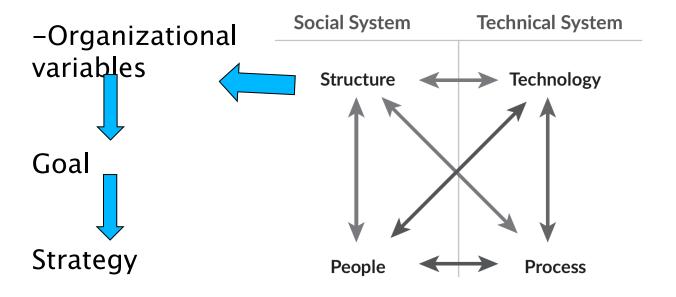
# Strategy



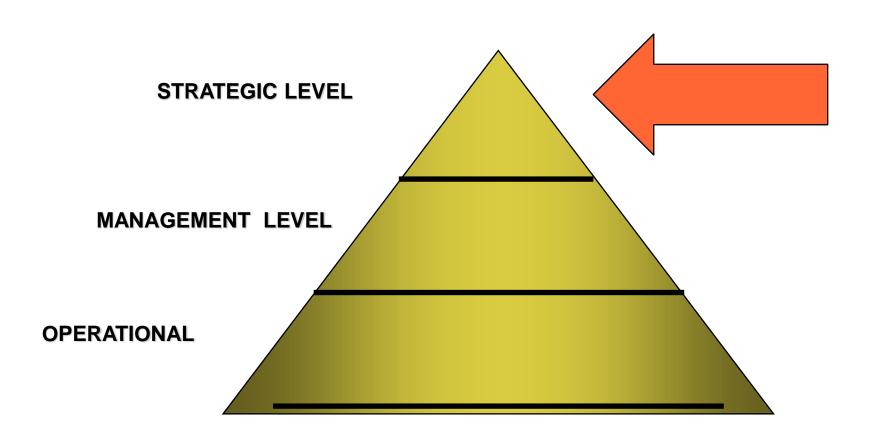
## Outline

- Definitions
- Types of possible strategies
  - Porter quadrants
  - BMC Value propositions
- Tools to verify strategies
- Tools to model strategy (and other org var)
  - BMC

## Model dimensions + models



- 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
  - 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

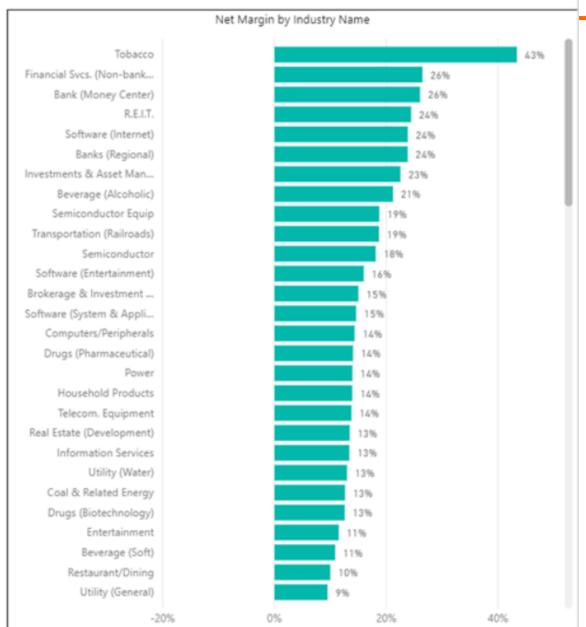
- Aims
  - Profit levels
  - Profit destination
    - profit no profit, family / public company
  - Interaction with social environment
  - Interaction with environment
- Business domain / business sector
- Means to achieve aims
  - Position wrt competitors
    - Number one or niche
    - Quality or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

# Business sectors Nace rev2 (EU)

	A*38 code	ISIC Rev. 4/ NACE Rev. 2	Divisions
1	Α	Agriculture, forestry and fishing	01 to 03
2	В	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
_	CD	Manufacture of coke, and refined petroleum products	19
	CE	Manufacture of chemicals and chemical products	20
_	CF	Manufacture of pharmaceuticals, medicinal chemical and botanical products	21
	CG	Manufacture of rubber and plastics products, and other non-metallic mineral products	22 + 23
	CH	Manufacture of basic metals and fabricated metal products, except machinery and equipment	24 + 25
	CI	Manufacture of computer, electronic and optical products	26
	CJ	Manufacture of electrical equipment	27
	CK	Manufacture of machinery and equipment n.e.c.	28
	CL	Manufacture of transport equipment	29 + 30
-	CM	Other manufacturing, and repair and installation of machinery and equipment	31 to 33
16	_	Electricity, gas, steam and air-conditioning supply	35
17		Water supply, sewerage, waste management and remediation	36 to 39
18	-	Construction	41 to 43
19		Wholesale and retail trade, repair of motor vehicles and motorcycles	45 to 47
20		Transportation and storage	49 to 53
21		Accommodation and food service activities	55 + 56
	JA	Publishing, audiovisual and broadcasting activities	58 to 60
23		Telecommunications	61
	JC	IT and other information services	62 +63
25		Financial and insurance activities	64 to 66
26	_	Real estate activities*	68
2/	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	_	Public administration and defence, compulsory social security	84
32	Р	Education	85
	QA	Human health services	86
34	QB	Residential care and social work activities	87 + 88
35		Arts, entertainment and recreation	90 to 93
36	-	Other services Control of the Contro	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]

### \$1.016 miliardi



Tesla

#### \$873 miliardi







🕏 Ferrari

BMW

Honda

Oaimler

Hyundai

Mazda

Subaru

Volkswagen

Fonte: Yahoo Finance

## 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)

Strategy – types

# Strategy types [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]

Competitive advantage

Low cost

Uniqueness

Wide

**Focus** 

Leadership on cost

**Differentiation** 

Narrow

Leadership on cost and focus

Focused differentiation

## Ex Automotive

Competitive advantage Low cost Uniqueness Wide (thermic Toyota, Lexus, Audi Nissan, VW 70M cars) Focus Toyota Prius, Tesla **Narrow** Nissan Leaf (Electric 5M cars)

## Airlines

# Emirates – quality of service

- Food, luggage, comfort
- Business and first, lounges
- Main airports
- Worldwide service
- Many airplanes
- Hub model, connections

#### Ryanair - cost

- No food, no luggage, no reclining seats
- No business class, no lounges
- Side airports (cheaper)
- Europe only
- One airplane (B737)
- Point to point, no connections

## Retail

#### **ESSELUNGA** – quality

- Location
  - Not central, outskirts
- Large selection
  - ◆ 10000+ items
  - Many per category
    - (ex milk, several items)
  - ◆ 4000–10000 sq meters
- High quality
  - Known brands
- Advertising

#### ALDI – cost + quality

- Location
  - Not central but as close as possible
- Limited selection
  - 2000 items
  - Few per category
    - (ex milk, one, two items)
  - 1000 square meters
- High quality
  - No brands (own brands)
  - Best quality for price
- Little or no advertising

## **BMC**

- Value proposition
  - Why a customer should prefer your product / service vs the competion's offer

- Two families of VP
  - Pain relievers
    - Ex pay a tax consultant to prepare your tax report
  - Gain creators
    - Ex. Buy luxury watch to get status

# BMC – possible VPs

- 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

# BMC – possible VPs

- 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

# Strategy – tools to analyze strategies

# Tools to analyze strategy

5 forces, Porter

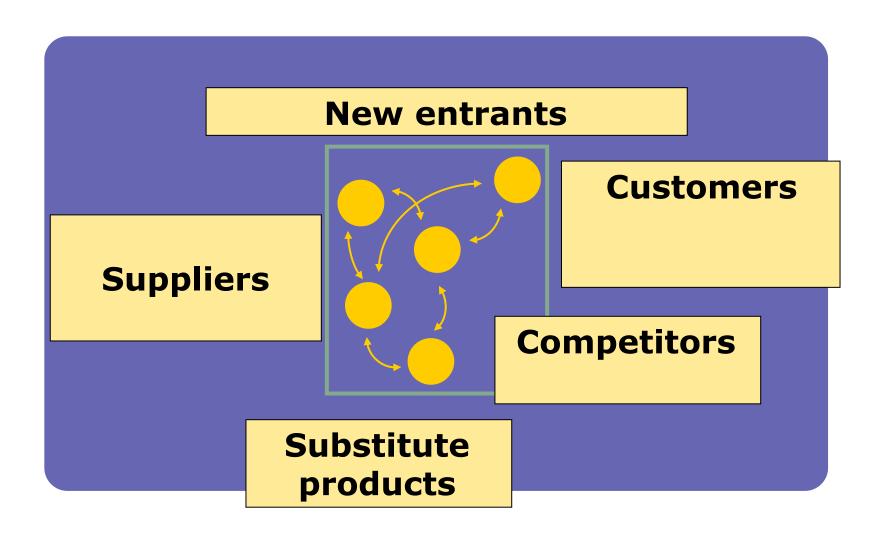
**BCG** matrix

**SWOT** matrix

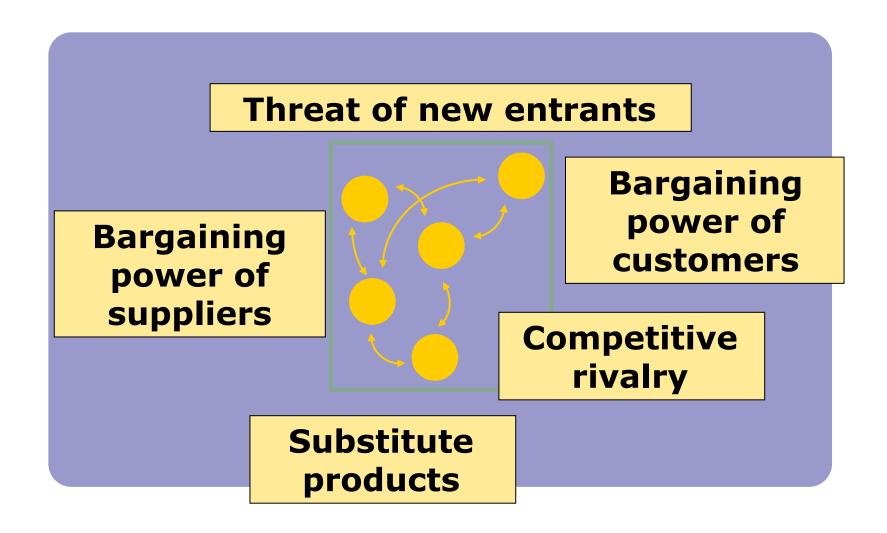
Scenario analysis

PEST analysis

## Actors in competition [Porter]



## 5 forces model – Porter



# 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 Prime)
```

## 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)

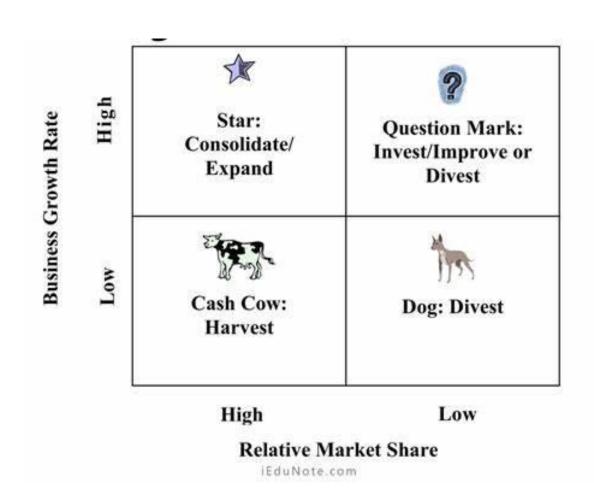
## New entrants

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

# Intensity of rivalry

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

## **BCG Matrix**



## **SWOT Matrix**



# Scenario analysis

- identify key uncertainties
- define scenarios considering
  - One uncertainty at a time
  - More than one combined
- for each scenario build worst, neutral and best cases
- Define actions for each scenario

# PEST analysis

- analyze effect of
  - Political factors,
  - Economic factors,
  - Social factors,
  - Technological factors
- on a certain strategy / decision
- now adding Environmental factors (climate ecology) and Legal factors (norms, ..)

## Technology and Strategy

# 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 Japanese 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

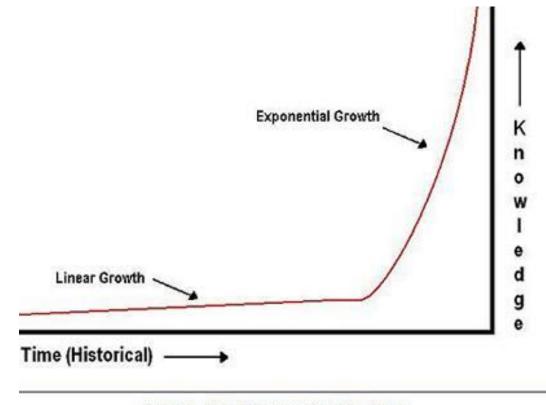
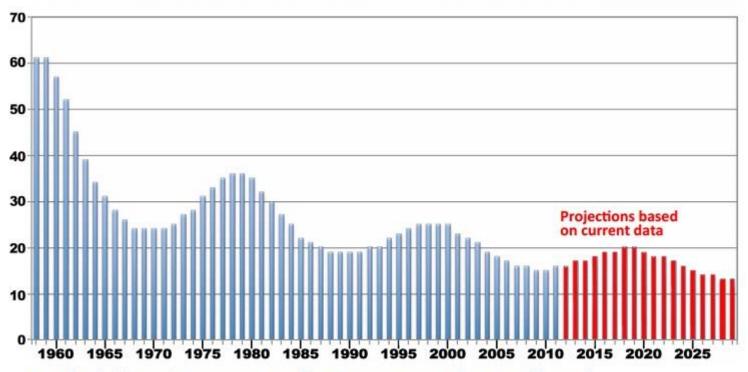


Figure 1 - The Knowledge Doubling Curve

## Technology and company's life span





Year (each data point represents a rolling 7-year average of average lifespan)

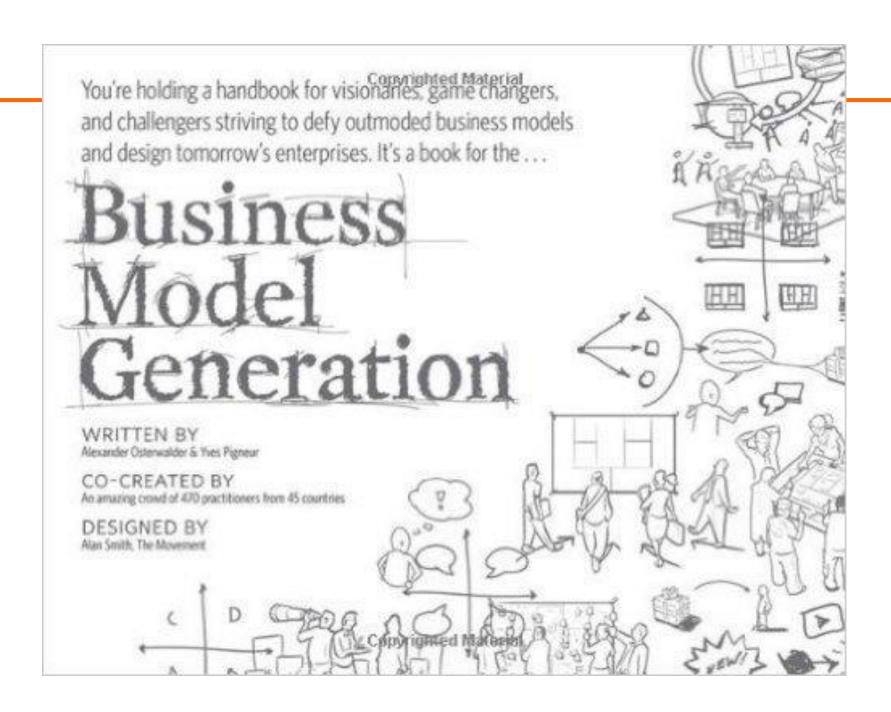
DATA: INNOSIGHT/Richard N. Foster/Standard & Poor's

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

## **BMC**

## Business model canvas

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



#### The Business Model Canvas

Designed for:

Designed by:

Iteration:

#### Key Partners



Key Activities

Key Resources





#### Value Propositions



What value dowe deliver to the customer? Which are of our outlinem? problems are we hipping to salve? What bundles of products and services are we offering to each Custo Which customer reods are we satisfying?



#### Customer Relationships



What type of relationship does each of our Customer Segments expect us to establish and maintain with them? What loves have we established? How are they integrated with the rest of our business mode? How costly are they?



#### Customer Segments



#### Channels



want to be reached? How are we maching them now? How are we maching them now? How are our Channets integrated? Which ones work best? Which ones are most cost-efficient?



#### Cost Structure





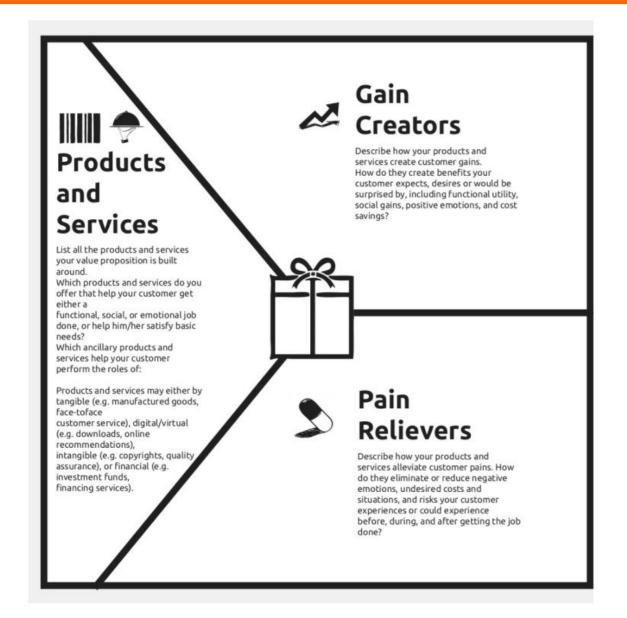
#### Revenue Streams





Key Partners	Key activities  Key resources	Value Propos	sition	Customer relationship  Channels	Customer segments
Cost structi	ure		Revenue	structure	

# Value proposition



## Value proposition

- The reason why a customer prefers product / service of a company vs another
  - Newness
    - Ex mobile phones in 1991 and before
  - Performance
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- Usability
  - iPod, Iphone

## Customer segments

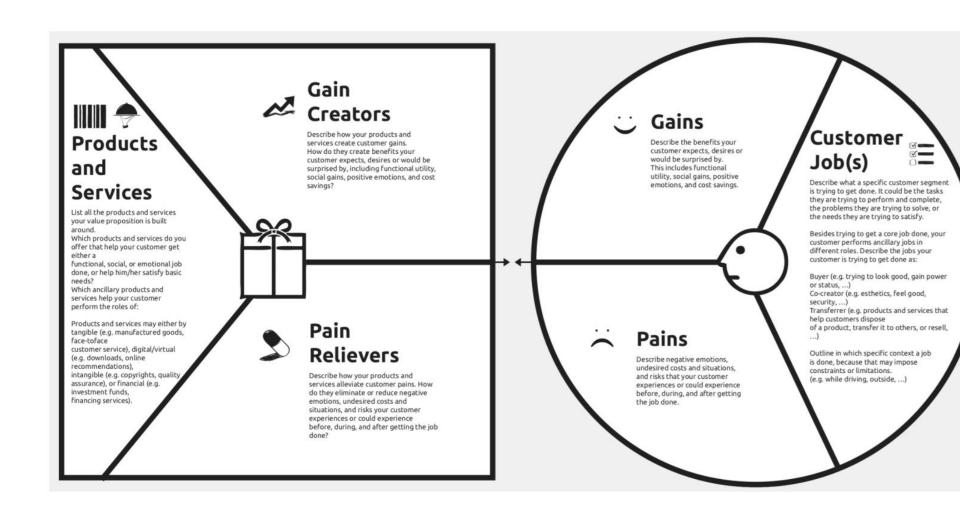
- Group(s) of customers the organization is aiming to serve
  - And groups the organization willingly decides NOT to serve

- 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
  - Ex consumer electronics, toothpaste
- Niche market
  - Ex luxury cars (Ferrari)
- Segmented
  - Ex luxury car, normal cars (Toyota + Lexus, Nissan + Infinity, Fiat + Alfa Romeo)
- Diversified
  - Amazon, cloud services + books and items
- Multisided
  - Ex commercial TV, audience + advertisers

## VP + CS



## 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 CRM, Customer Relationship Management)

## Channels

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

## Customer relationship

- Type of relationship between organization and customer segment.
   Main goals are
  - Customer acquisition
  - Customer retention
  - 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)

## 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, nonkey 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: Sony ++ Panasonic + Philips)
  - 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

### 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)
    - 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

## Pricina mechanisms

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

# Ex Ipod / I Tunes

KP Record companie s.	KA Marketing Hw design	VP Seamless music experience	CR Lovemark Switching costs	CS Mass market
OEM	KR People, Apple brand, Ipod hw, Itunes sw, content and agreement s		CH Retail stores Apple stores Apple.com	
C¢		D.¢		

C\$
People, manufacturing, marketing and sales

R\$
iTunes store, high hw revenues,
low music revenues

### **BM Patterns**

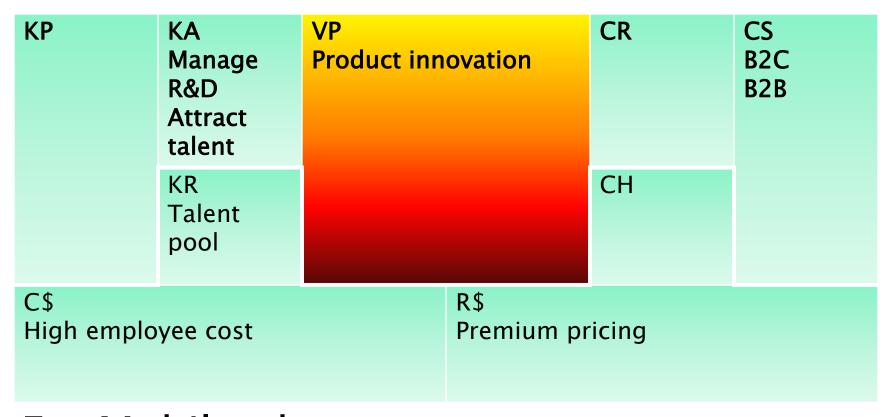
- Unbundling
  - Infrastructure focus
  - Innovation focus
  - Customer focus
- Long tail
- Multisided
  - Free
  - Freemium
  - Open

# 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]

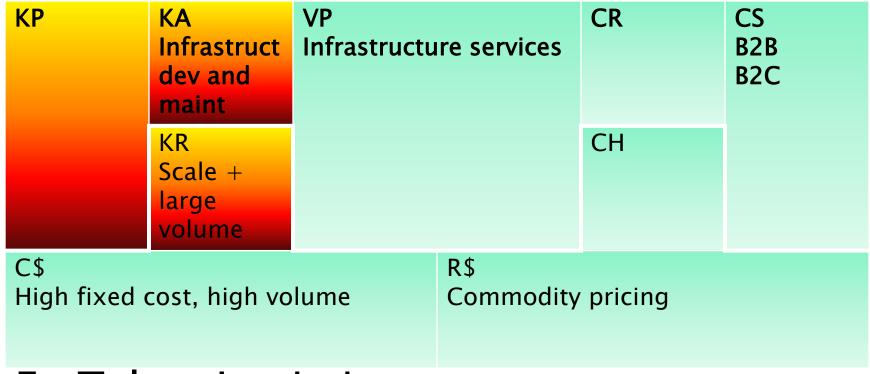
## Product innovation



Ex: Mobile phones, cars

Focus: innovation

# Infrastructure management



Ex Telco, Logistics

Focus: Economy of scale

# Customer relationship



Large share of wallet (sell as much

as possible to same customer)

Ex banks, insurances
Focus: Economy of scope

High cost of customer acquisition

## Telco operator – bundled

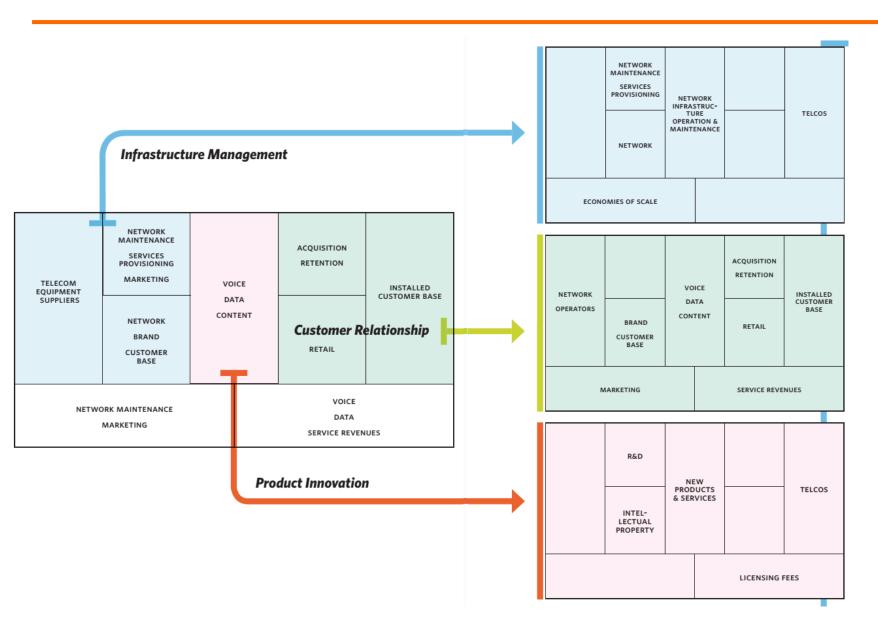
- Same company
  - Manages network infrastructure
  - Handles Customer relationship
  - Develops products / services

# Telco operator - unbundled

 Concept: CR is the core business of the company

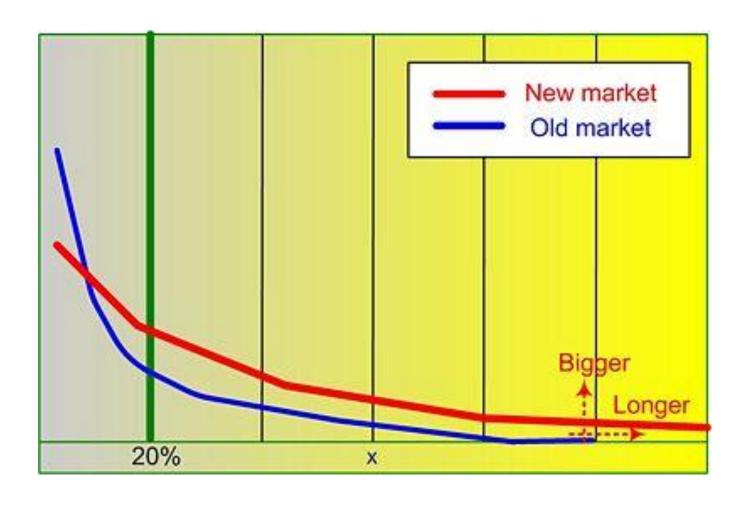
- Network: managed externally
  - (Ericsson, Nokia –Siemens, Alcatel Lucent, Huawei)
- CR: focus of company
- Product and service creation
  - Strict links with small external companies

## Bundled → unbundled



# Long tail

[Anderson 2004]



# Long tail

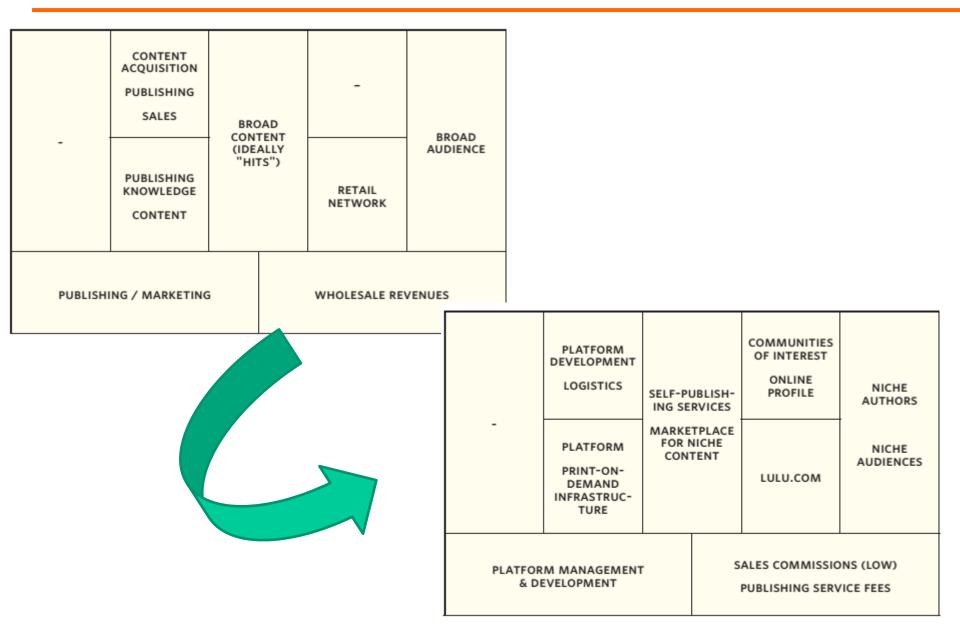
- Traditional: sell large quantities of few items
- Long tail: sell small quantities of many items

- 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 interdepended 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 (Google play, App store)

## 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

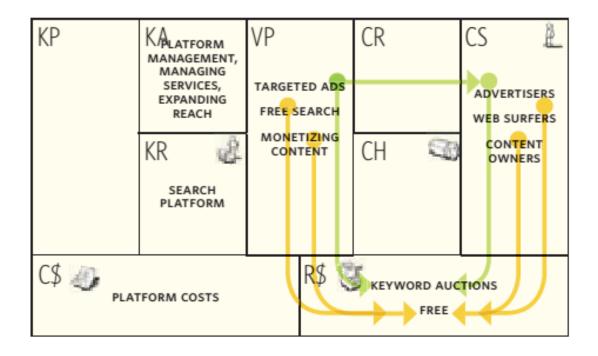
# Ex Google

- 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



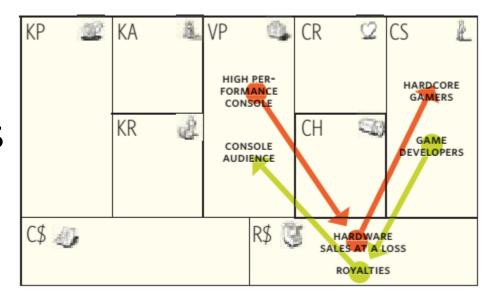
# Ex game consoles

- Side 1: player
- Side 2: game developer

Different BM: PsP/ Xbox vs Wii

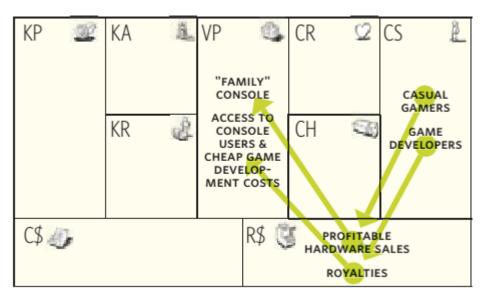
## Ex. PsP / XBox

- 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

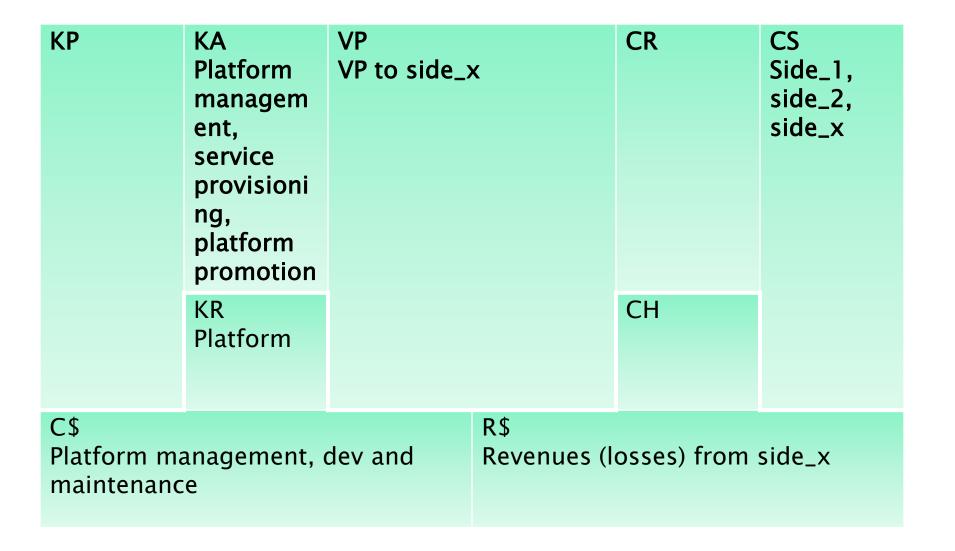


## Ex Apple

### 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

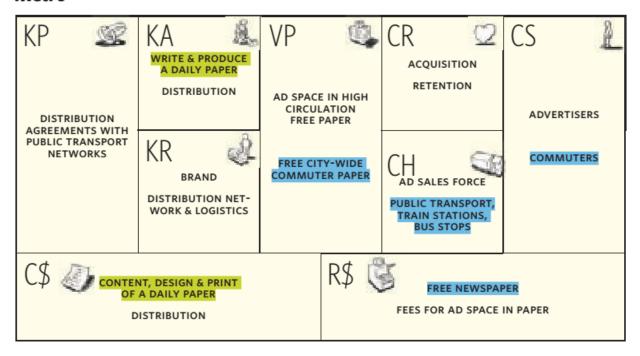
### Free

- 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

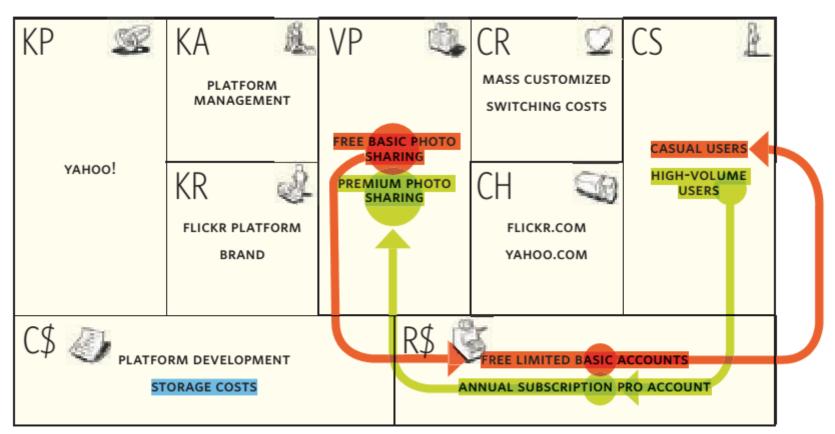


### Freemium

- 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



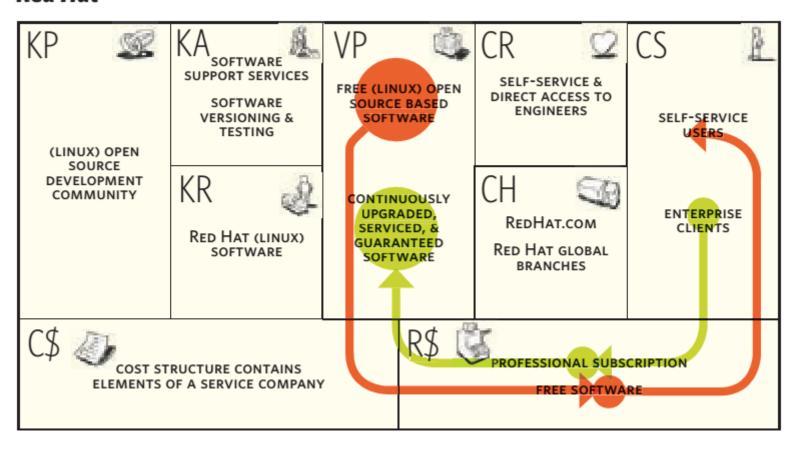
Red flow: tree service

green flow: fee

Platform development fixed cost, storage variable cost

## Ex Red Hat

#### **Red Hat**

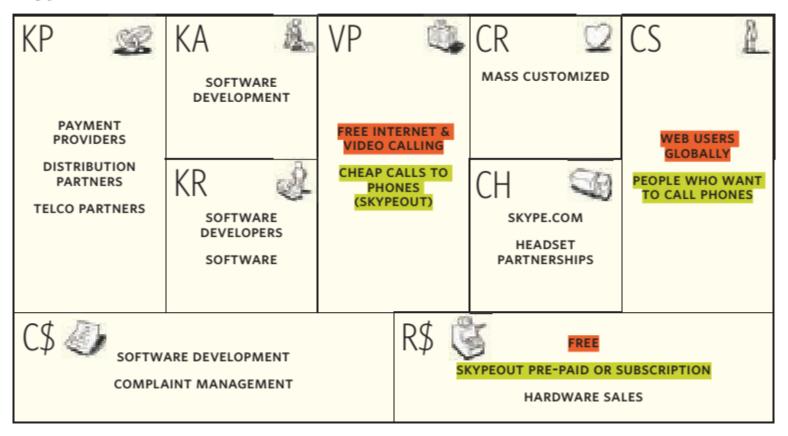


## Red Hat

- 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

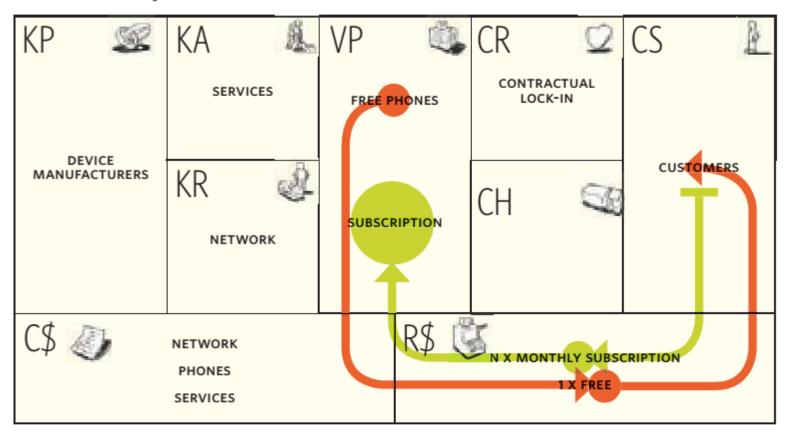
 Possible because skype is not a Telco (no cost for managing the network)

## 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

### **Bait & Hook of Free Mobile Phones**



## 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 solutionsskills

## Mission Model Canvas

Adaptation of BMC for non profit organizations

KP	KA	VP		BUY In and SUPPORT	BENEFICIA RIES
	KR			DEPLOYME NT	
MISSION BUDGET			MISSION ACHIEVEMENT		