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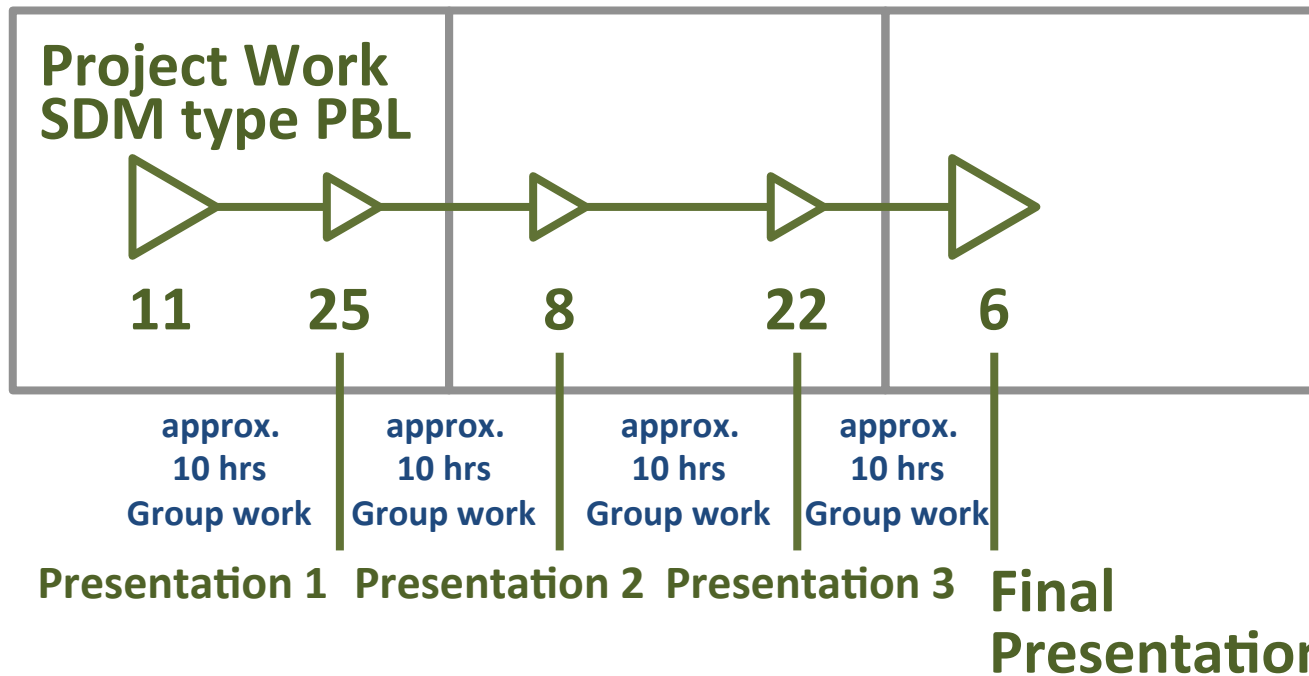
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EDGE Program funded by MEXT
Keio University
Global Innovator Acceleration Program
2015
Project Work SDM type PBL
#2

Graduate School of System Design and Management
EDGE Program Team

Keio EDGE Program Project Work: SDM type PBL Schedule

October November December



Keio EDGE Program
Project Work: SDM type PBL
Common Context

Healthcare

- You can re-define if necessary.
- This is neither a requirement nor a constraint.
- This is a starting point for your discussion.
- At the end I want you to convince your audience that this is *a healthcare related solution*.

Keio EDGE Program

Project Work: SDM type PBL

New Value Creation Process “Big Picture”

- Basic **building blocks** for your new value creation.

problem
definition

design
principle

functional
design

physical
design

use-case

value
proposi-
tion

unit
econo-
mics

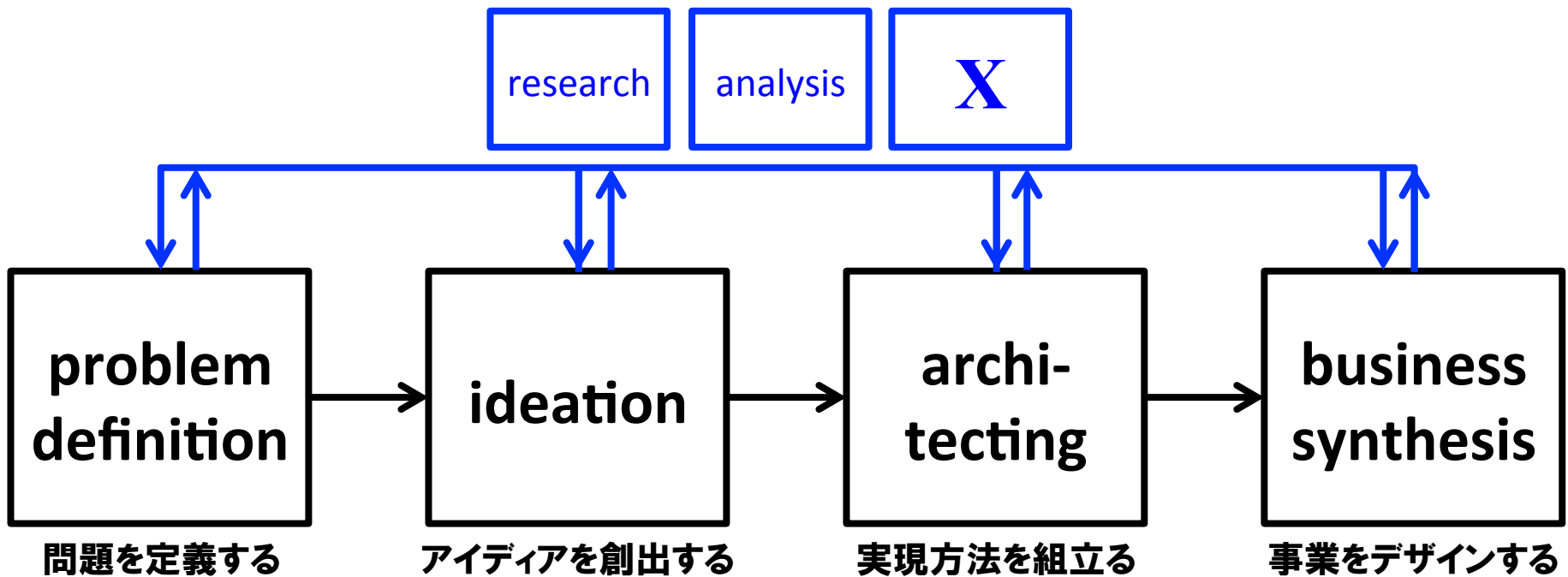
marketa-
bility

profita-
bility

Keio EDGE Program

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Basic Project Framework



Keio EDGE Program

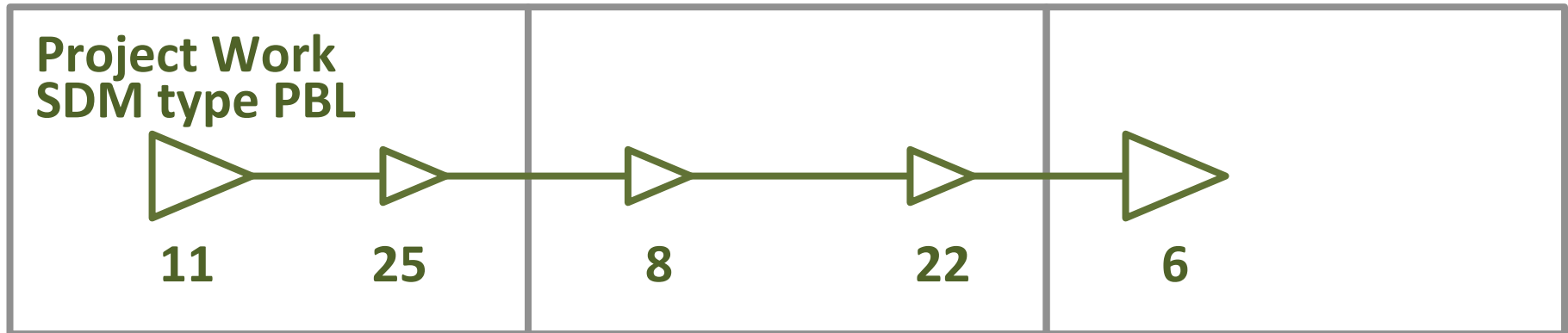
Project Work: SDM type PBL

In-class Activity

October

November

December



problem
definition

business
synthesis

problem
definition

problem
definition

Final
Presentation
for PBL

ideation

ideation

ideation

architecting

architecting

architecting

business
synthesis

business
synthesis

Keio EDGE Program

Project Work: SDM type PBL

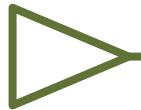
In-class Activity

October

November

December

Project Work
SDM type PBL



11



25



8



22



6

problem
definition

business
synthesis

problem
definition

problem
definition

Final
Presentation
for PBL

ideation

ideation

ideation

architecting

architecting

architecting

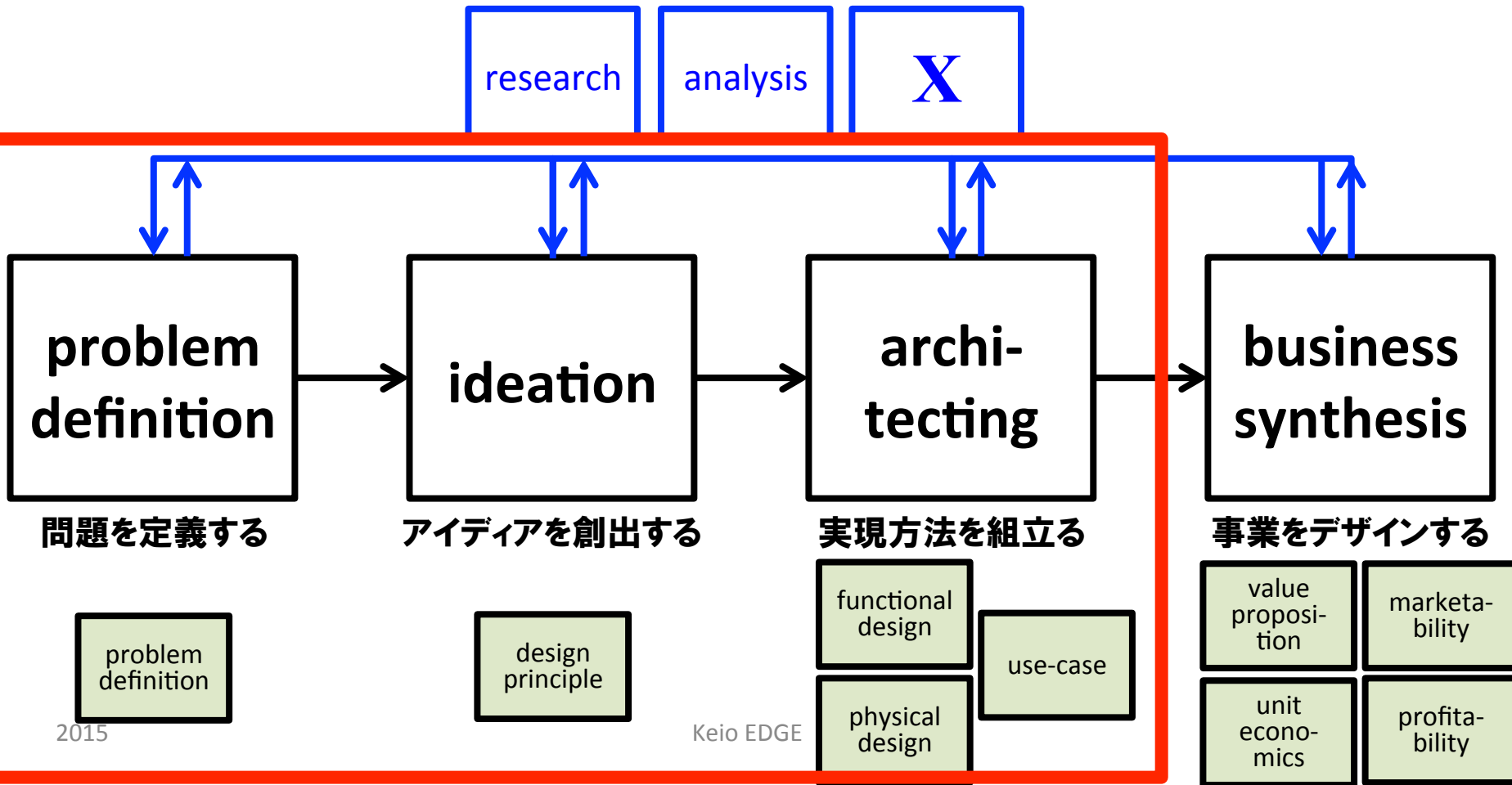
business
synthesis

business
synthesis

2015 *1st iteration*

at least Keio EDGE *at least*
2nd iteration *3rd iteration*

PBL #1



Keio EDGE Program

Project Work: SDM type PBL

In-class Activity

- Tentative schedule of October 25th, November 8th, 22nd :
 - **9:30 - 11:30** Team presentations and discussions
 - **11:30 - 12:00** *Lecture or Group work*
 - **13:00 - 18:00** *Group work* and/or consult with instructors

Presentation: 20 minutes

- 10 minutes presentation
 - Your **problem definition**
 - Your **solution** (highlight: **overview & value created**)
 - Your design principle or **most important insight**
 - Your solution's **use case**
 - Your solution's **functional and physical architecture**
- 10 minutes Q&A
 - Instructors and peer teams will ask questions.
 - ***All questions are intended to improve your design process and outcome.***
 - You can ask questions to the instructors too.

for this afternoon

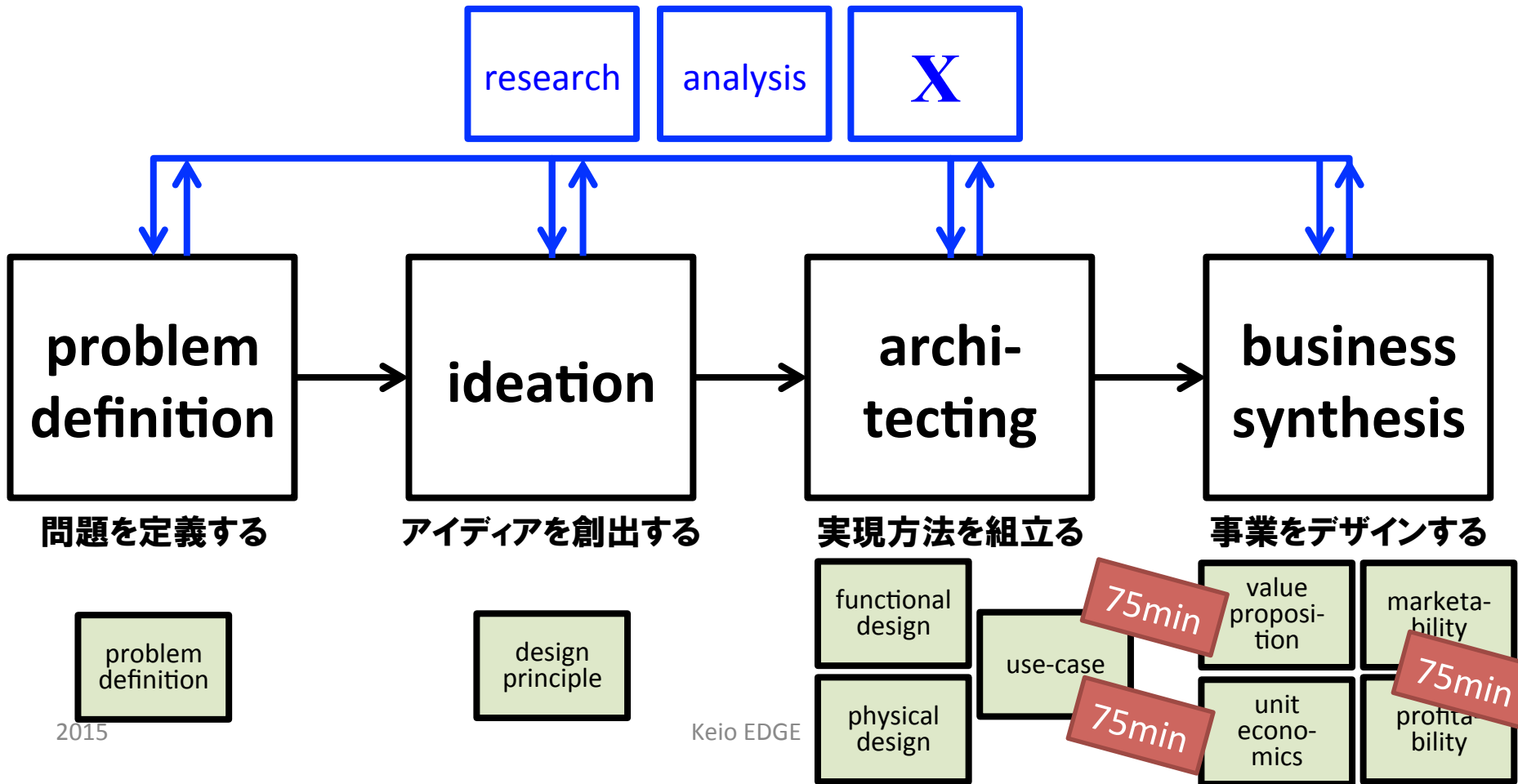
PBL #2

This is just a suggested time table. You can choose what to work on.

13:00	14:15	75分	10	Exercise Value Proposition
14:15	14:25	10分	11	Break
14:25	15:40	75分	12	Exercise Unit Economics
15:40	15:50	10分	13	Break
15:50	17:05	75分	14	Exercise Marketability, Profitability
17:05	17:15	10分	15	Break
17:15	18:00	45分	16	Presentations

PBL #2

This is just a suggestion. You can choose what to work on.



What we did in intensive workshop day 6

Value Propositions

- Find possible “**pain relievers**” of your solution for your customer(s).
- Find possible “**gain creators**” of your solution for your customer(s).



- Review pain relievers and gain creators and create a **short sentence to describe the Value Propositions** of your products/services.
 - Discuss and identify what you really want to deliver to your customers.
 - Discuss how your value proposition can be unique.

Value Proposition to Unit Economics

- Discussion about the **value** in terms of **economics**.

- Suggested process for Keio EDGE program

Core Value

Clarify what you deliver to your customer.

CVCA

Understand value chains around your core value.

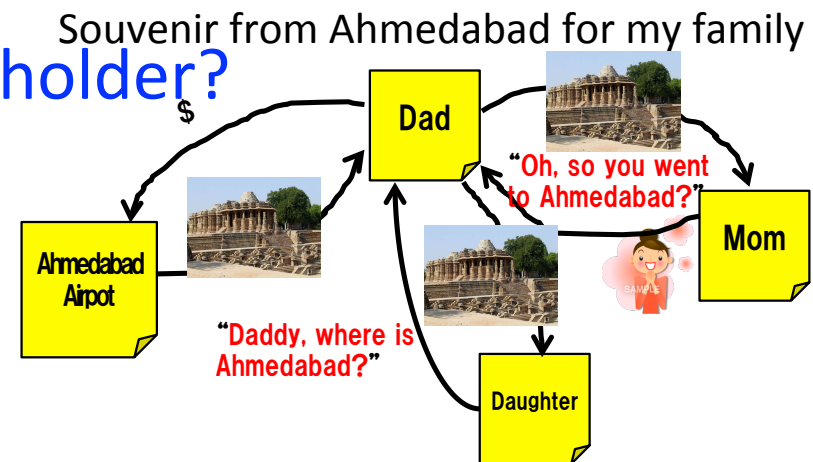
Price & Cost

Value is delivered at certain price with certain cost.

**MQ
Accounting**

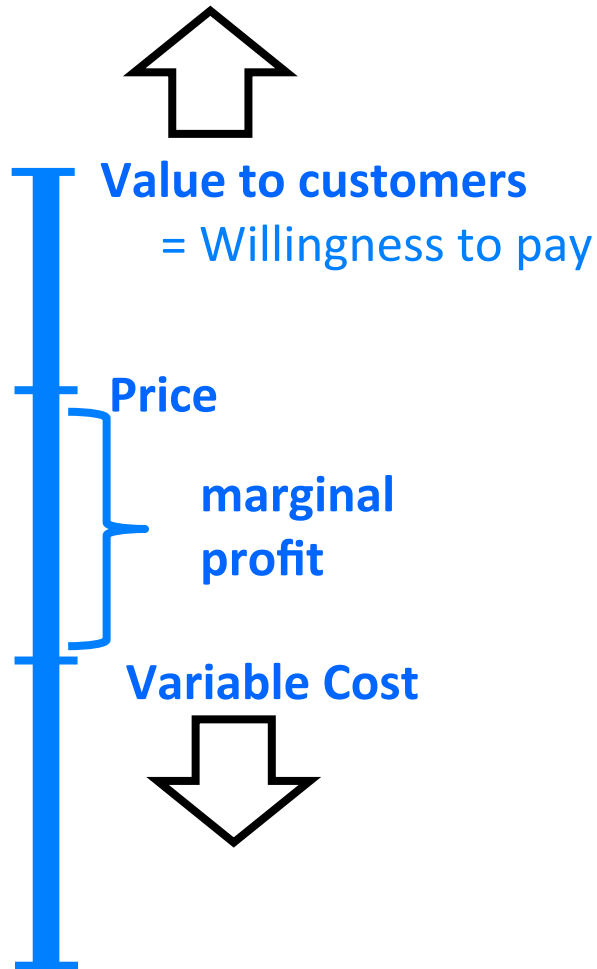
Discuss and make decisions on how you are going to deliver your core value to your customer in terms of economics.

- **Discuss and create CVCA** of one of your concepts or ideas.
 - Consider the **values that are not only money and goods/services.**
- Who are main stakeholders?
 - What are values for the stakeholder?
 - How is the value chained?



Visualize value chain so you can discuss, modify, and make it as a part of innovative solution!

Value and Price and Cost



- Value to customers must be higher than price
- You want to increase value / decrease cost for getting more marginal profit
- Value is not fixed:
 - ✓ it depends on customers
 - ✓ it depends on what story you deliver

MQ(Margin-Quantity) Accounting

An Italian Restaurant Case Study

Unit Economics
(yen)

Volume
(persons)

Whole Economics
(thou.yen)

P 3,000	V 2,000
	M 1,000

×

Q 1,000

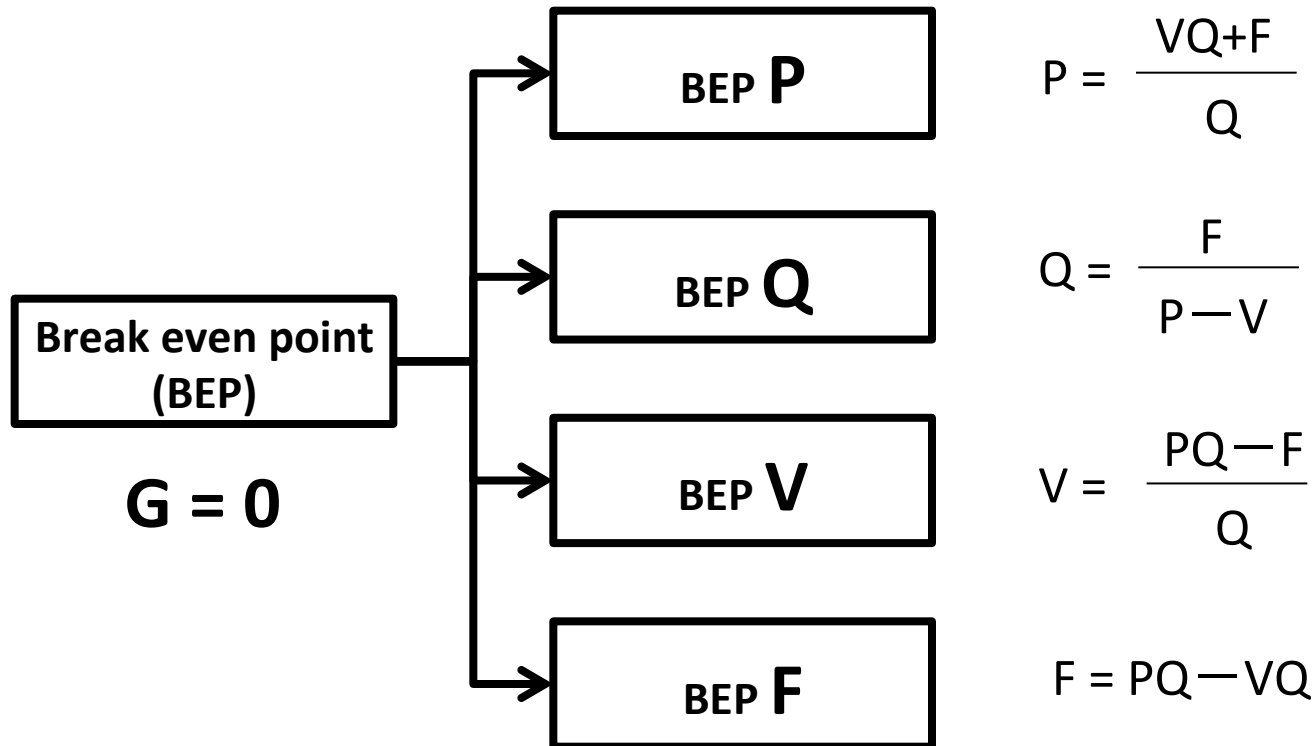
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PQ 3,000	VQ 2,000	
	MQ 1,000	F 800
		G 200

- **P: Price**
 - Revenue per customer
- **V: Variable cost**
 - Cost of food materials and etc
- **M: Marginal profit**
 - Price minus variable cost
- **Q: Quantity**
 - Number of customers
- **F: Fixed cost**
 - Personnel cost, rent cost, water, gas and electricity cost
- **G: Gain**
 - final profit

4 Break-Even Points

- You can calculate four kinds of break-even points (BEP P, Q, V and F)



Case Study

- You are an owner of an Italian restaurant. Your restaurant's unit economics and profitability are shown below.
- For improving your restaurant's profitability, you have some options about menu reformation and advertisement investment.

**Unit Economics
(yen)**

P 3,000	V 2,000
	M 1,000

×

**Volume
(persons)**

Q 900

=

**Whole Economics
(yen)**

PQ 2,700,000	VQ 1,800,000	
	MQ 900,000	F 800,000
		G 100,000

Market Sizing

- Estimate the market size you are primary targeting at.
 - Accurate estimation is impossible.
 - Use “Fermi estimate” as your best effort.
- Moneywise sizing is preferable, but population-wise sizing is ok too.
- Write down your estimation process including all the hypothetical numbers so that you can update them later on.
- Once you finished market sizing for primary market, do it for secondary market.
 - Don’t target at all over the world.
 - Be realistic.

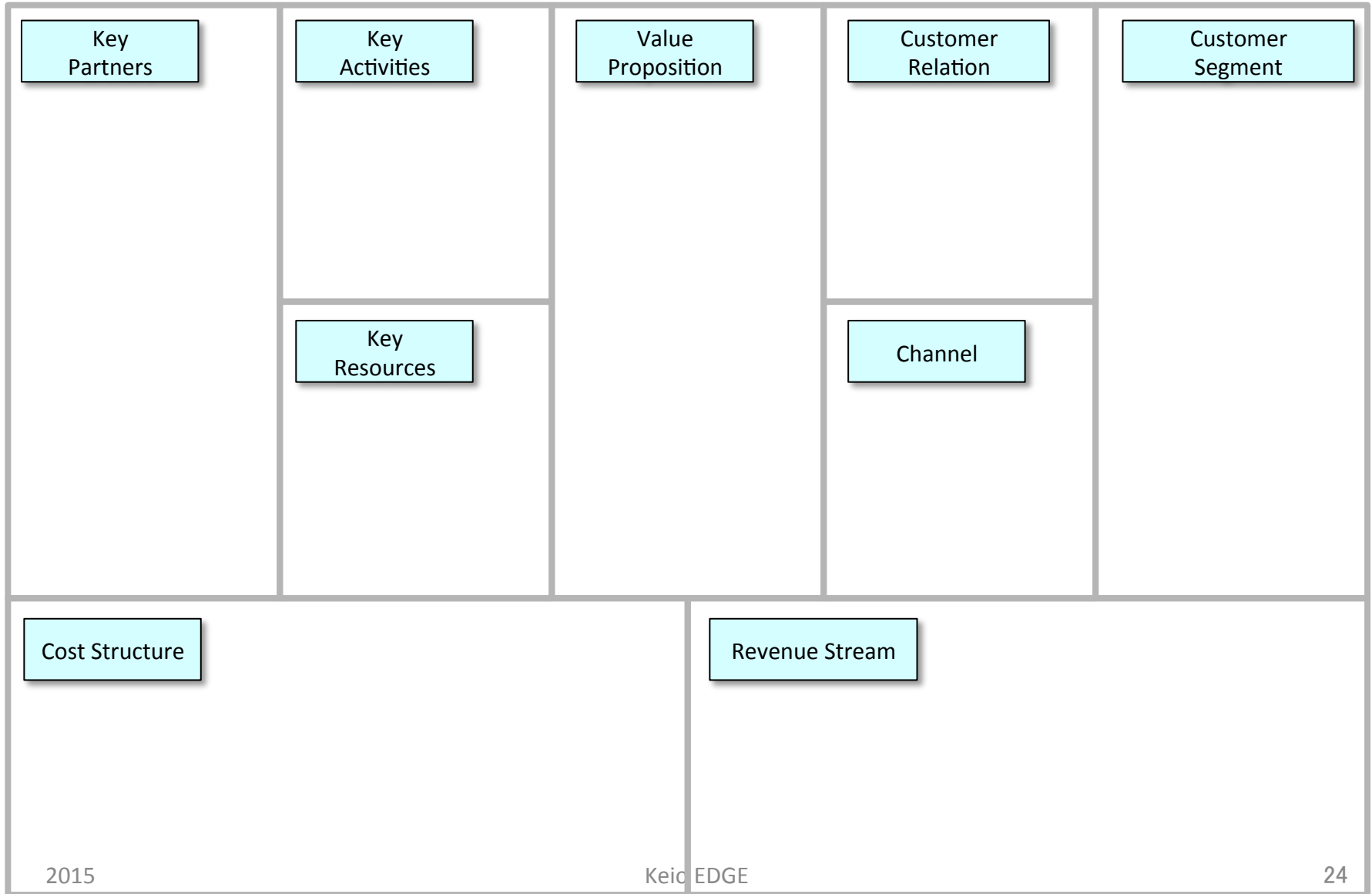
Sample of Fermi estimate

Q: How many piano tuners in Chicago?



Chicago population	✓ 3 million		
# persons / household	✓ 3 persons / household	➔	3 million / 3 = 1 million household
% piano owners	✓ 10%	➔	1 million x 10% = 100 thousand pianos
# piano tuning / year, piano	✓ 1 / year	➔	100 thousand x 1 = 100 thousand times / year
# piano tuning / day, tuner	✓ 3 / day, person	} ➔	100 thousand / (3x250) = <u>130 persons</u>
Working days / year, tuner	✓ 250 days / year, person		

Business Model Canvas



What do Venture Capitals check?

Marketability	<ul style="list-style-type: none">• Sufficient market size?• Unmet needs?• Growing?
Product/Service	<ul style="list-style-type: none">• Value proposition satisfies unmet needs?• Scalable?
Competitiveness	<ul style="list-style-type: none">• Competitive advantage?• Sustainable?
Management team	<ul style="list-style-type: none">• Can get things done?• Good chemistries?
Profitability	<ul style="list-style-type: none">• Good unit economics?• Initial investment can be paid back?
Return to funds	<ul style="list-style-type: none">• Sufficient return to the fund?

Basic questions you want to answer...

Marketability	<ul style="list-style-type: none">• What is your target market segment?• Market size?• Is it growing?
Product/Service	<ul style="list-style-type: none">• What is your value proposition?• How can you deliver it?
Competitiveness	<ul style="list-style-type: none">• Who is your competitor?• What is your competitive advantage?• Is it sustainable? Any entry barrier?
Management team	<ul style="list-style-type: none">• n/a
Profitability	<ul style="list-style-type: none">• How about unit economics?• Price? Marginal Profit?• Initial investment?
Return to funds	<ul style="list-style-type: none">• n/a

A Tip for Business Synthesis Process

A tip for Business Synthesis Process

- Think about your **value proposition** **all the time**.
 - *Revise, update, modify, change* it as you move on.
 - Is it really something you want to work on?
- Discuss and iterate to **maximize the proposing value**.
 - Who should be your customers to **maximize the proposing value**?
 - How should it be delivered to **maximize the proposing value**?
 - How should it be charged to **maximize the proposing value**?
 - ...