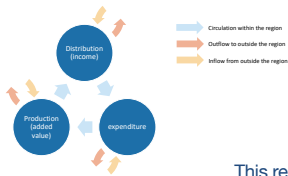


# Gaming Development for Learning Regional Economic Circulation : Regional Economic Circulation Simulation



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This research was supported by JST RISTEX Grant Number JPMJRX21B6 and JSPS KAKENHI Grant Number 22K04595

## Introduction

### Ward and Lewis (2002) *Plugging the Leaks*

- It is important to review the structure of money going out of the region rather than drawing in money from outside the region
  - In building a monetary circulation in the region, it is important for local residents to exchange ideas and form a consensus with each other
- Developed gaming as a platform for local residents to think about regional economic circulation



Ward and Lewis(2002)Plugging the Leaks

## Regional Economic Circulation Simulation (RECS)

### What is RECS?

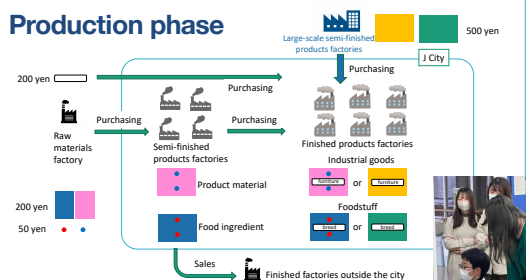
The "**Regional Economic Circulation Simulation**" (**RECS**) is an analog face-to-face gaming simulation

- the participants experience the flow of money in and out of the region through production and expenditure as a factory owner who manufactures finished or semi-finished products in the region

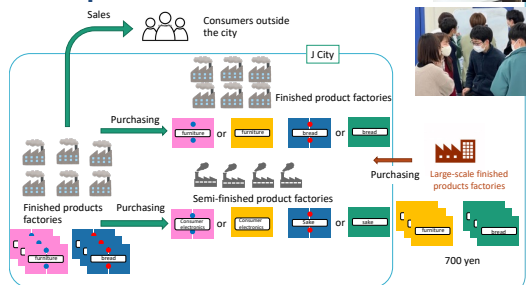
### Structure of RECS

- The game consists of multiple turns consisting of a production phase and a sales phase

#### Production phase



#### Sales phase



### Players' strategy

Players take one of two main strategies

#### Strategy 1 : Cost-consciousness

- money flows out of the region
- a highly externally dependent regional economy

#### Strategy 2 : Relationship-oriented

- creating internal money circulation channels
- autonomous regional economy

| Main trading partners  | Factories inside the city | Factories outside the city |
|------------------------|---------------------------|----------------------------|
| Price/Cost             | High                      | Low                        |
| Freedom of negotiation | High                      | None                       |
|                        | Strategy 2                | Strategy 1                 |

### Aim of RECS

- Strategy 2 is critical to the regional economic cycle
  - Realize the importance of strategy 2 through gaming
  - Consider how to behave based on this strategy

### Payment system

- In this game, all payments are made digitally using tablets that read QR codes
- The tablet application can show the percentage of spending that has gone out of the city for each factory and the city as a whole



## Results

On January 21 and 22, 2023, 21 first-year students of Joetsu University of Education played the game

### How did you devise a way to do business within the region?

#### Strategy 1

- Decreased prices closer to those of factories outside the city
- Changed prices to meet customer needs
- Reducing the selling price for a limited number of units to get customers to buy the product

#### Strategy 2

- Created a point card and added value
- Build collaborative relationship with factories of finished products in the city
- Mutually trade with other factories in different industries in the city
- Created selling phrases and sales methods that attract customers
- Consulted with other factories in the city on pricing
- Determined when to buy raw materials and established cooperative relationships with finished goods factories

- Through gaming, the players realized the importance of strategy 2 and showed various innovations to build relationships

- However, most of the innovations were accompanied by selling price reductions
- On average, the final balance decreased from the initial balance in both games

