Pandemic Pancake

STAR

Specification, testing, assurance and risk

ONLINE VERSION

CECS 6002 | Semester 2, 2021

Australian National University

Week 5

Mon 23rd Aug– Encounter and resource

Tues 24th Aug (nil)

Wed 25th Aug – Pancake STAR activity

Thurs 26th Aug (nil)

Fri 27th Aug (nil)

We are here

Week 6

Mon 30th Aug – Practice applied - theory

Tuesday 31st (nil)

Wed 1st Sep (nil)

Thurs 2nd Sep (nil)

Fri 3rd Sep (nil)

FAILED SPEC


Sarah O'Connor @Sara_Lisabeth · 23h
We actually have to make them. Prepare for my pancake victory. Tempted to make poffertjes.
2
3
Kathy Reid is two shots good @KathyReid · 23h
GIF
2
2

Before we start …

- You can have ingredients laid out, but please don't start preparation such as mixing, chopping or blending before we start the game.
- This is not an assessable exercise – this game is designed for thinking about, and trading off variables and the different roles in assurance and regulation.
- Your pancakes, once cooked, need to be inspected and validated against specifications by our Regulators – Katherine, Kathy, Zena, Hannah.
- *Please think about how we can see those pancakes (holding a plate over a keyboard may not be the best idea – you may need to take a photo instead)*
- If you're not able to cook (and that's OK – everyone has different limitations and constraints during lockdown), think about how else you may be able to support your team.
  Do you do internal quality assurance? Do you keep an eye on the tally of Pan Coins to identify the best strategy for Pancakes to cook next?

You are the first people to play

Pandemic Pancake **STAR**

Specification, testing, assurance and risk

join the social media stream at @anucybernetics #PancakeSTAR

The Scenario

Pancakes are both delicious and the backbone of the Australian economy and its currency – the Pancoin.

Today your team will simulate the pancake economy, and how specification, assurance and trust play a role in consumer confidence and profit generation.

You are split into two teams – Team A and B. Each Team cooks Pancakes according to a recipe (specification).

Each Pancake costs a certain amount of Pancoins to cook, depending on the Pancake's complexity.

Once cooked, each Pancake is assured by way of inspection by regulators. Pancakes that pass assurance earn your team PanCoins, and an additional Quality Star

If your Pancake fails assurance, you get 0 PanCoins & lose a Quality Star
You may not appeal

If you have questions of a Regulator they may take up to 5 minutes to respond (bureaucracy!)

The winner is the team with the most PanCoins at the end of the game.

Roles

- **Customers** – who request a Pancake order and who pay for the Pancake order with PanCoins

  Today we're going to assume that the members of your household are your customers, and that they have ordered Pancakes based on your specifications.

- **Pancake Manufacturer** – You! The manufacturing centre produces the Pancakes from ingredients

  Today we're going to ignore the supply chain that provides the ingredients.

- **Regulator** – who checks that the cooked Pancake from the Pancake Manufacturer matches the Pancake's specifications.

Teams

Team A	Team B
Sarah	Julian
Erika	Myrna
James	Matt
Chloe	Jake
Adrian	Kate
Regulators for each team	
Katherine	Zena
Kathy	Hannah

Three phases of the game

Phase 1 – Develop specifications

- Each person in team develops spec (s) (recipe) for a Pancake
- Checked over by team
- Assigned a complexity score

Phase 2 – Cook pancakes

- Each Pancake costs Pancoins to cook
- Cook Pancake
- Regulator assesses and passes / fails

- **Phase 3 – Debrief**
- Causal loop diagram of the inter-related variables that had to be traded off in the game
- Feedback on the game itself

Phase 1: Specifying recipes

(around 20-25 mins)

In this phase of the game, each person individually specifies one or more recipes they are going to cook.

Your team may want range of recipes – some complex, some simple, so that you spread out the risk. Cooking a complex Pancake and failing could cost you a lot of PanCoins!

Your recipes should be specified in enough detail that they can be quality assured by the Regulator.

There are some guidelines in the Google Document that will assist you.

Keep in mind that the more specific you can be in your recipe, the less ability the regulator has to "fail" your Pancake.

Enter your Pancake Specification in the Google Document on the slide indicated.

Within your teams, assign each Pancake a Complexity rating, using the guidelines in the Google Document.

Remember – you will need to execute what you specify.

Complexity ratings

Rating	Description	Cost to make	Revenue
1	Pancake mix, no toppings	1 Pancoin	1 Pancoin x Quality Stars
2	Pancake mix, up to 3 toppings	2 Pancoins	2 Pancoins x Quality Stars
3	Raw ingredients, no toppings	3 Pancoins	3 Pancoins x Quality Stars
4	Raw ingredients, up to 3 toppings	4 Pancoins	4 Pancoins x Quality Stars
5	Raw ingredients, more than 3 toppings	5 Pancoins	5 Pancoins x Quality Stars

ACTIVITY TIME

Please refer to the Google Slides deck

Phase 2: Manufacturing pancakes

(around 1-1.5 hours)

In this phase, you will cook Pancakes to your specification, and present them to the Regulators for inspection. The Regulators will inspect your Pancakes and assure them against your specification.

1. Before cooking a Pancake, the Team indicates to the Regulator which Pancake they will be cooking. The Regulator deducts 1 PanCoin per Complexity rating for materials. E.g. Complexity 3, 3 PanCoins deducted. *This means that if you start with Complex Pancakes, and they fail inspection, you may not have a lot of PanCoins left to cook more Pancakes with.*
2. You cook the Pancake. Multiple Team members can cook at once, but the materials for each Pancake need to be "paid for" before cooking begins. *Yes, we know you bought the ingredients, it's a game mechanic ;-)*
3. The Regulator inspects your Pancake.
4. If a Regulator fails an order, you get NO PANCOINS. Zip, zero, nada. You've lost your money. Cooking each Pancake is a risk. More complex Pancakes are riskier. **You also lose a Quality Star. *Beware being at 0 Quality Stars (0 x anything is 0!)***
5. If a Regulator passes an order then the Team is awarded 1 PanCoin per Complexity rating, multiplied by the Team's Quality Star. E.g. Complexity 2, 3 Quality Stars = 6 PanCoins.
6. High quality, complex Pancakes earn you lotsa €. I mean, PanCoins :D
7. If a Regulator passes an order then the Team gets an additional Quality Star, up to a maximum of 5 Stars.
8. **No appeals will be entered into, the Regulator's decision is final and attempts at bribery render your Team disqualified!**

How the game starts

- Each team starts with 5 PanCoins to purchase ingredients.
- Each team starts with a Quality Rating of 1 Star.
- Consider carefully which Pancakes you will cook first. Simple? Complex?
- Consider carefully the distribution of risk, um, I mean Pancakes, within your team.

Do you want everyone working on Complex Pancakes, or should you have some simple Pancakes in the mix too?

- If your team is broke, and has 0 PanCoins, the **Regulators will undertake a Corporate Bailout** by giving *each team* an additional 5 PanCoins.


ACTIVITY TIME
Please refer to the Google Slides deck

Phase 3 – Debrief

(25 mins diagram, 10-20 mins discussion)

Create a causal loop diagram of the Pancake STAR context on the Miro board (link to be provided).

The elements and relationships that should be mapped include:

- The relationship between specification and quality (did better specification lead to higher quality?)
- Did quality increase over time as the team became more familiar with requirements?
- Was making more Pancakes a risk? Why?
- Did having more revenue from Pancake sales allow you to take more risks?
- Did quality cost more? Why? Was there anything that reduced cost?

Are there any other tradeoffs or feedback loops you observed?

ACTIVITY TIME

Please refer to the Google Slides deck

Phase 3 – Reflecting on the game

(10-15 mins)

Using the Miro board, add post it notes to the board identifying what you think we could do to improve the game *(link to Miro board to be provided).*

This uses the Start – what could we start doing?, Continue – what should we continue to do with the game?, and Stop – things in the game that should be dropped – structure.

If we have time, we will group them into themes.

ACTIVITY TIME

Please refer to the Google Slides deck