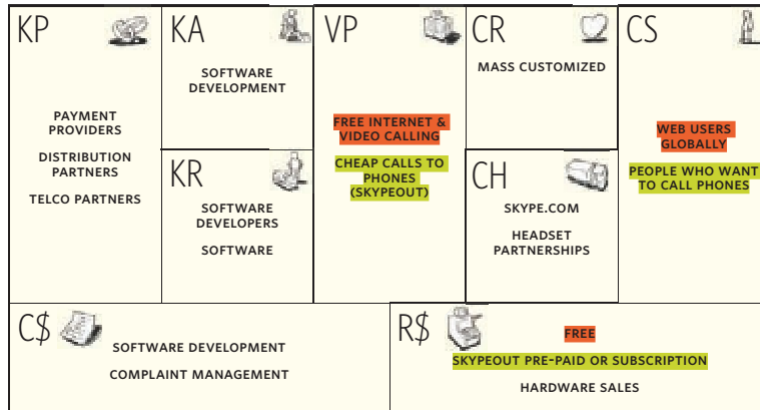


Red Hat

- Free version of Linux
 - ♦ No support
 - ♦ No legal owner
- Red hat version, for annual subscription
 - ♦ Support
 - ♦ Legal owner defined
 - ♦ 7 years duration

Skype

Skype

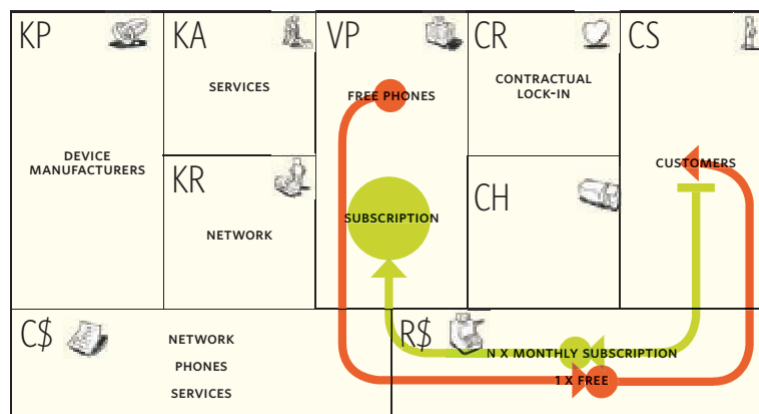


Skype

- Possible because skype is not a Telco (no cost for managing the network)

Bait and hook

- Upfront free offer
- Later fees
- Ex: free handset offered by mobile network operators
 - ♦ customer locked in, no switch to other operator possible for 24–36 months
 - ♦ Customer pays services



Open innovation

- Outside in
 - ♦ Use ideas, skills, patents from external companies
 - ♦ (vs produce all innovation internally)
- Inside out
 - ♦ Offer / exchange ideas, skills, patents to external companies
 - ♦ (vs keep all innovation internally)

-
- www.innocentive.com
 - Marketplace for exchanging / matching problems and solutions–skills

Mission Model Canvas

- Adaptation of BMC for non profit organizations

