



A Solution to Food Waste – Access Economy

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CONTENTS



5W1H



ASIS/TOBE MODEL



ANYLOGIC Simulation Result

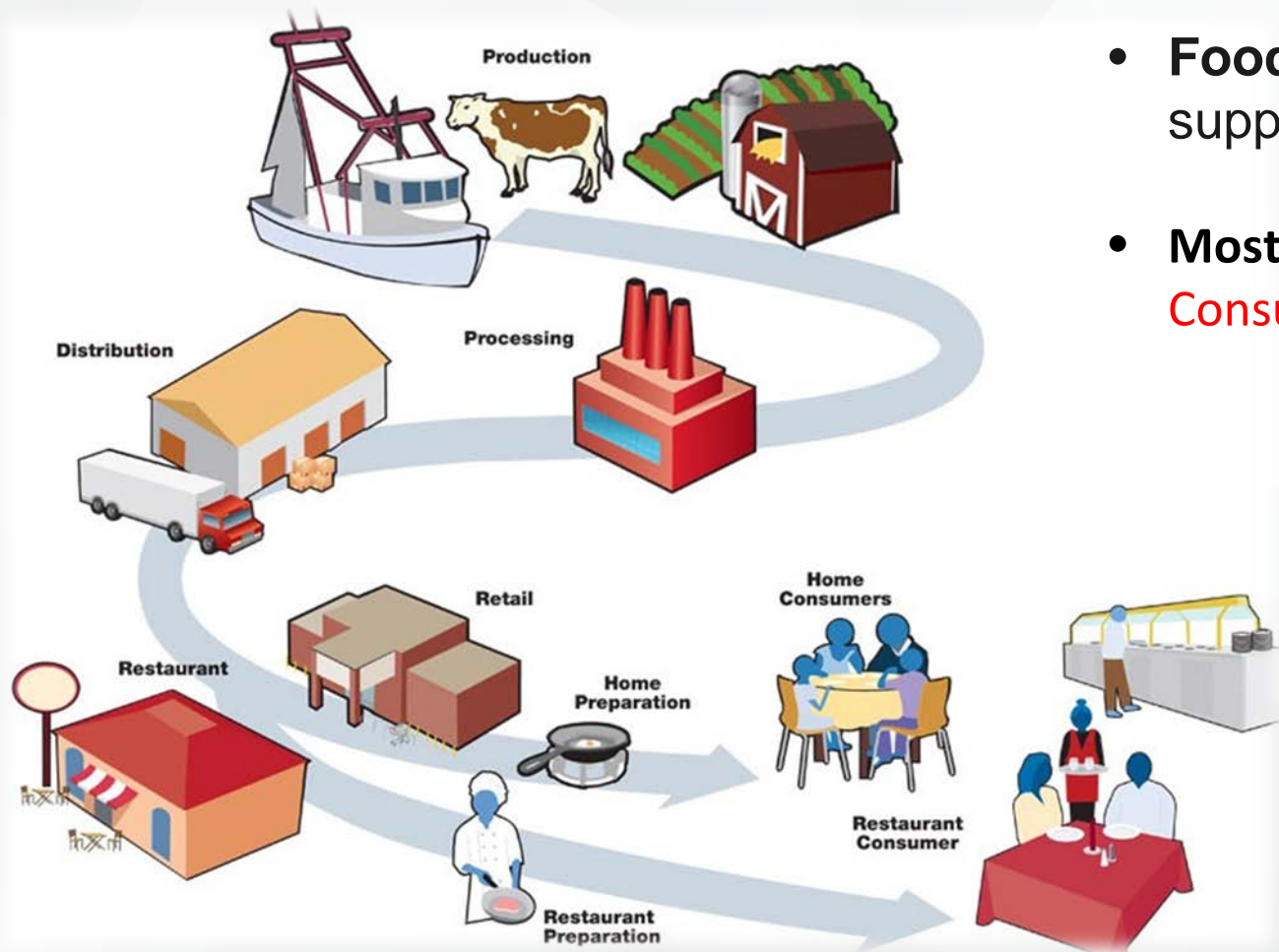


Demo



Conclusion

What is food waste and access economy (1/2)



- **Food waste** is any removal of food from the food supply chain.
- **Most of food waste** is mainly caused by **Home Consumers** and **Restaurant Consumer**.

What is food waste and access economy (2/2)



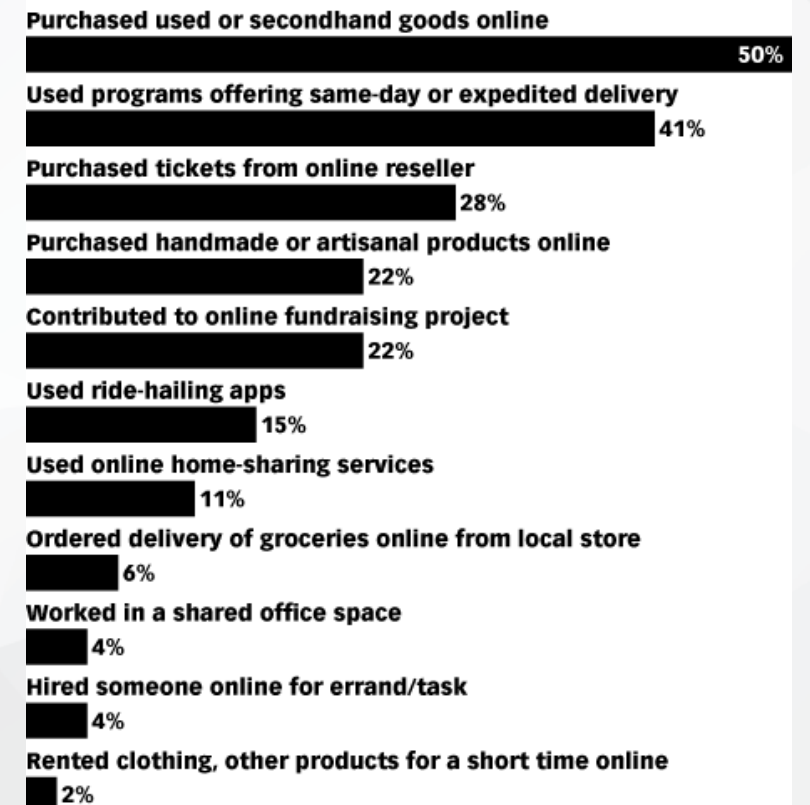
- **Access economy vs. Sharing economy**
- **The access economy** is a business model where goods and services are traded on the basis of access rather than ownership .
- The core concept is the reuse of "idle resources".

Why food waste and access economy will boom (1/2)

- **Food waste** is a significant problem that have existed for a long time.
- **The access economy** is popular these years with technology development, i.e. Uber and Airbnb.

US Adults Who Have Used Select Sharing Economy/On-Demand Services, Dec 2015

% of respondents



Note: ages 18+

Source: Pew Research Center, "Shared, Collaborative and On Demand: The New Digital Economy," May 19, 2016

Why food waste and access economy will boom (2/2)

World

Taiwan

(1/3) 1.3 billion tons food is wasted every year.

A

2.75 million tons of food is wasted

795 million people suffer from severe hunger

B

314,474 people are in low-income families in 2017 .

- Assume people can live 70-year-old life, people probably eat 50 tons of food throughout their lives .

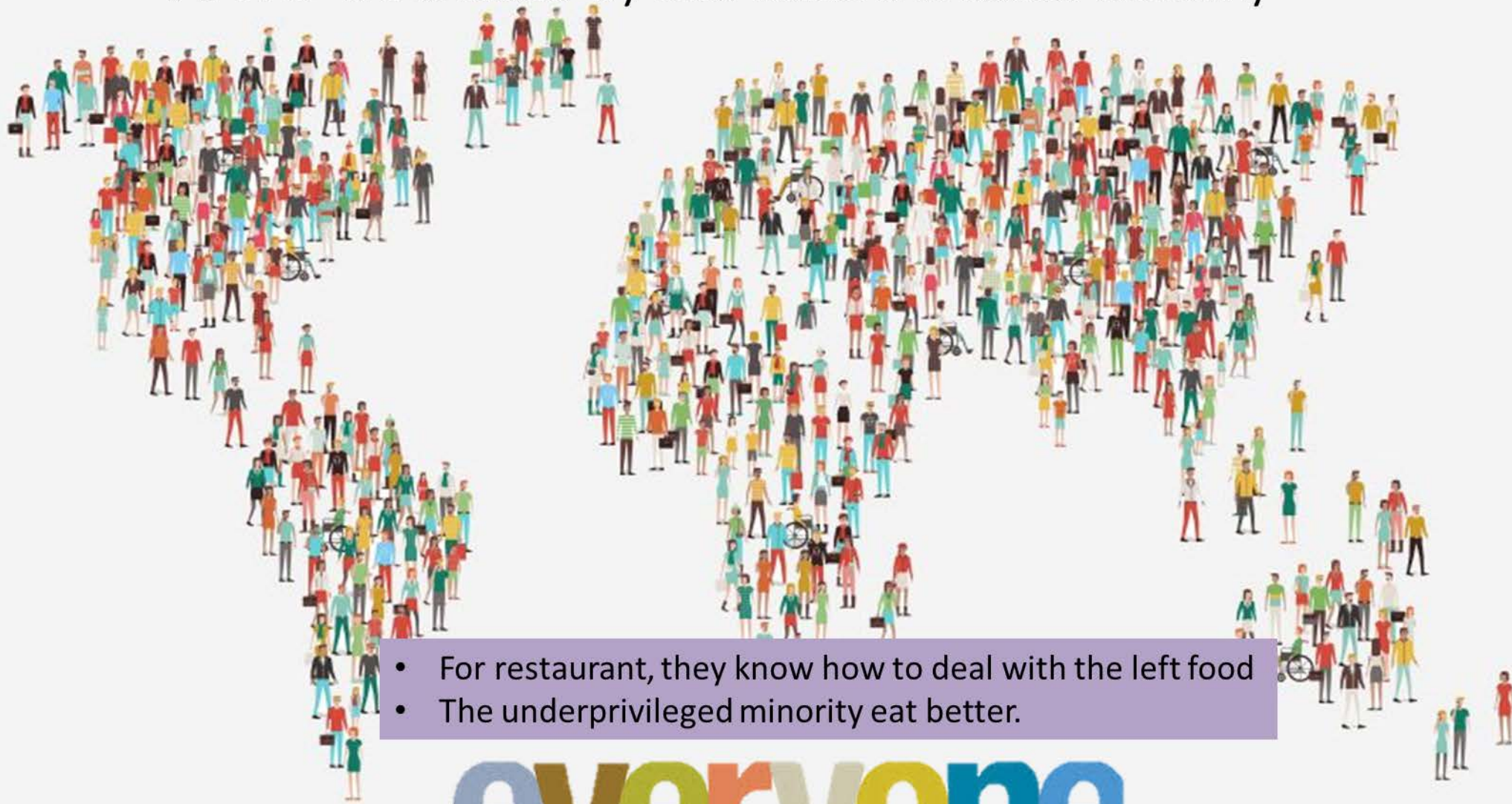
$$\frac{13000000}{50} = 260000 \text{ people}$$

- 50% are used as animal feed, 16% are used as fertilizers and 34% are simply thrown away.



Every time when we need food,
food waste and access economy will combine.

Who are affected by food waste and access economy



- For restaurant, they know how to deal with the left food
- The underprivileged minority eat better.

everyone

Where the platform can be used



School



Restaurant

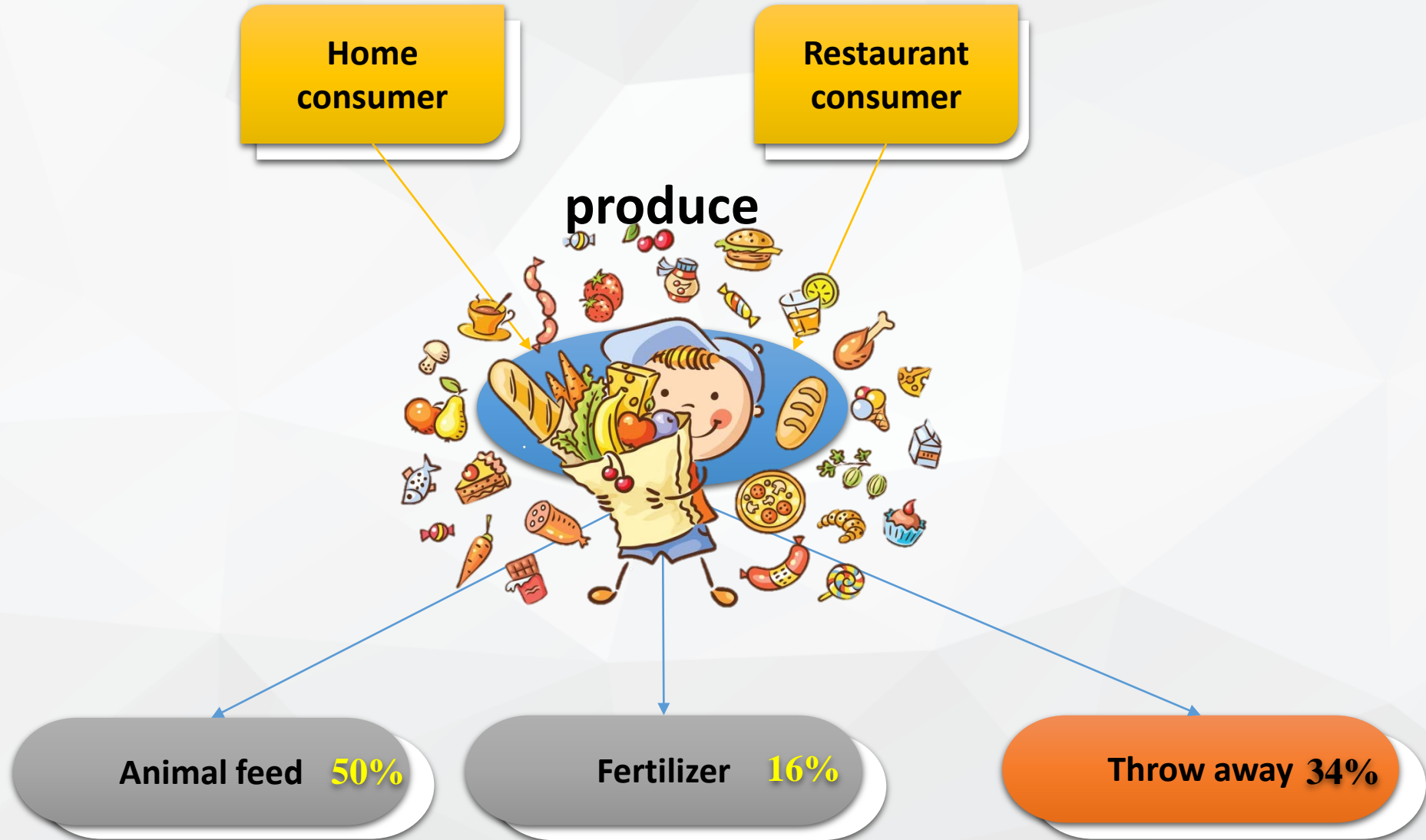


Where lack of food

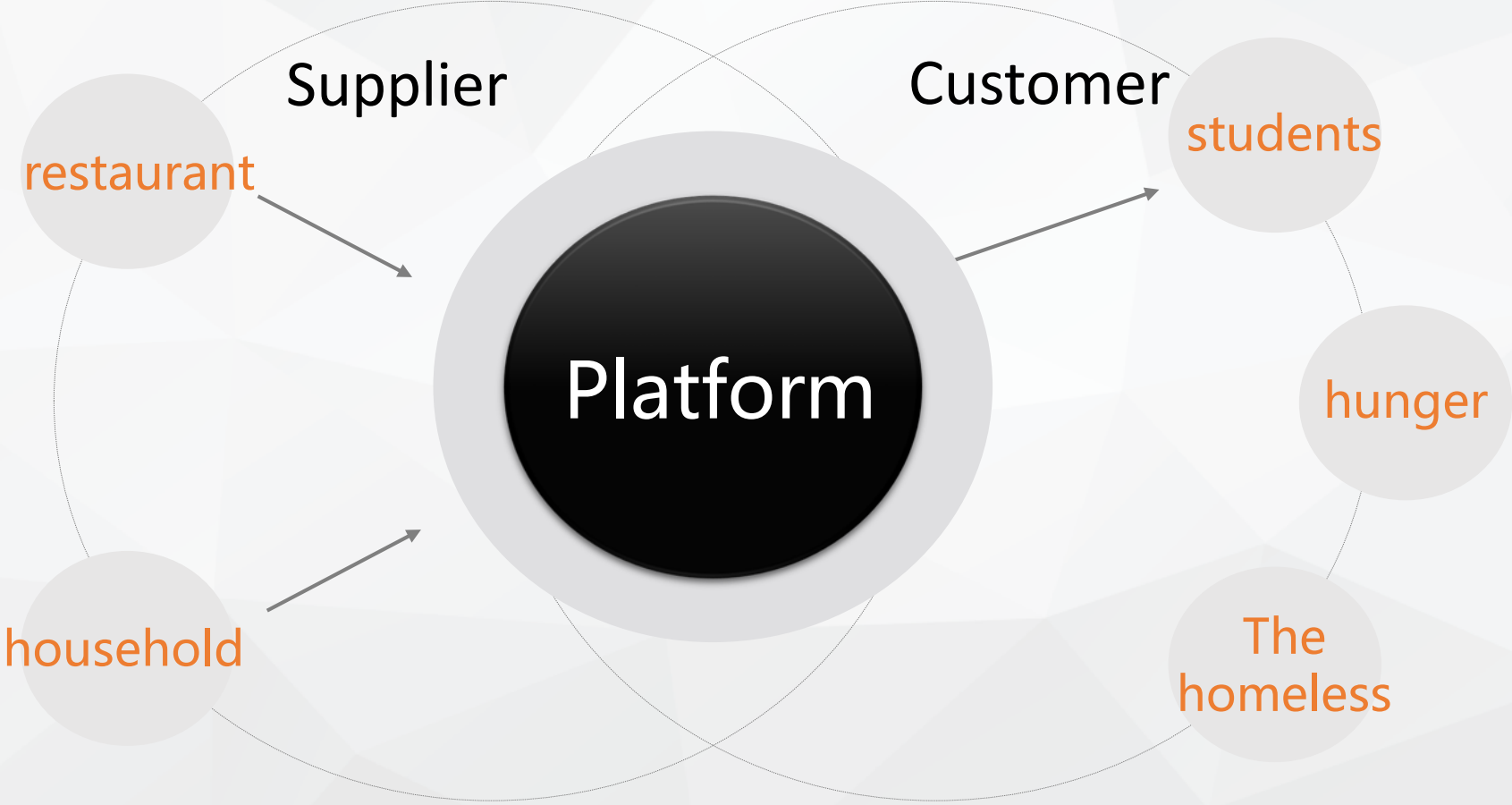
How food waste and access economy integrate



As-Is

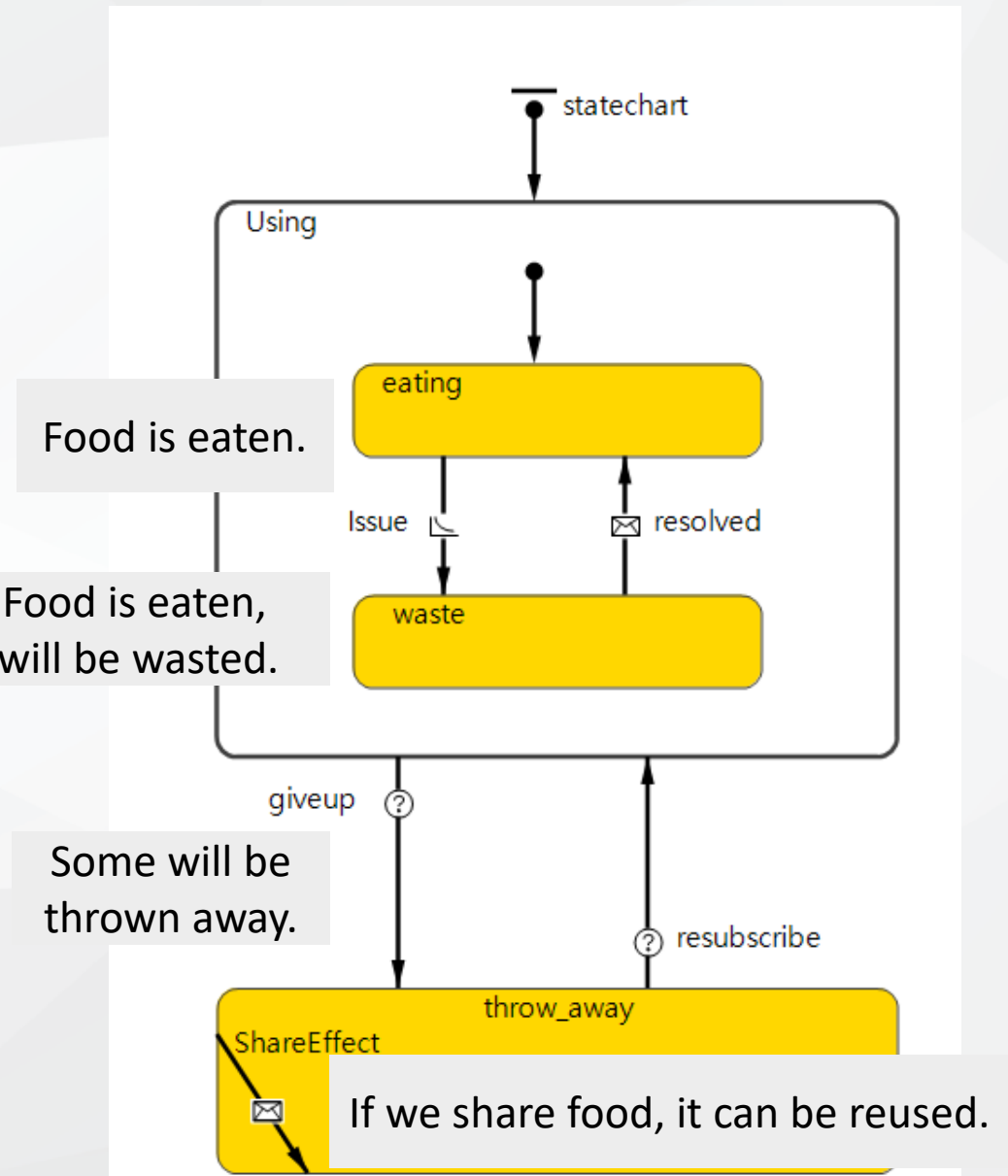
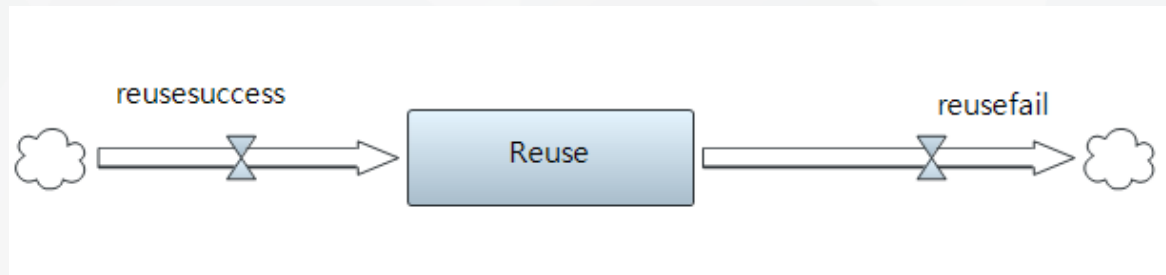


To-Be



Anylogic Model

- There are 100 food.
- If we share 1 times, there will be 10 food back to Using State.

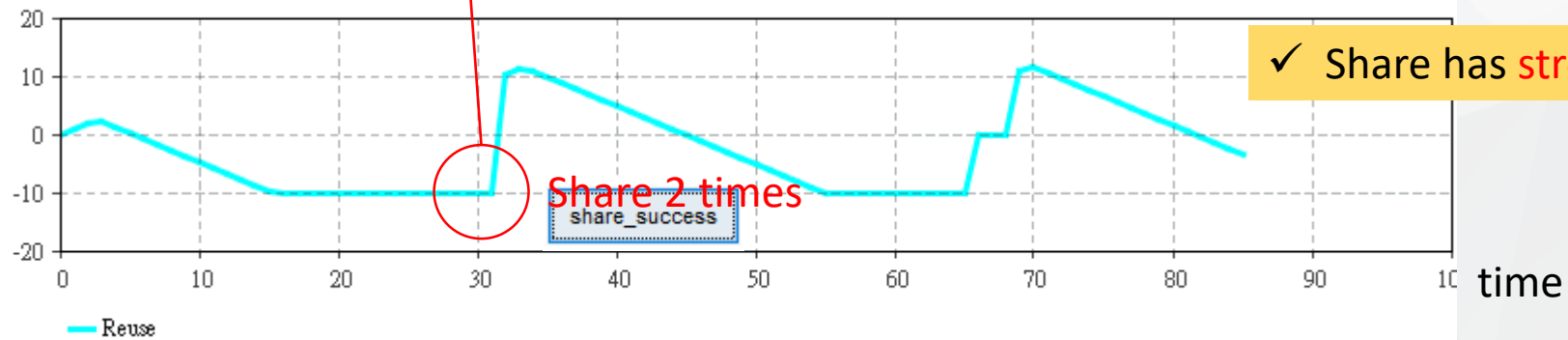
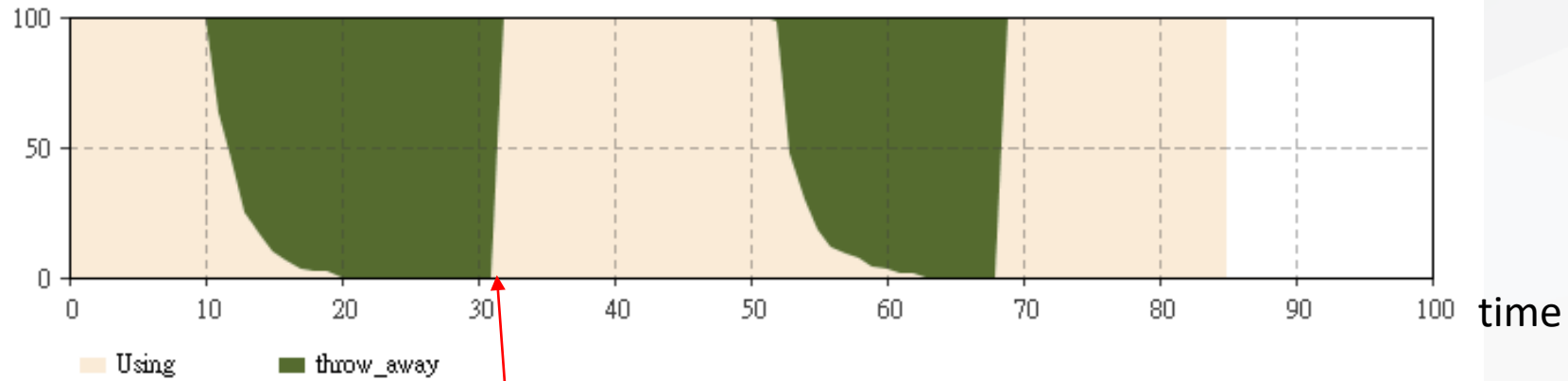


Simulation



Simulation Result

food



✓ Share has strong effect on reuse.

Share 2 times

share_success

Demo

清大共享平台 *Share your meal* Homepage foodie小故事 後臺管理

這是一個經濟共享的社會，若你有吃不完、用不完的窘境，這裡是你最好的選擇。

這是一個共享經濟的社會，若你想吃別人的，想用別人的，那這裡你非來不可。

在這裡，你可以交朋友，可以省下不必要的錢，更能將垃圾變成黃金。

加入會員後，就能擁有絕佳的體驗。

FOODIE 登入



甜點區
Sweet your heart



熟食區
eat right now



生食區
COOK YOURSELF



FOODIE 之友

成為 foodie 之友的朋友們，可以一圓廚師之夢，也可以用少少的淘樂吃到不同食物。



每月活動

在月底，荷包已見膨脹，共享餐會是你最好的選擇。

啟用 Windows
移至 [設定] 以啟用 Windows +

Conclusion

Manager

- ✓ get big data
- ✓ optimize our behavior process
- ✓ help suppliers make continuous progress

Food supplier

- ✓ a better way to deal with the extra food
- ✓ build neighborly relations

Food customer

- ✓ eat at a lower price



promote the positive value cycle

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