

How to manage startups with innovative method

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What is “successful business”??

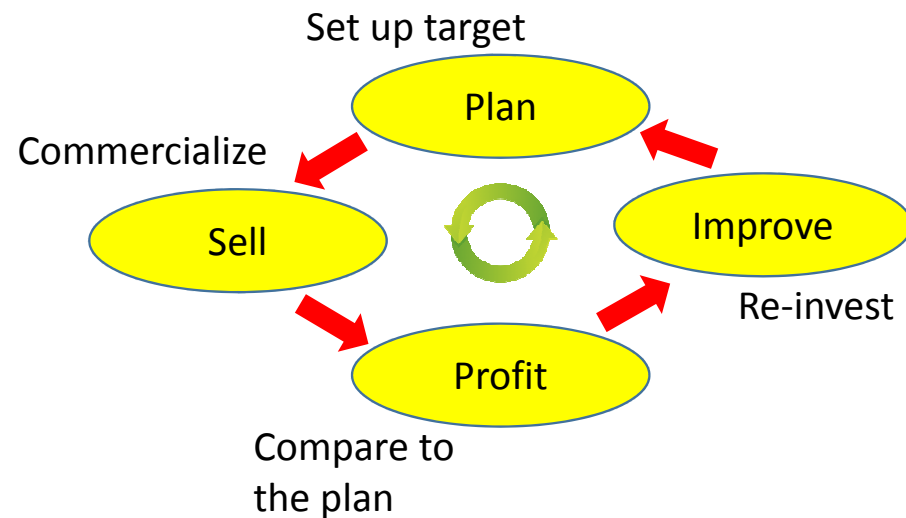
In general, success ratio of startups is about 3 out of 1,000.

- Is that earning big money?
- Then how much money you should get?

Definition of “successful business”

- To target market, and target customers
- Sell the products or the services with target price achieving target sales quantity
- Make profits continuously
- Develop higher value of products or services re-investing profits
- Expand business continuously

Keep growing!!



Happen to be successful vs. strategic approach

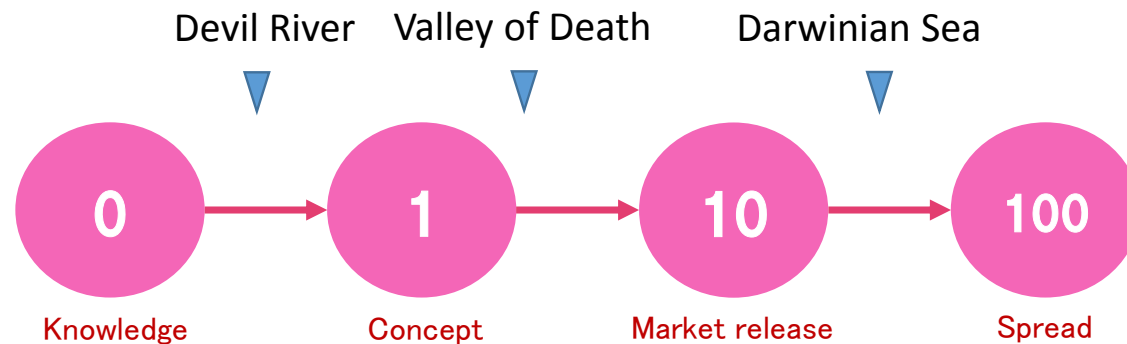
In reality, we can see in many cases “happen to be” type of success. Many people may feel strategic approach must be better in terms of success ratio. It may be true but who knows the reality. Also it depends on strategy itself.

Point here is that nobody can perfectly predict the success or the change in the world. However, we can raise the success ratio knowing “substance” of success stories.

Learn Strategic approach
for higher success ratio

- Know 3 barriers in the entire process
- See real case studies & think!
- Think about 3 key success factors
- Find business potential by jobs to be done
- How to reuse business model from different business area
- Exercise : business value up

Innovation process



Devil River

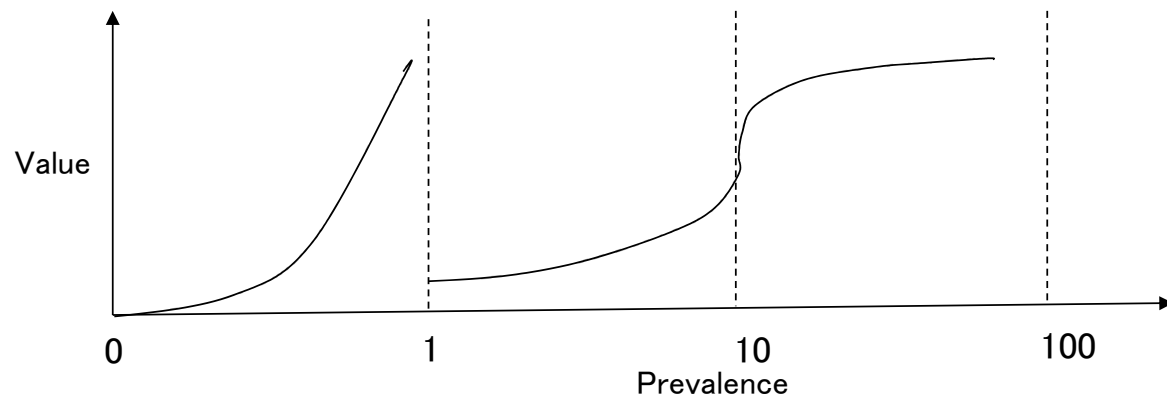
Barrier between R&D activity & technical realization

Valley of Death

Barrier before technical solution could be commercialized and manufacturable

Darwinian Sea

Barrier to win severe competition and to be real winner in the field



Idea/Concept

Commercialization

By Tokyo Univ. i.school

Ricoh's challenge -1 THETA (case #1)



Challenges : “THETA” (case #1)



Generate new concept for the Digital Camera

Propose new way to use the Digital Camera

Circumstance:

SNS is becoming nearby for everybody and many young people are sharing photos conveying atmosphere at the moment .

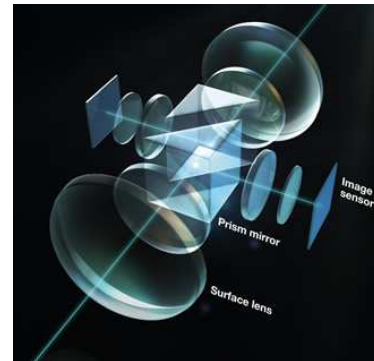
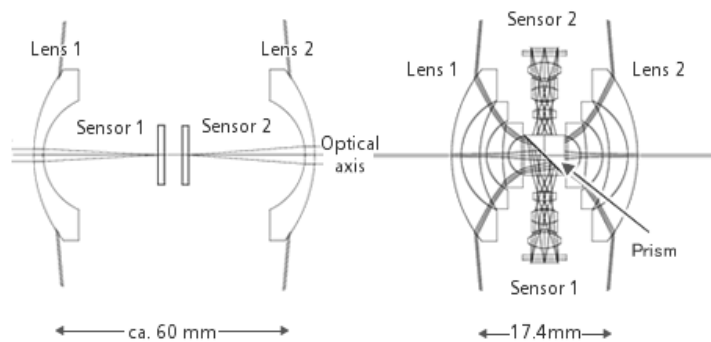
- End of 2009 : Started workshop phase having variety of people

Decision:

Make one shot 360 degree camera with small shape to enter the breast pocket.

- Sep. 2010 : Kicked off the project gathering required expertise

Break through : “THETA” (case #1)



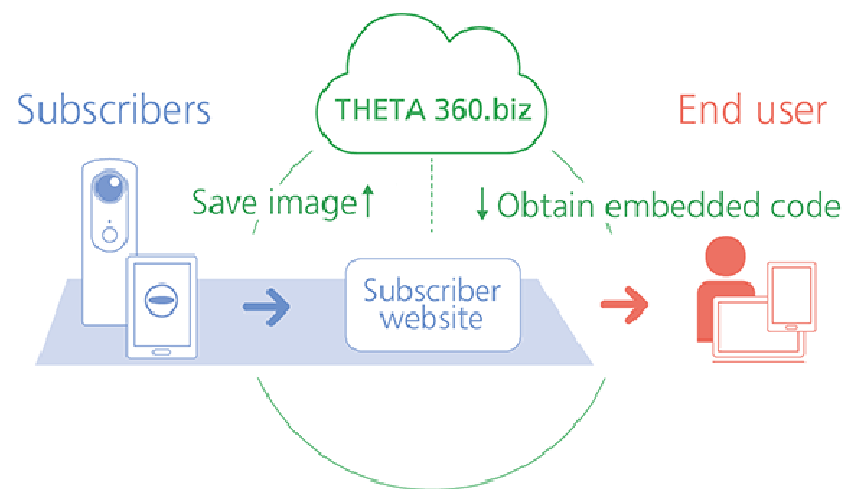
Solution for small shape:
Inflection optical method
(deflect incident light and guide it to the image sensor)

Risks:
Parallax adjustment
Unsuitable for mass-production
cost up (adding prism)

■ Oct. 2013 : Released 1st product to the market

Expansion: “THETA” (case #1)

■ Oct. 2014 : “THETA360.biz”



THETA 360.biz

Sell camera devices to consumers

- Pure consumer business
- Get margin from sales



Provide cloud services to companies

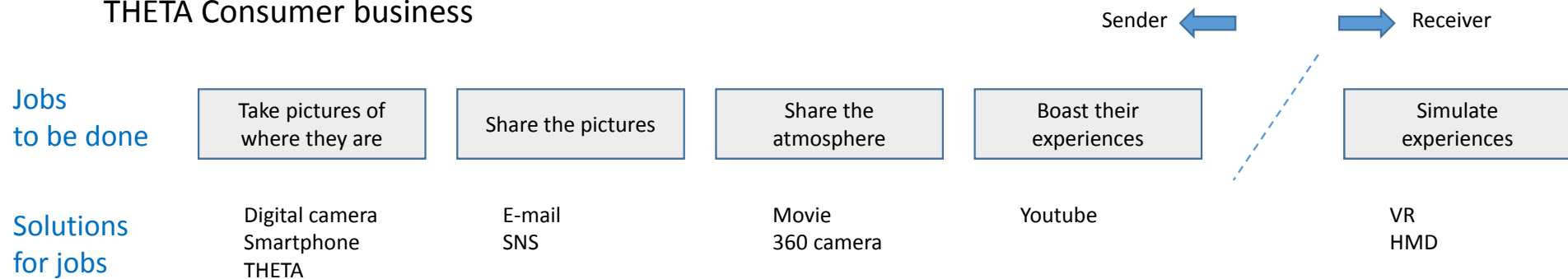
- Additional customer value
- Get pay per view revenue
- Go into ad. business



Knowing customers (case #1)



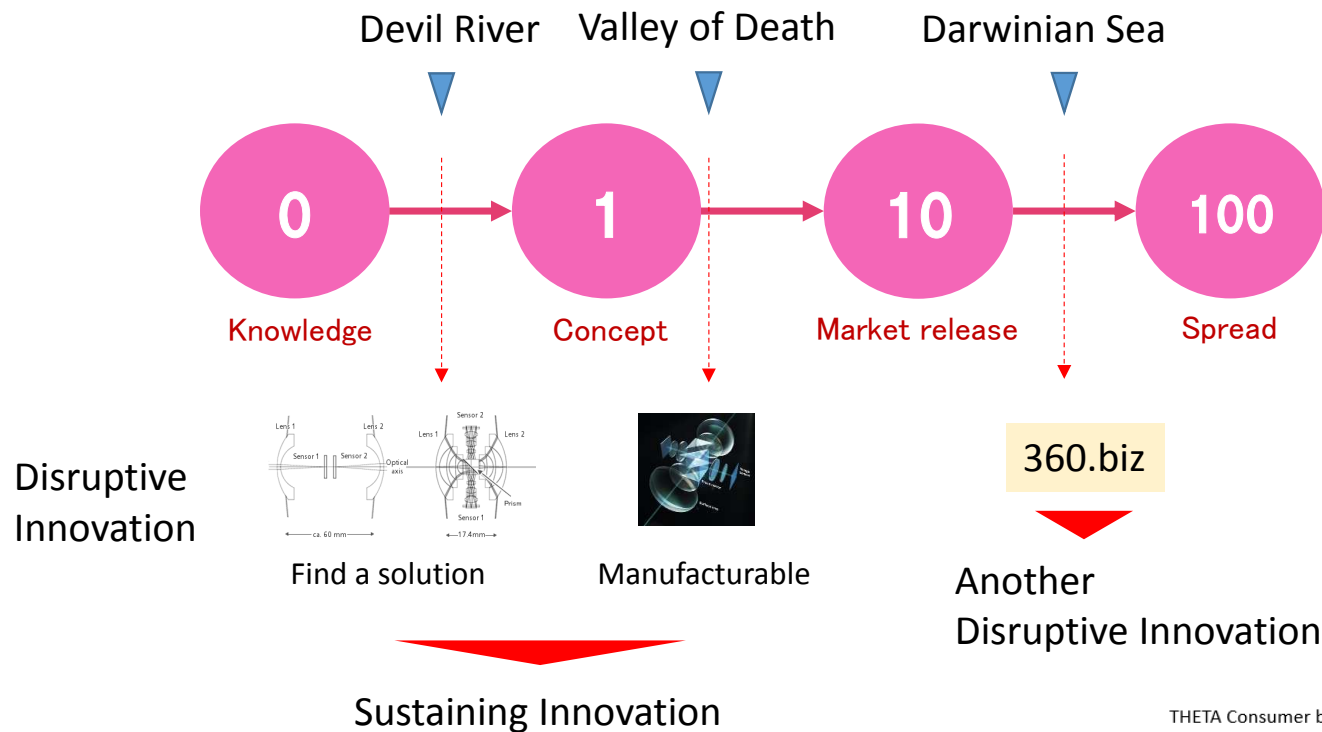
THETA Consumer business



Customer doesn't buy the product seeing the product itself.
Customer adopts the product in order to deal with the jobs to be done. (by Christensen)

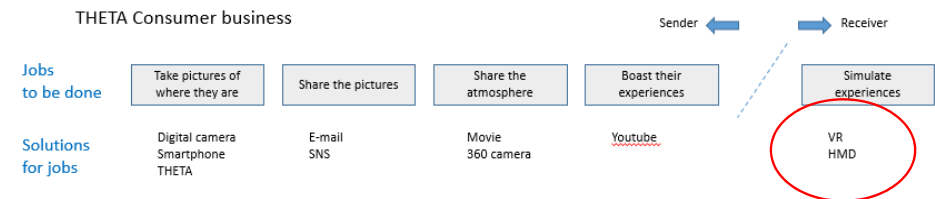
Competitor for your business exists in each job but couldn't be found correctly seeing the product.
Business chance should be also there in each job to be done.

Grow more: “THETA” (case #1)



Approach to another disruptive innovation

- Another solution for “job” for current customer
ex) “Simulate experiences” etc..
- Find another “job” for current customer
ex) Customer observation
- Define jobs for new customer
Market expansion
- Deploy new business model from different business area
Business Model DB -> reusable



Summary : case #1

- Ricoh THETA has been successful for Ricoh so far in terms of taking a good position in the consumer camera market.
- Success factors
 - Technical break through --- downsized by Ricoh optical technology
=> Devil River / Valley of death
 - Rapid environment change --- SNS world accepted our concept
- Could service 360.biz opened a way to B2B business and contributed THETA business expansion.
=> Darwinian sea
- Next challenges should be in customer's jobs to be done.

Any other idea?

Ricoh's challenge -2 Ultra short throw Projector (case #2)



Challenges : “Ultra short throw Projector” (case #2)

Conventional Projector:

- needs space or additional table to put the projector in the center of the meeting room
- emits fan noise and hot air blows
- anything shouldn't be in between the screen and the projector



In 2003, Ricoh was providing optical engines for the projector to various projector makers.



Came up an idea

Putting mirrors before the lens and deflecting the light results in short distance.

Decision:
Start R&D activity to develop short throw optical engine.

Break through : “Ultra short throw Projector” (case#2)

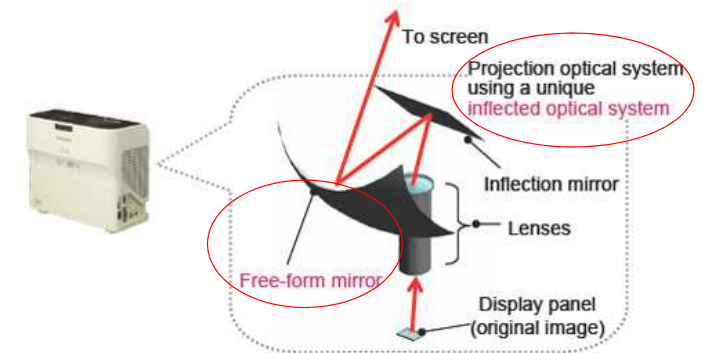
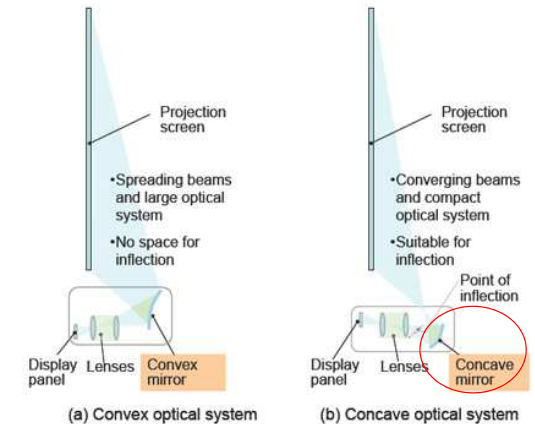
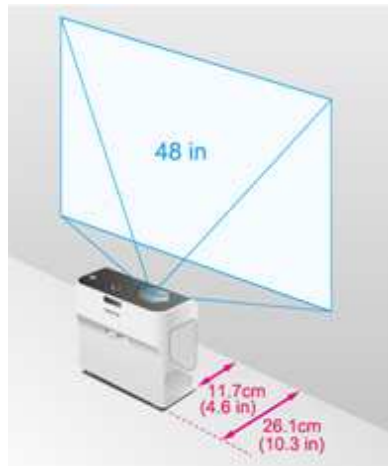


Three key technologies enabling ultra-close-range Projection from a small, lightweight body

Realize ultra magnification using a concave mirror – a reversal idea

A free-form concave mirror for further downsizing

An inflected optical system to reduce size based on an unique vertical structure



Decision to enter projector business (case #2)

■ 2006 : Ultra short throw 1st prototype (concept level)

■ 2007 : Complete a practical level of prototype >> in-house exhibition

Direct appeal to President

■ 2008 : President ordered to study business possibility

One business expert had been assigned.

Business plan had been reviewed by “Innovation Facilitation Board”

■ 2009 : Company T decided to withdraw from projector business

Acquired manufacturing asset, design asset, and patent, etc.

➤ Decided to enter the business

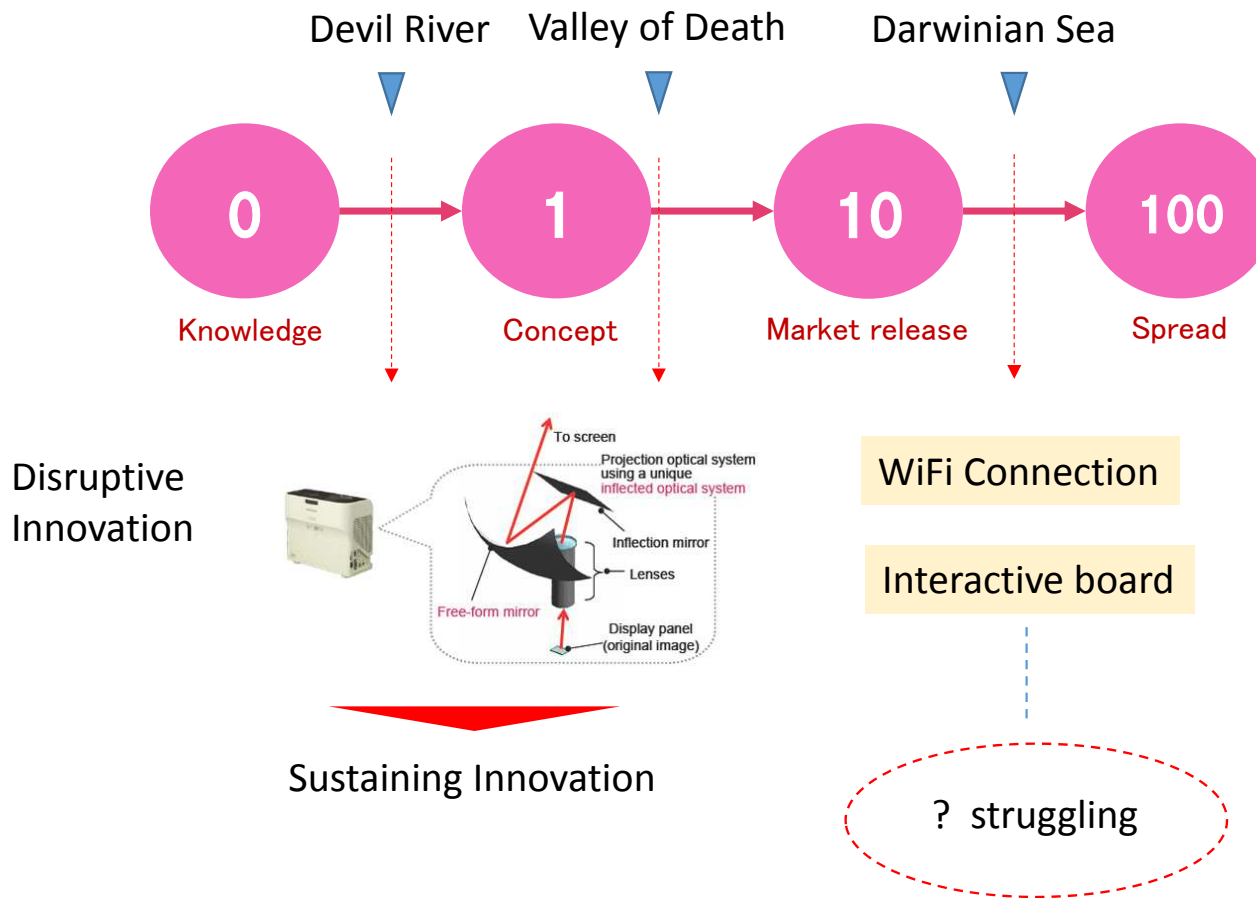
■ 2011 : Launched 1st Ultra Short Throw Projector product

Support from top management

Light decision process

Get required resources

On the way to real “success” (case #2)



Approach to another disruptive innovation

- Look ahead workstyle innovation & find new jobs synchronizing workstyle change in the office environment
ex)
 - just sharing -> collaboration in the meeting room.
 - PC -> Smartphone -> BYOD
 - Mobile worker, remote place worker

Summary : case #2

- Ricoh “Ultra short throw projector” has been on the way to success so far.
- Success factors so far
 - Technical break through --- downsized by Ricoh optical technology
=> Devil River / Valley of death
- Challenges
 - Expand brand awareness appealing new concept
 - Try to reach new business area, ex, education, signage ,,,
=> Challenging to Darwinian sea
- Environment change
 - Variety of PC to projector interface, ex, VGA, HDMI, thunderbolt, USB, lightning,,,

Any other idea?

Far to success – TOE (case #3)

New business utilizing Ricoh unique TOE (TCP/IP off load engine) technology

■ Realize all the functionalities for TCP/IP protocol stack on the hardware

【Features】

TCP/IP protocol

- Implement all functions on the H/W
- Follow latest RFC (standard)
- Support many of RFC Options
- IPv6

Support many network interface

- Ethernet / WiFi / 3G / LTE

Implement Security functions

- High speed filter(FireWall)
- IPsec/TLS (Transport Layer Security)

【Strength】

High through put

- Faster than 10x of S/W process

Low latency

- <10μsec (<1/100 than S/W stack)

Low power

- <1/10 than S/W stack

Low cost

- No need for external memories

Cyberattack tolerance

- Hardware authentication key
- IPv6

【Weakness】

Need H/W development

- High NRE (ex; SOC development)
- Need both S/W and H/W engineers

Low flexibility

- Compared with S/W

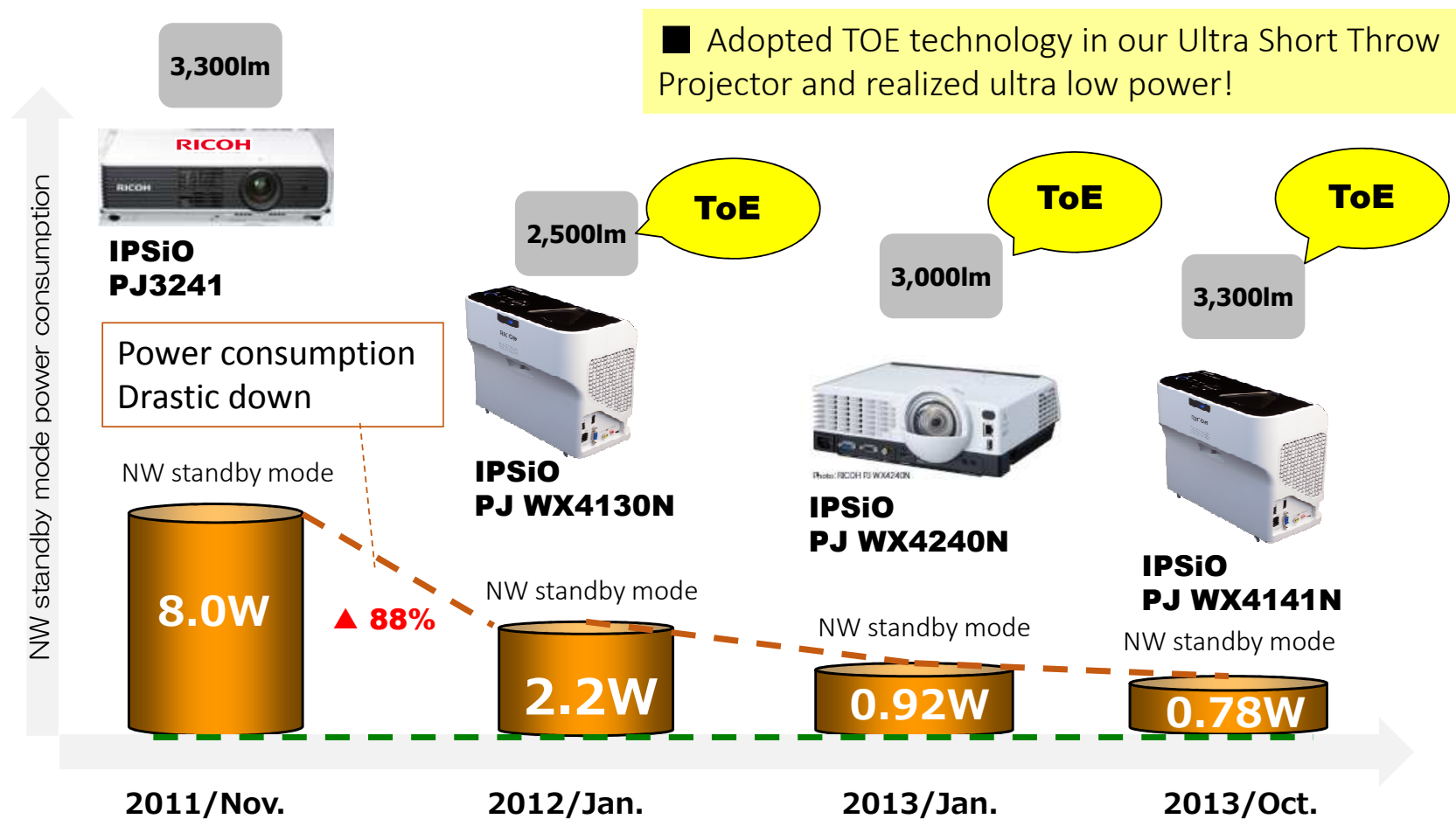
Compatibility

- Need customization for generic OS

Not much utilization in the market

- Minority in the embedded system area

TOE experience in Ricoh (case #3)



Strategy for TOE business (case #3)

■ Majority is software protocol stack.

【Why software stack? 】

High difficulty & no useful H/W solution in the market
Many players (Toshiba, Hitachi, etc.) tried without success

【Ricoh's achievement】

Break through points

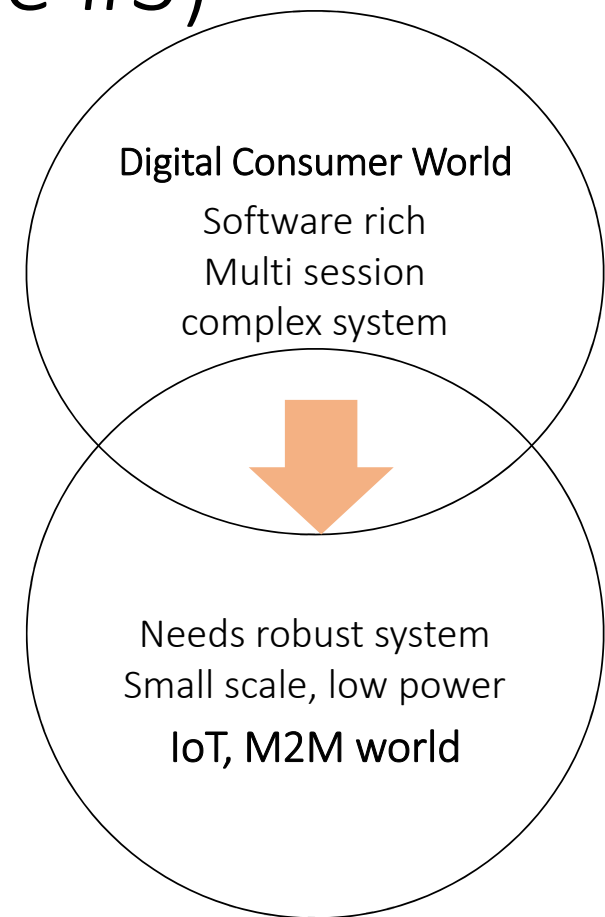
- IPv6
- abnormal/exceptional process

【Target customer】

IoT device communication
Social infrastructure

【Target business】

IP business
Semiconductor business
Gateway



Summary : case #3

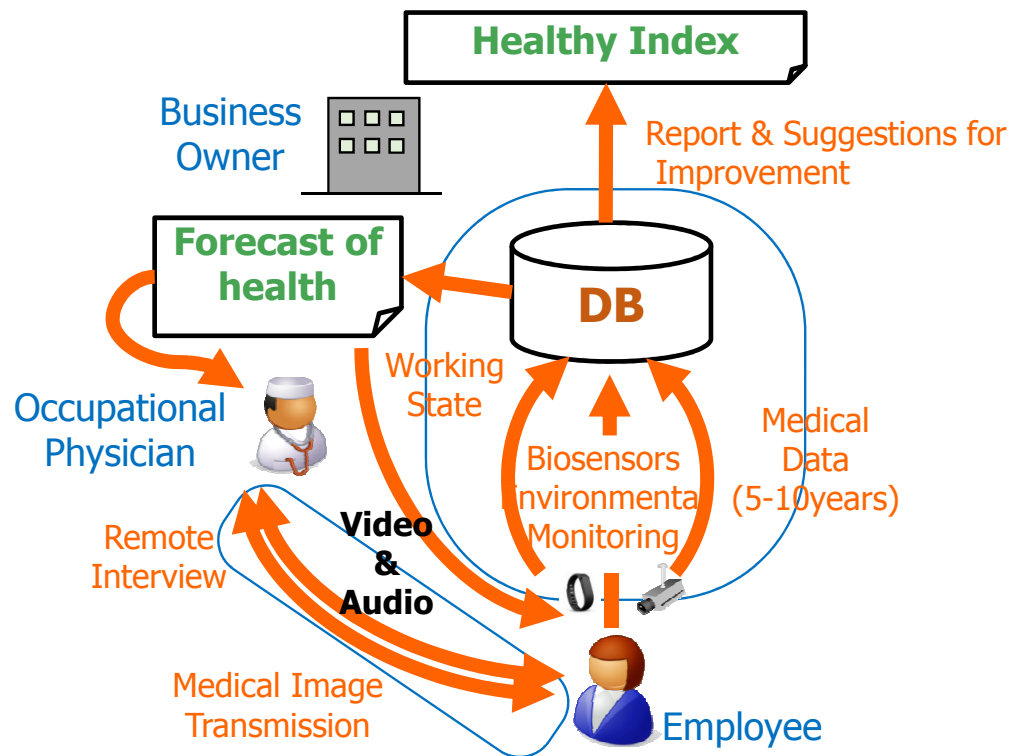
- Using TOE technology, Ricoh developed projector products with world lowest standby power consumption.
- IoT era is coming and we believed TOE features should be accepted in various cases.
- Then tried to go into new business utilizing TOE
- Marketing activities
 - Approach to semi-conductor company for collaboration
 - Sell TOE chip to IT integrators
 - Sell TOE solutions to IoT business players

=> Interesting but no need at the moment

What's the problem? Any thought??

Far to success – Healthcare business (case #4)

Remote Lifetime healthcare support business



Service to provide a platform for preventing a disease and for safe, comfortable and convenient Healthcare promotion

Main Features

Healthy Index

To analyze & evaluate the health condition of the employee from the DB and to suggest an improvement for the Healthcare management

Forecast of health

To estimate the disease risks of employee and advice at an early stage to improve their daily working and life style by health & hygiene staff

Remote interview

Sharing the medical & vital data with physician and employee for face to face instruction

Health Management Supporting System

Summary : case #4

- Medical cost is rapidly increasing and companies and even government have been forced to bear the cost. (Issues in Japan)
- Occupational physician has problems. Not to have enough resources to care employee's health.
- In order to improve people's productivities, healthcare business is getting a strong attention.
- Gathering health data is one of important elements to win big data business.
=> Some of companies showed interesting and worked together for trial but ...

What's the problem? Any thought??

Easily misunderstand the “success”

Lapsable mistakes

- Good technology, good product must lead to “success” → case #3
- Needs must be there, so it must be “successful” → case #3 & #4
- Money will come later → case #4
- No differentiator, no solution for hindrance → case #4

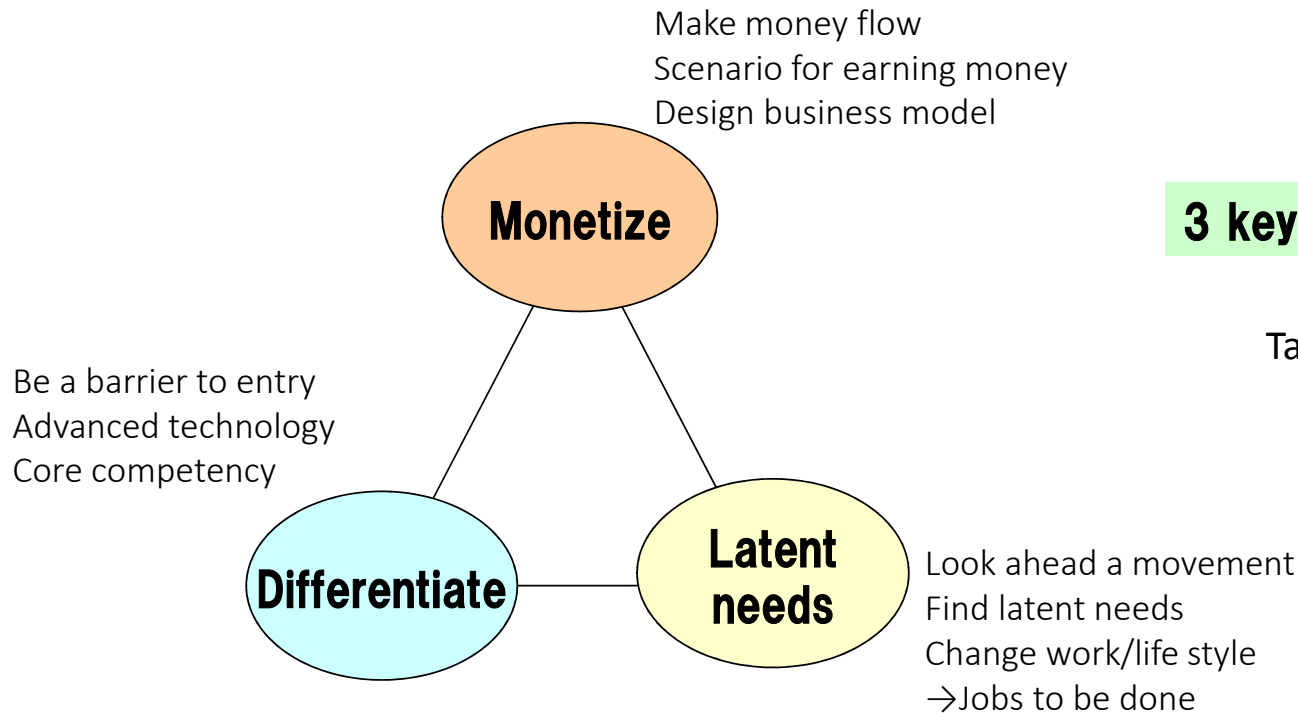
New business creation **doesn't mean** making good products or services.

New business creation **means** making good scheme moving money via products or services.



New Business Model

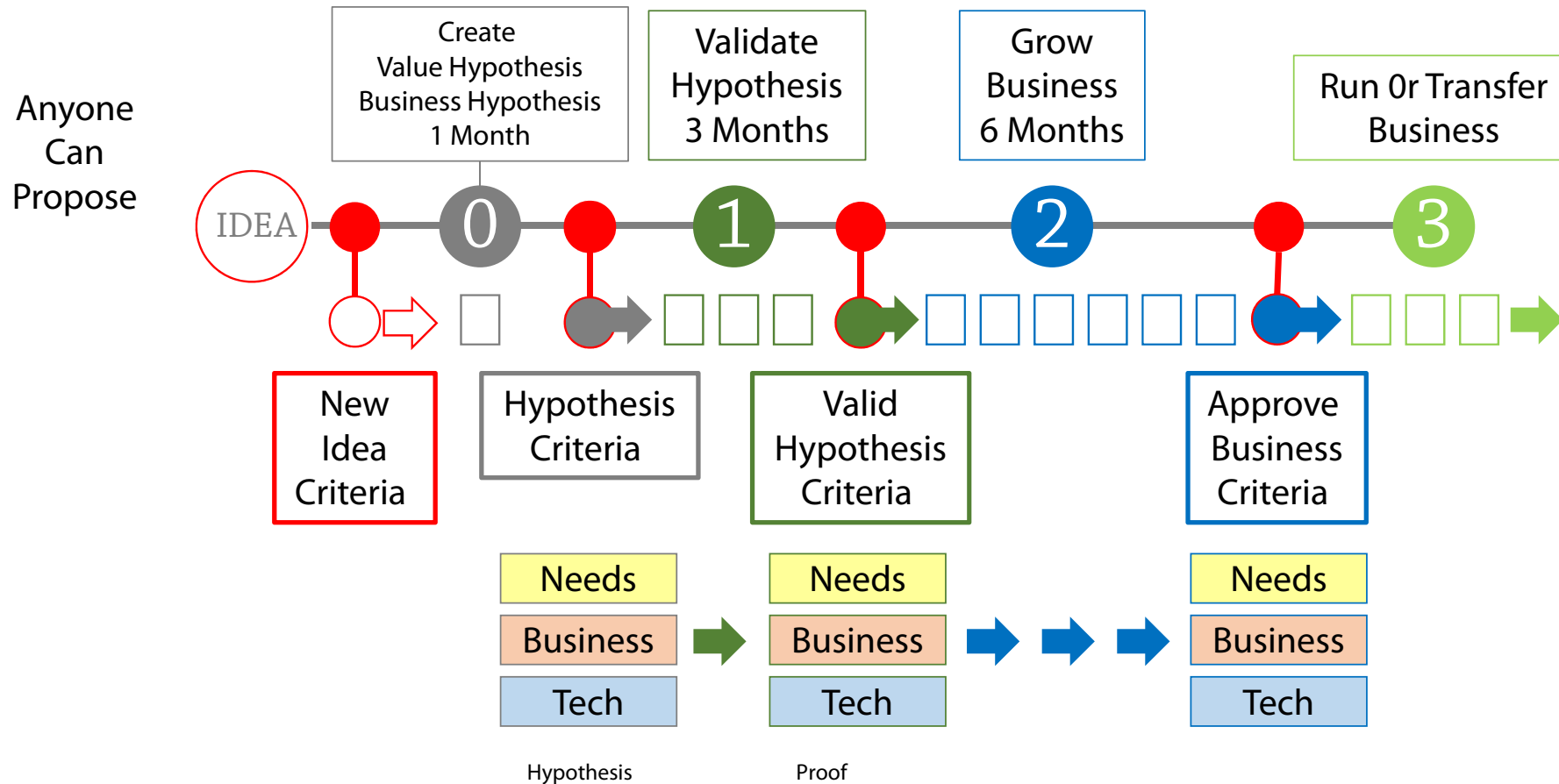
Key factors of Business Model



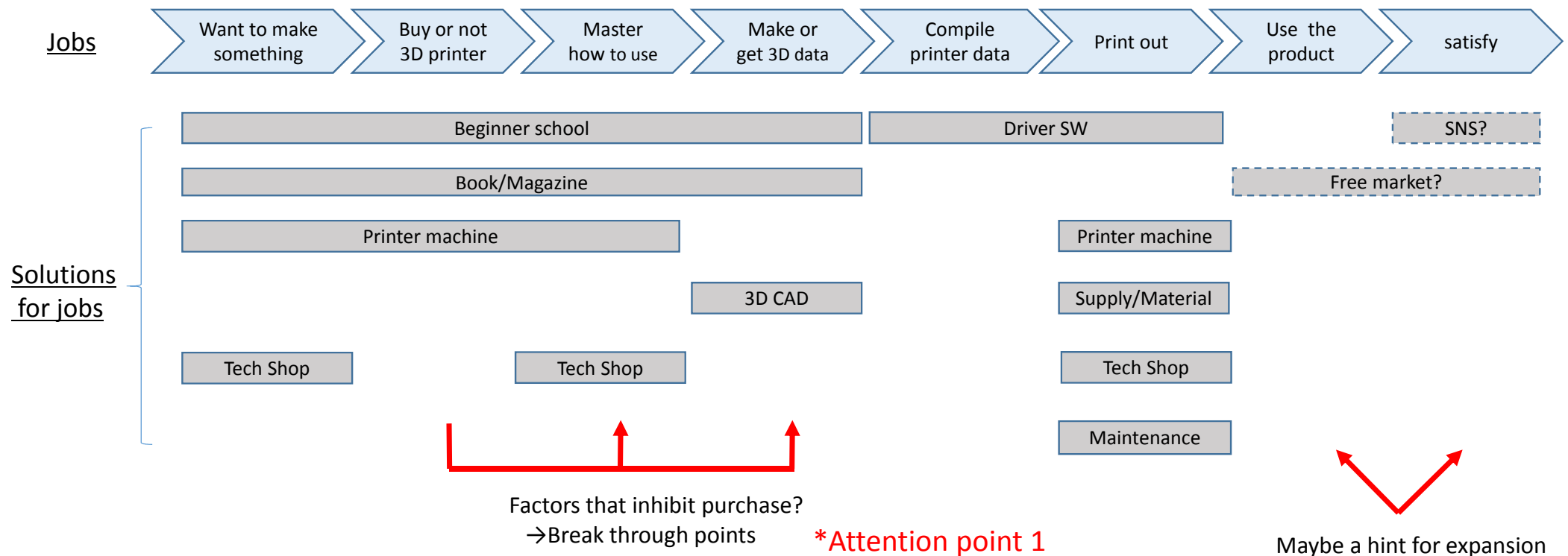
3 key factors must be well balanced.

Taking only 1 or 2 of them causes to “fail”

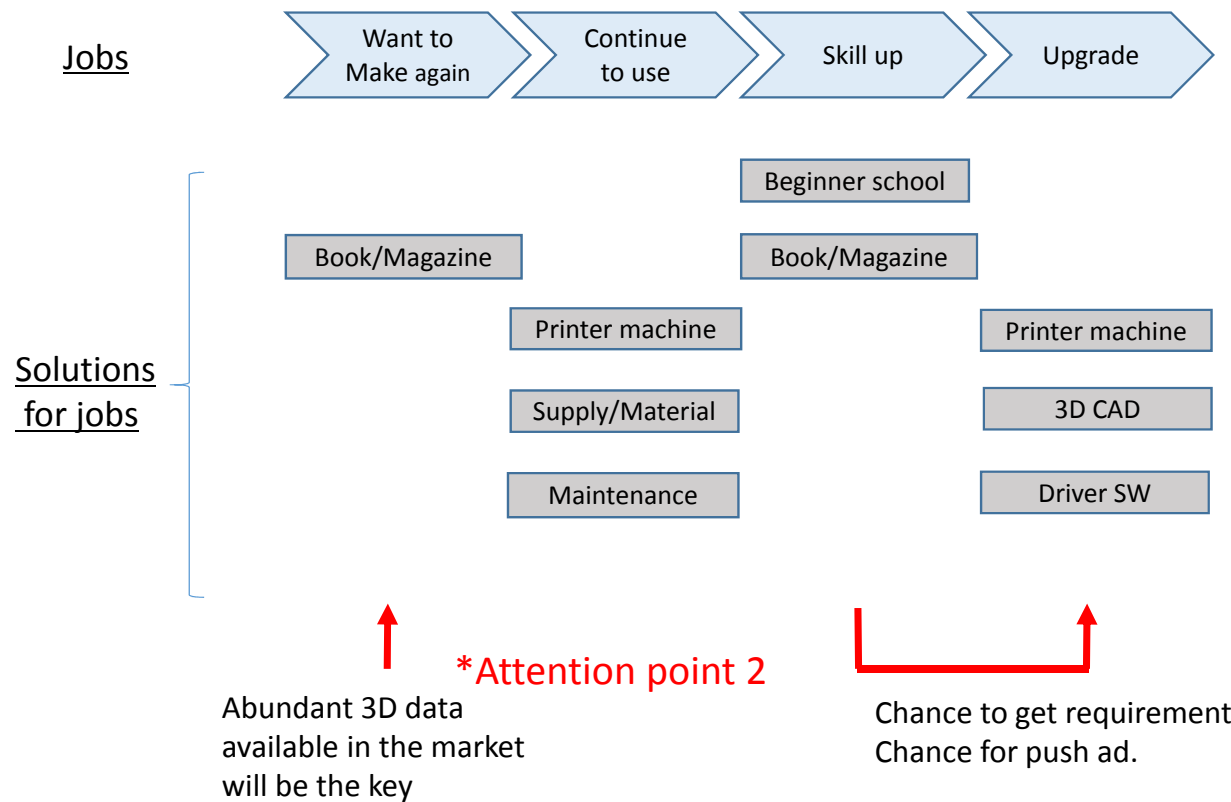
Phase gate approach



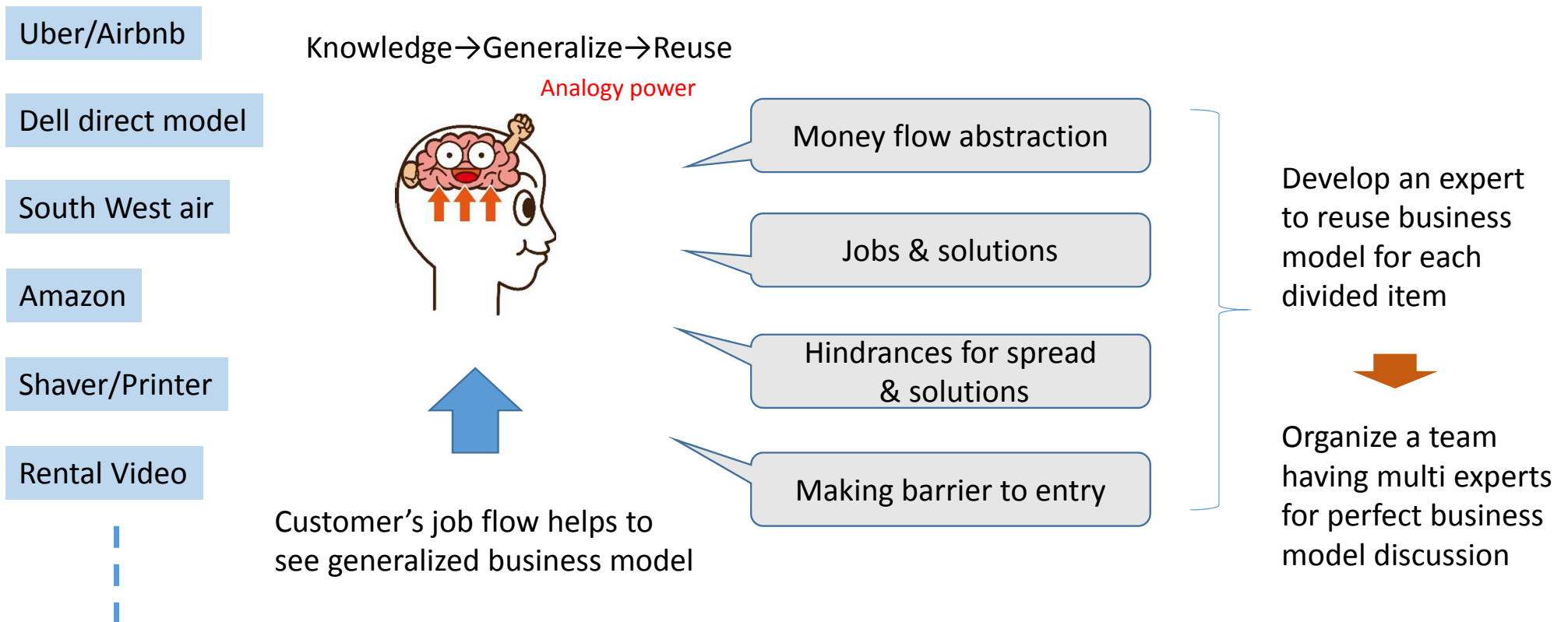
Jobs to be done (3D Printer business) -1



Jobs to be done (3D Printer business) -2

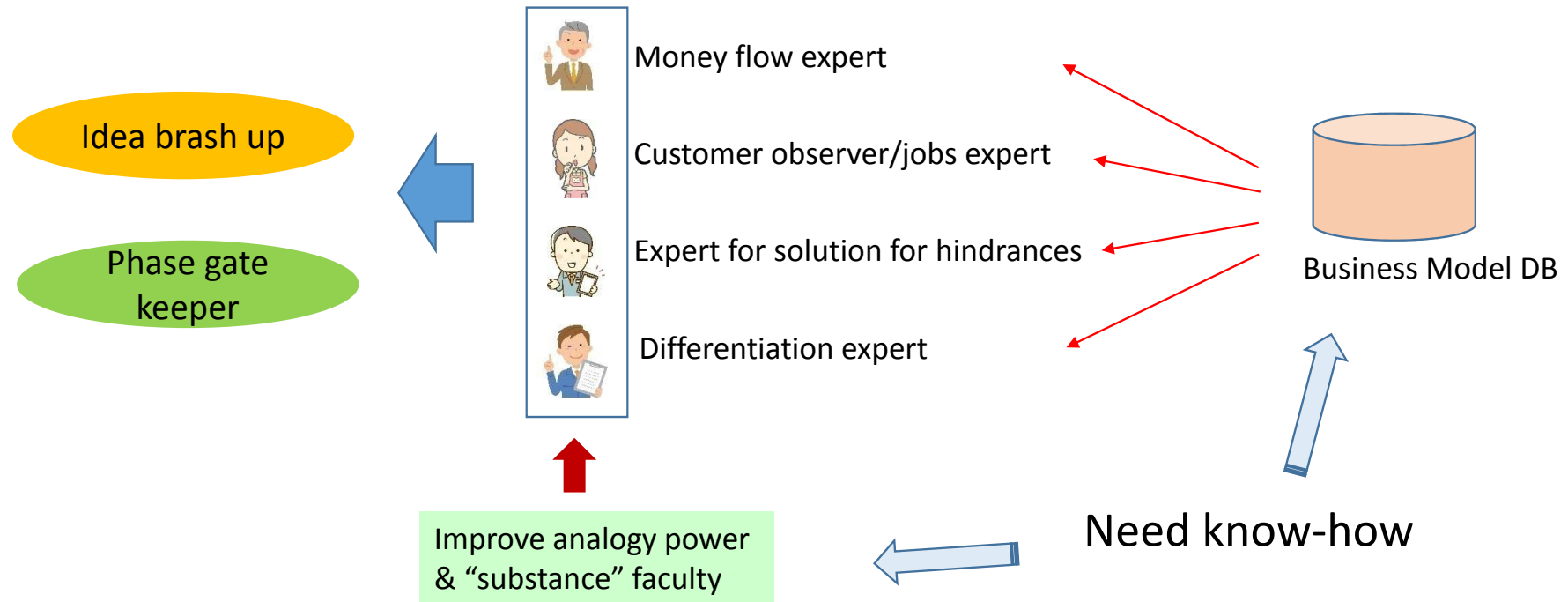


Learn Business Model from success cases



Team build for Innovation

If you don't have a super genius, then you should build up a good team for innovation.



Business value up exercise (3D printer)

Assumption:

Business value up exercise → Expand business for low end 3D printer

Target customers : Persons being interested in using 3D printer but no real experience so far

Value up exercise -1

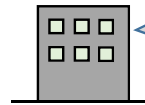
Attention point : Factors that inhibit purchase

Theme : Encourage potential users to step forward

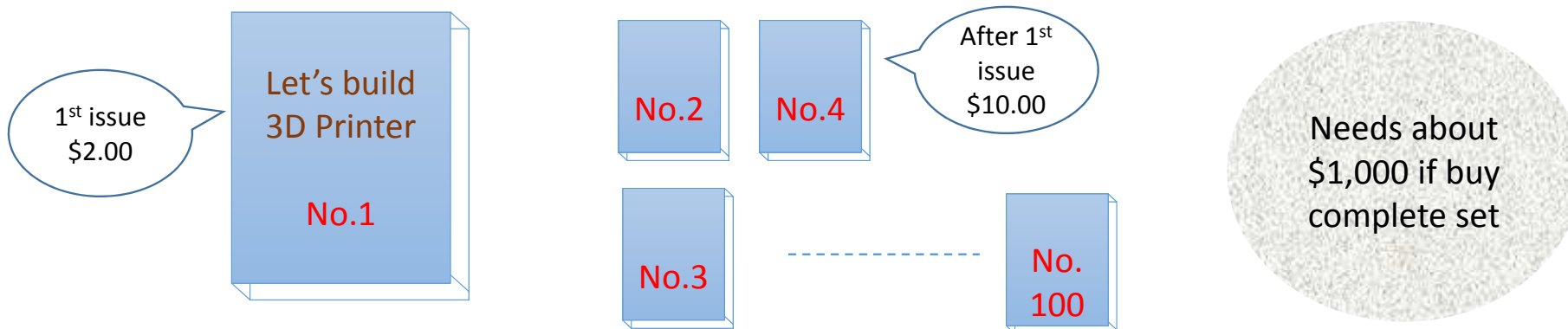
Idea : Use Deagostini's business model



New user wants to buy the 1st issue because of low price. Also feels at ease because he can easily drop off. But once started to buy, user may want to keep buying.



Company can expand user layers. Lower price of 1st issue could be a very good advertisement. Seeing actual sales of 1st issue, they can easily forecast volumes for the rest of issues and can mitigate an inventory risk.

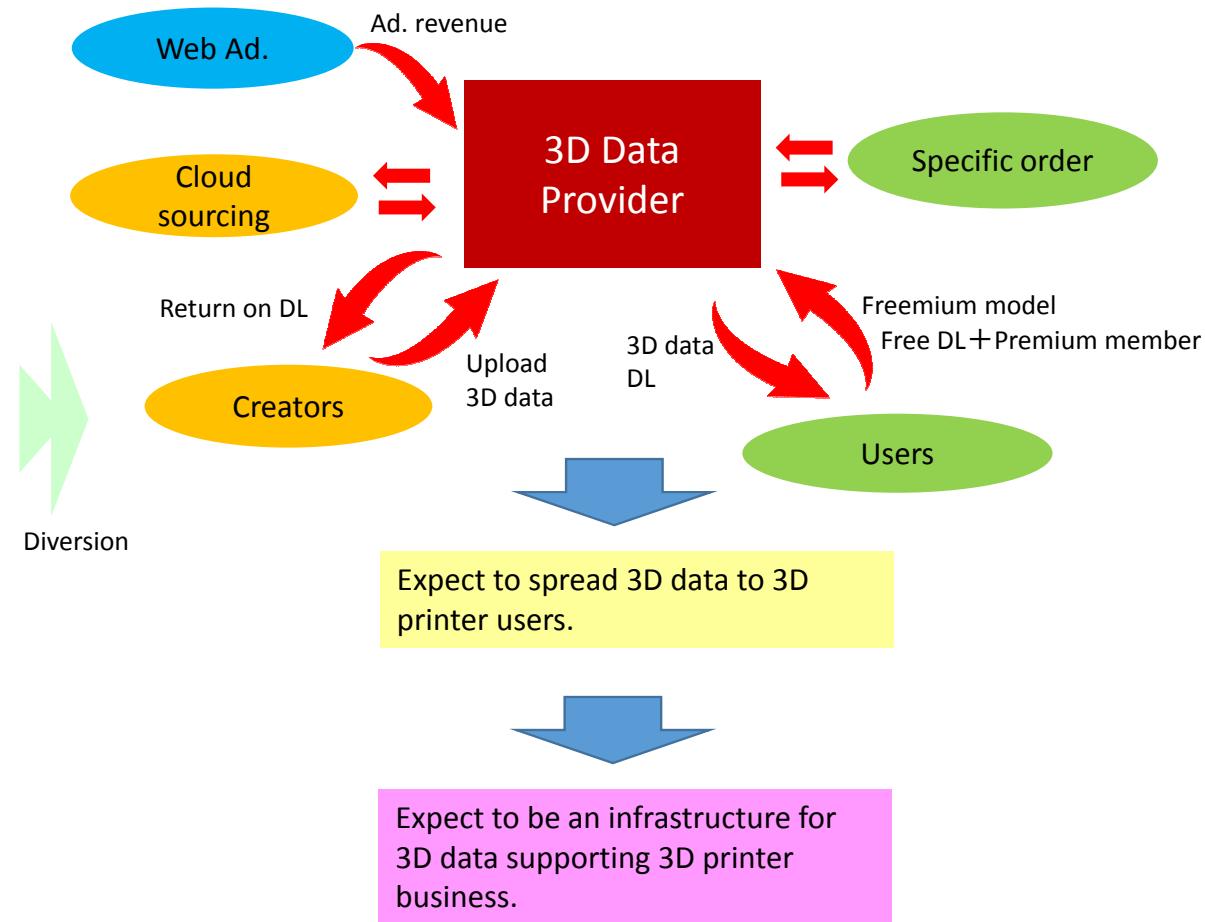
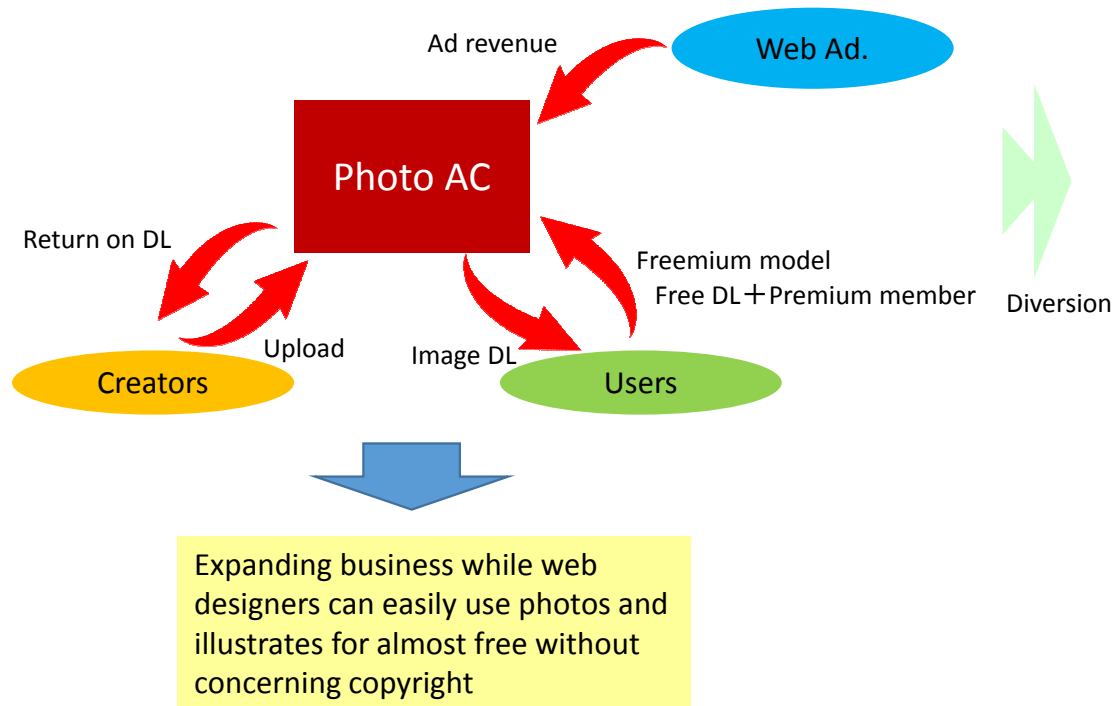


Value up exercise -2

Attention point : Abundant 3D data available in the market

Theme : Encourage users to make something again & again

Idea : Divert a business model of "Photo AC"



Conclusions

- Keep an eye on all the innovation process, not only 0 to 1 phase but through 100. Big chance can also be at Darwinian Sea.
- Phase gate process may be considered as an obsolete way but important thing is to keep 3 key success factors well balanced during the process.
- Business model should be reused and diverted from other business area.
- In order to reuse the business model, “analogy” is a key for success and easy way for “analogy” is to analyze the business model into some divided items.
- Writing down jobs flow shows you potential innovation points.
- Process and framework can provide a guidance for innovation and more important thing is to build a capable team and capable people.
- Success ratio should drastically increase by innovation process and innovative people.

Thank you for your attention!!