# Systems Approach we talk about today

- **Value Graph (upper half)**
  - purpose and alternative viewpoint
  - higher purposes and alternative ideas
- **Causal Loop Diagram**
  - cause-and-effect viewpoint
  - causes and effects
- **Customer Value Chain Analysis (CVCA)**
  - value chain viewpoint
  - stakeholders and their values
- **Function and Physical Architecture**
  - function and physical viewpoints
  - functions and physical structures

Customer Value Chain Analysis
顧客価値連鎖分析

- **Customer Value Chain Analysis (CVCA)**
  - value chain viewpoint
  - stakeholders and their values
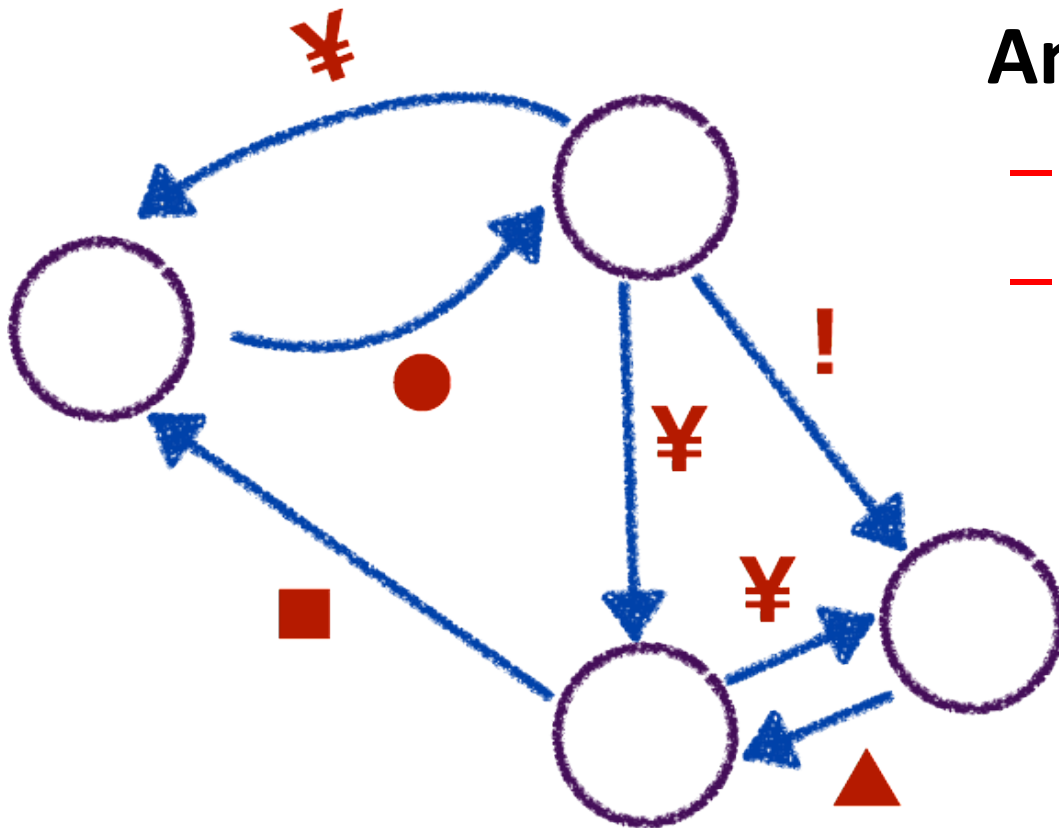
CVCA can clarify;
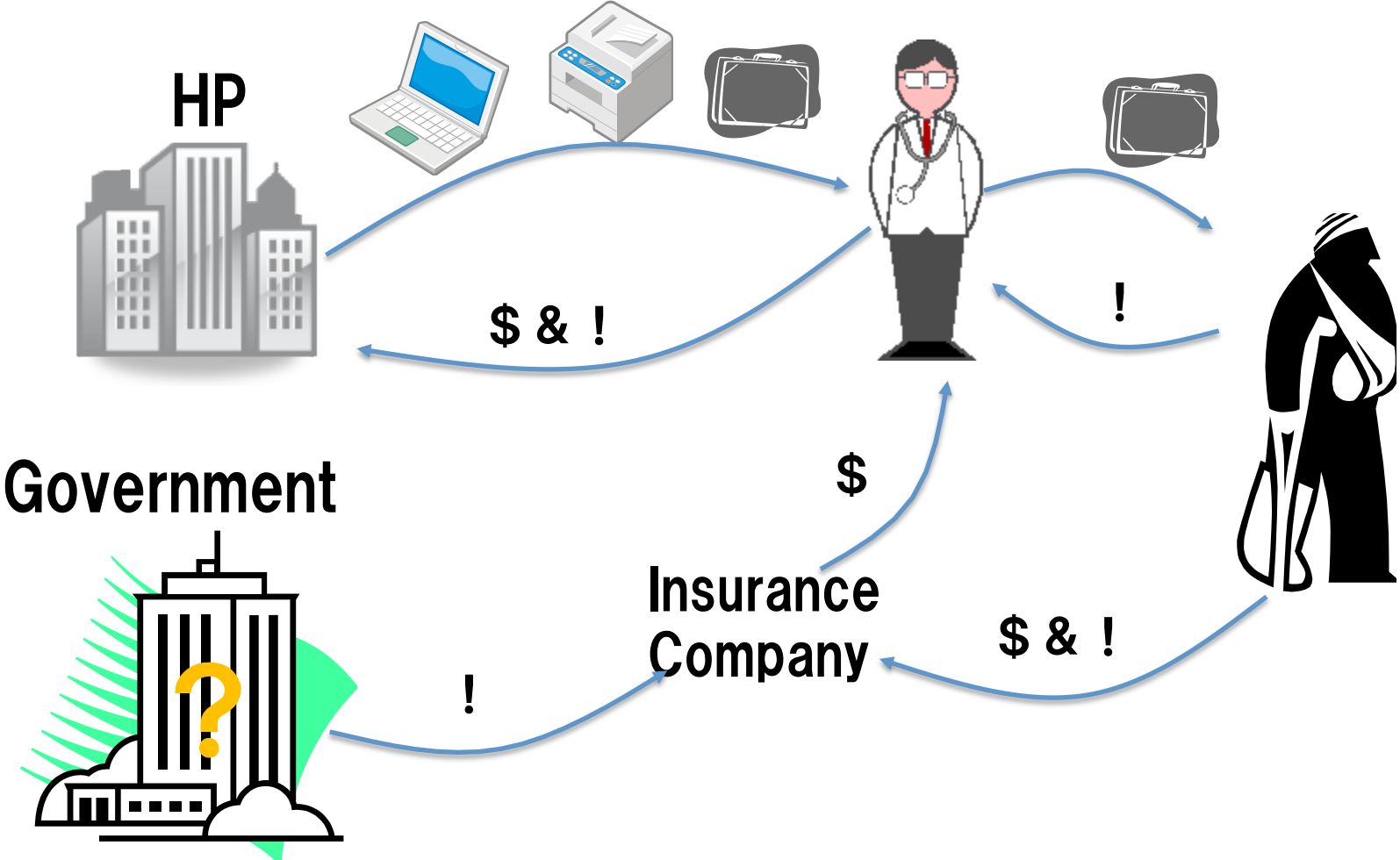
Who are the stakeholders?
How does value flow?
How does material or energy flow?
How does information flow?
Who are you designing for?
Who are your important customers?

HP：Electrocardiographic Monitor (心電モニタ）

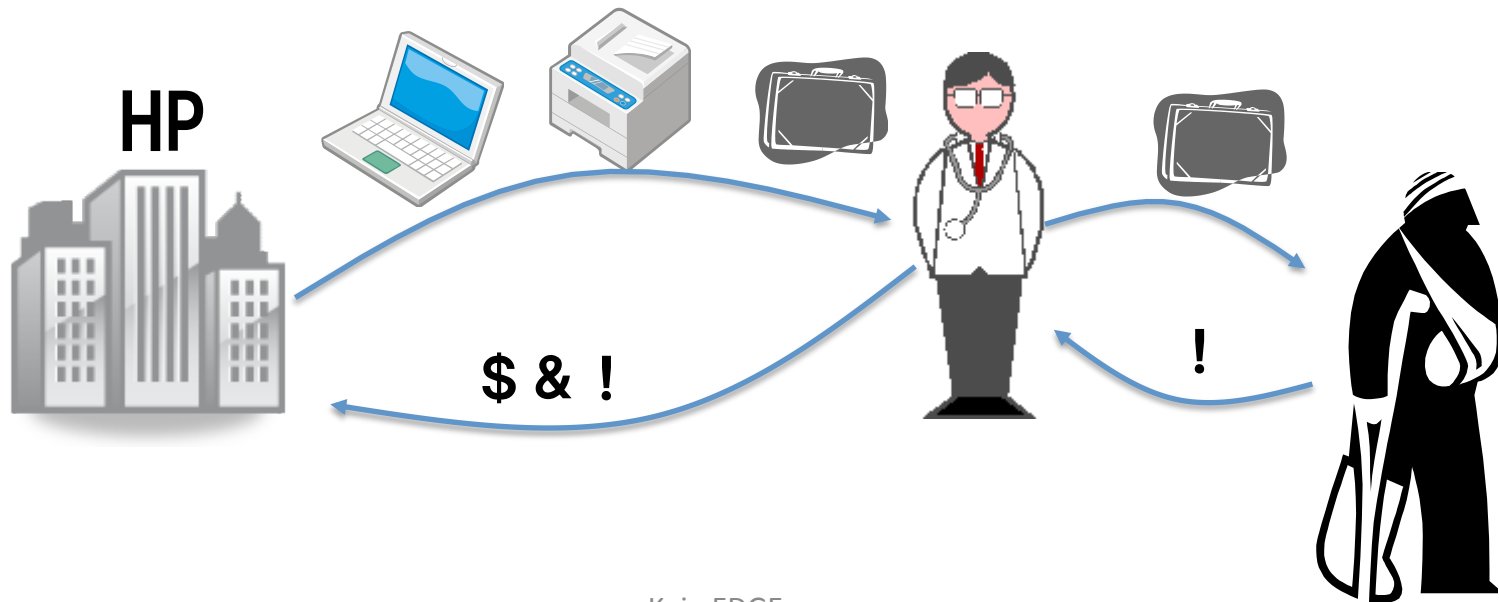# CVCA Steps

1. List Up Stakeholders
   - Customers、Partners、Organization for Standard (ISO), etc.

HP

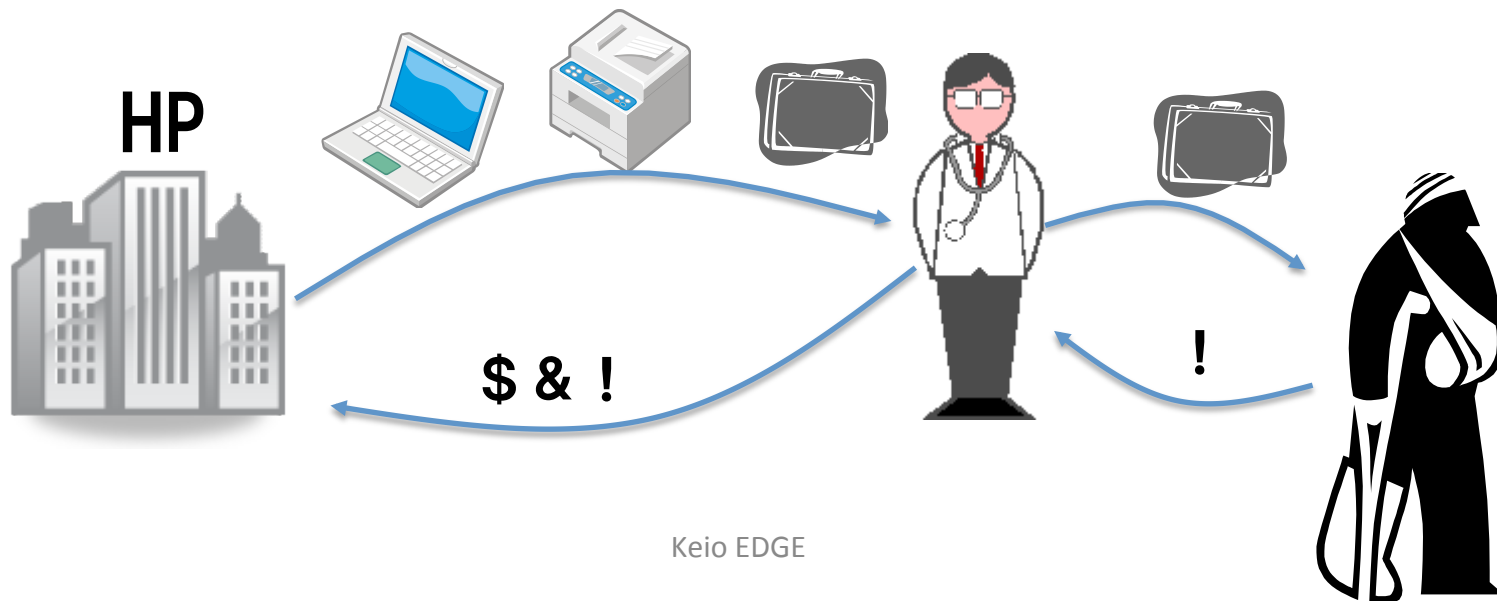# CVCA Steps

2. Identify value between stakeholders and its flow
   - "$" for money, capital
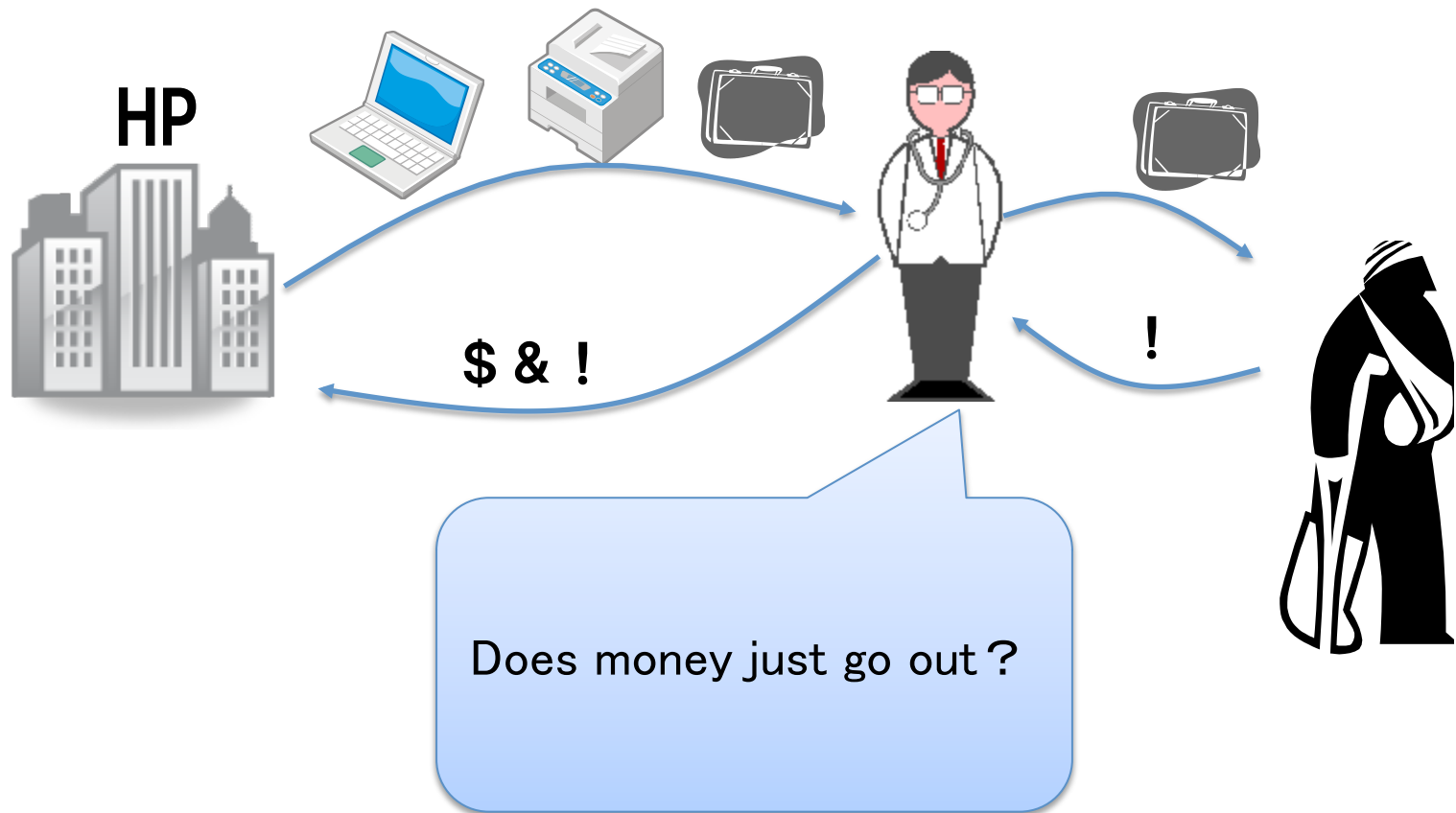   - "Icons" for product, service and information
   - "!" for claims, regulations

HP

$ & !

!

CVCA Steps

3. Perform Analysis
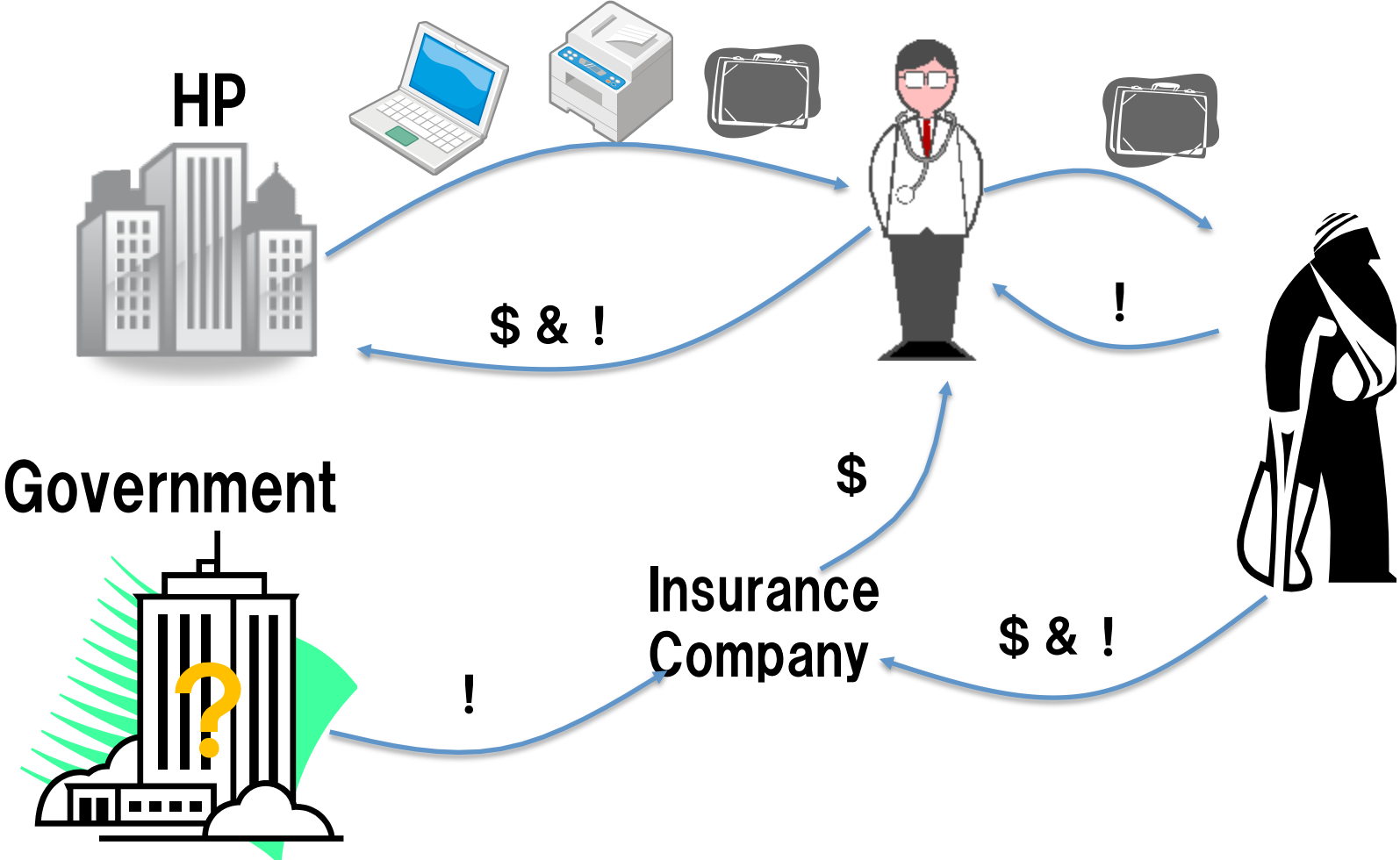   - Who is important customers? : Trace "$" and "！"
   - What is value for stakeholders？ : Change from input to output
   - Identify negative effects (like claims)

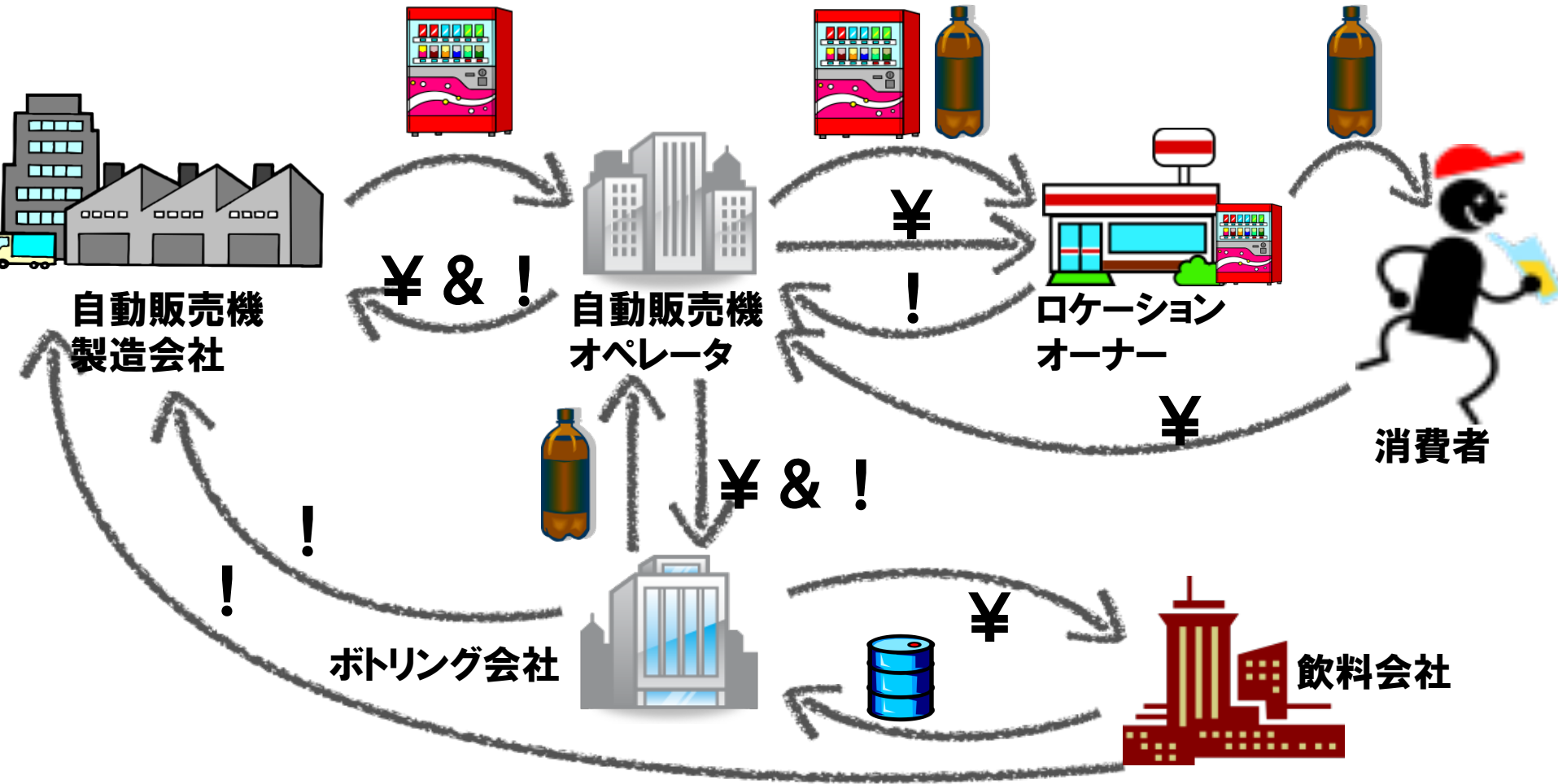
HP

$ & !

!

HP：Electrocardiographic Monitor (心電モニタ）

HP

$ & !

Does money just go out？

HP：Electrocardiographic Monitor (心電モニタ）

Example

Vending Machine

自動販売機
製造会社

￥ & ！

自動販売機
オペレータ

￥

！

ロケーション
オーナー

￥

消費者

￥ & ！

ボトリング会社

￥

飲料会社

！

！
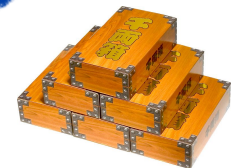
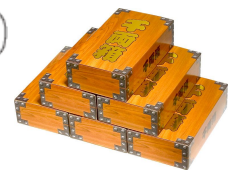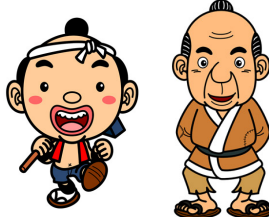# Momotaro Folktale CVCA

改心

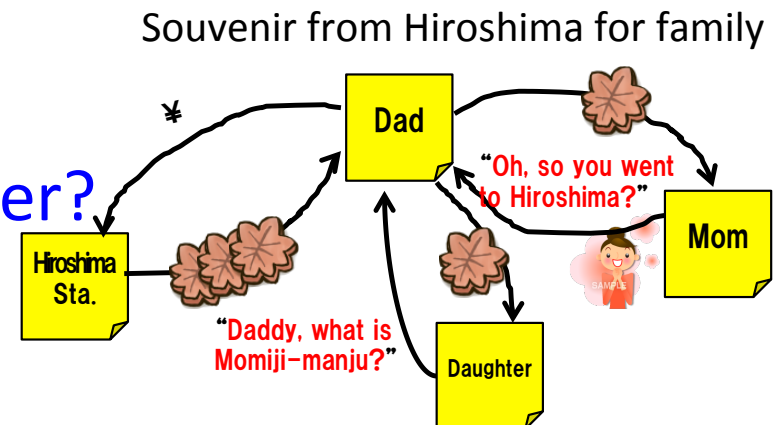鬼

おじいさん
おばあさん

桃太郎
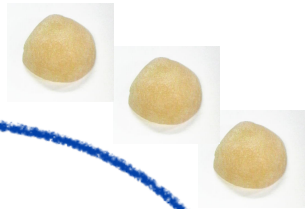
協力

猿・雉・犬

！

村人

CVCA Exercise 1

- **Discuss and create CVCA** of one of your concepts or ideas. (*If you don't have one than you can do "wearable life log device".)

- Consider the **values that are not only money and goods/services**.

☐ Who are main stakeholders?
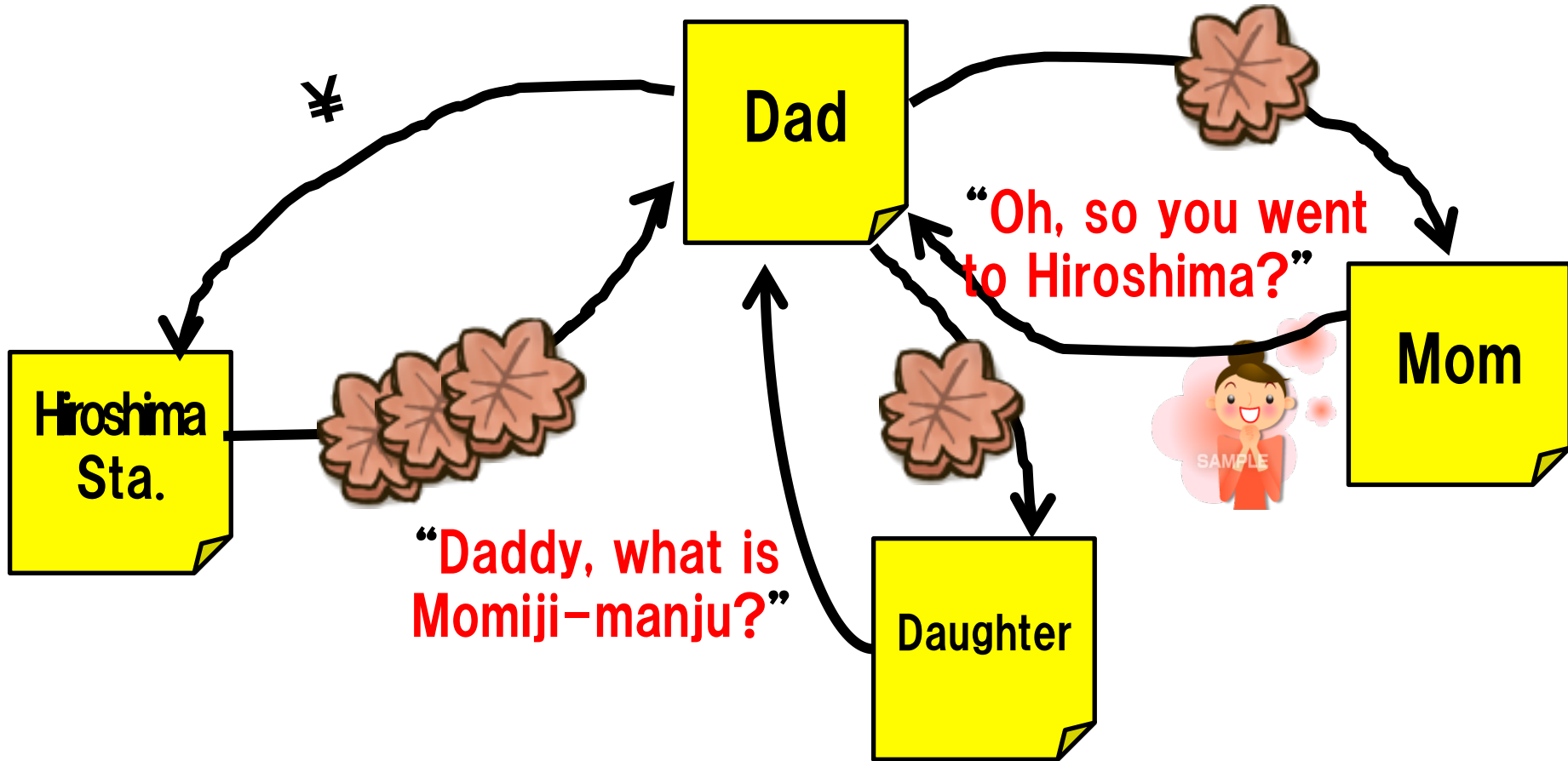☐ What are values for the stakeholder?
☐ How is the value chained?

Souvenir from Hiroshima for family

Visualize value chain so you can discuss, modify, and make it as a part of innovative solution!
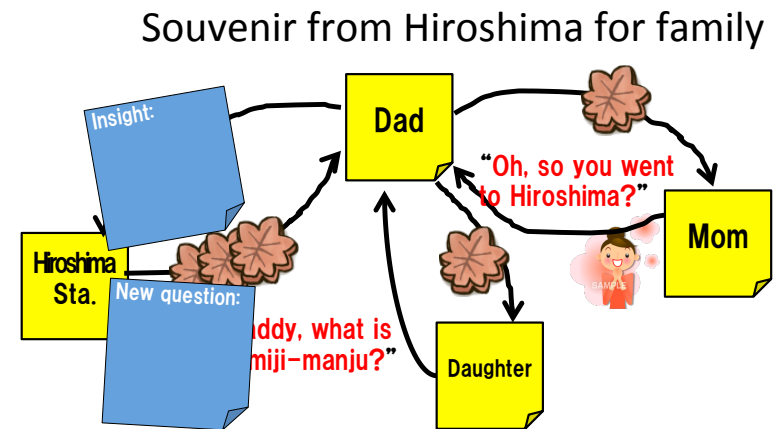
Souvenir from Hiroshima for family

CVCA Exercise 2

- Discuss about your CVCA session. Both process and output.

- Jot down **interesting finding** and **new questions found** during the discussion. They may be important insights.

☐ All value flows okay?

☐ Any chance for new value?

☐ Any chance for less or more stakeholders?

Souvenir from Hiroshima for family

Insight:

Dad

"Oh, so you went to Hiroshima?"

Mom

Hiroshima Sta.

New question:

"...ddy, what is ...miji-manju?"

Daughter

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