

A scenic view of a Japanese city, likely Tokyo, featuring a wide river in the foreground. The riverbanks are lined with lush green grass and numerous cherry blossom trees in full bloom, displaying vibrant pink and white flowers. In the background, several modern skyscrapers and a prominent red and white tower (likely the Tokyo Tower) are visible against a clear blue sky. The overall atmosphere is peaceful and picturesque, capturing the beauty of spring in Japan.

A soba reflection on Japanese cyber security!

By Ben Ellis



Who am I?

- Second Year Student, Cyber Security Management @ Bournemouth University
- Communications Officer of Bournemouth University Cyber Security Society
- Interested in cyber security for 4 years
- Aspiring Security Consultant who is specialising in OSINT and threat intelligence
- Worked as Junior Security Consultant in Japan.
- Threat intelligence on 2020 Olympics and cyber threats facing British/Japanese companies.



Welcome to Japan

Time for the techy stuff!

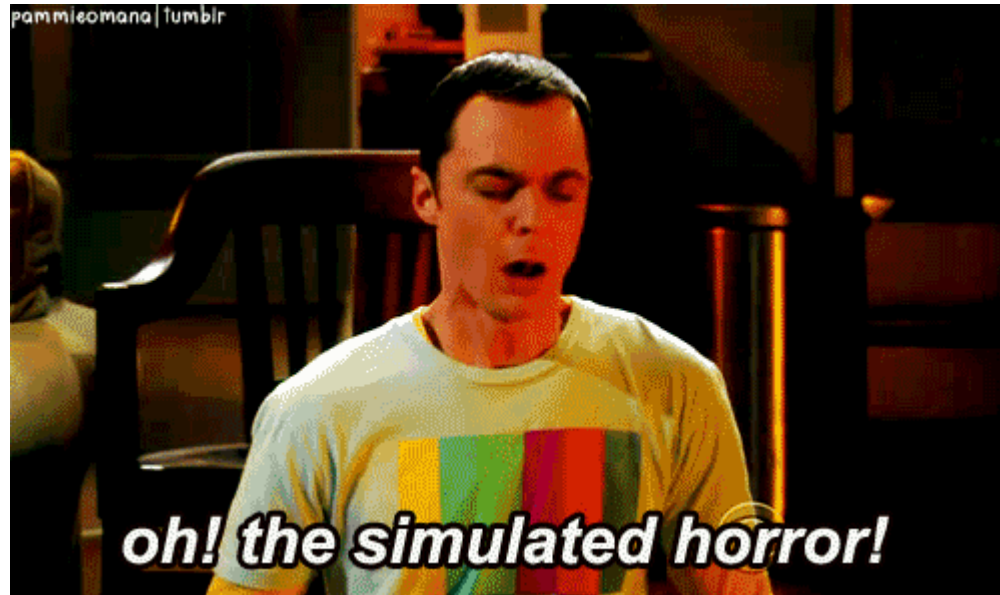
- Japan is known as one of the tech kings of the world
- They have close relationships with other high level security countries like the UK and USA!
- Strong work force, strong will, strong ethics

So they must be big on the cyber security scene surely?

The state of the Japanese cyber security scene

DOOMED!!!

(in my opinion)



But why you ask? Part 1: History

- Due to Article 9 of the Japanese constitution, the "Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as means of settling international disputes" and therefore "land, sea, and air forces, as well as other war potential, will never be maintained"
- Lack of understanding of intelligence gathering
- "There is no insider threat so we are safe" – anyone know any Japanese hackers?
- "Water and safety are free"

But why you ask? Part 2: Culture

Losing face: the Japanese culture of shame!



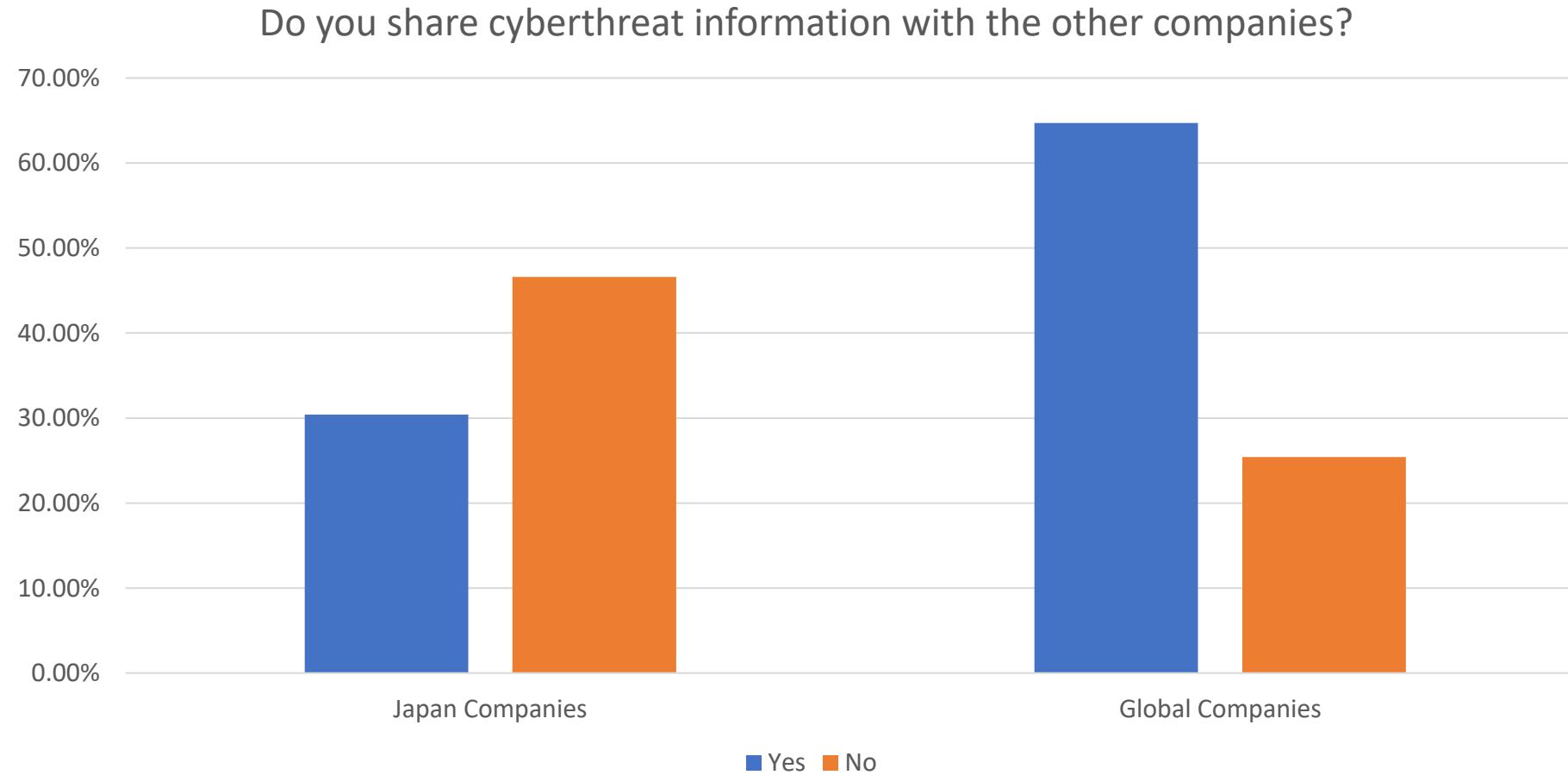
Policies, Frameworks and Guidelines

- The basic act for cybersecurity in November 2014
- The cybersecurity strategy in September 2015
- The Cybersecurity management guidelines ver 1.0 in December 2015
- METI's industrial policy for IoT security and safety in japan
- NISC's general framework for secure iot systems in August 2016

Why is it still weak?

- Cyber security is expensive!
- Cyber security is “an expense, not a necessity”

Why is it still weak?



Source: PwC Global State of Information Security Survey 2016

Why don't they share?

4 main reasons were given in 2016:

- No adequate information sharing framework
- Concern over how others would use personal information
- No adequate technology to share information
- No trust with competitors

But are these reasons valid?

Existing information-sharing frameworks



Cyber-security Information Sharing Partnership

Initiative for cyber security information sharing partnership of Japan (J-CISP), launched in oct 2011



Japan Electricity information sharing and analysis center (JE-ISAC), launched in March 2017



ICT-ISAC japan, launched in march 2016

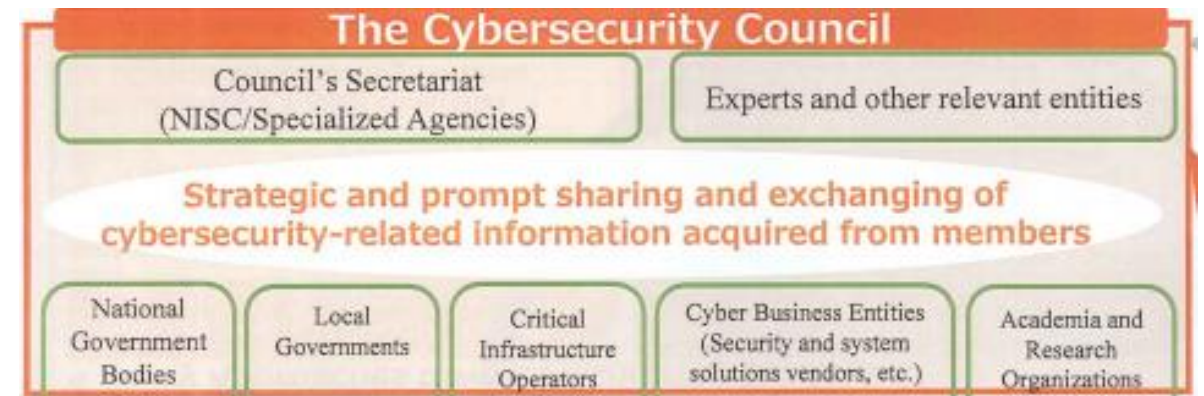


Financial services ISAC Japan, launched in august 2014



Japan-Auto-ISAC

Cybersecurity council



The second amendment of the basic act on cybersecurity meant a cybersecurity council was established.

The purpose of the council is to enhance the information sharing between the members of the council and to help promote cybersecurity.

Establish a task force that are tasked to cross check the threat information and to provide it to the general members of the council.

(Cybersecurity Strategy in Japan, 2019)

The present state?

National center of incident readiness and strategy for cybersecurity (NISC) released the “Cybersecurity Strategy in Japan” report looking at the present situation and challenges.

They set the basic goals of the Cybersecurity Strategy for next 3 years (2018-2021)

The key parts of the summary, was the three policy approaches and promotion and implementation of cybersecurity:

1. Enabling socio-economic vitality and sustainable development
2. Building a safe and secure society for the people
3. Contributions to the peace and stability of the International community and Japan's national security

Future plans and 2020 Olympics?

- Universities are already offering basic level cybersecurity courses.
- Kyushu university 2014, University of Nagasaki 2016.(Mihoko Matsubara, 2017)
- MIC launched National cyber training center in 2017.
- Their mission is to annually train 100 engineers under the age of 25 to protect Tokyo 2020 and to also provide exercises which simulates cyber attacks against critical infrastructures.

Critical infrastructure

Japan:

- Information & communications
- Financial
- Aviation
- Railway
- Electric power supply
- Gas supply
- Government & admin
- Medical
- Water
- Logistics
- Chemical industries
- Credit card
- Petroleum



United Kingdom:

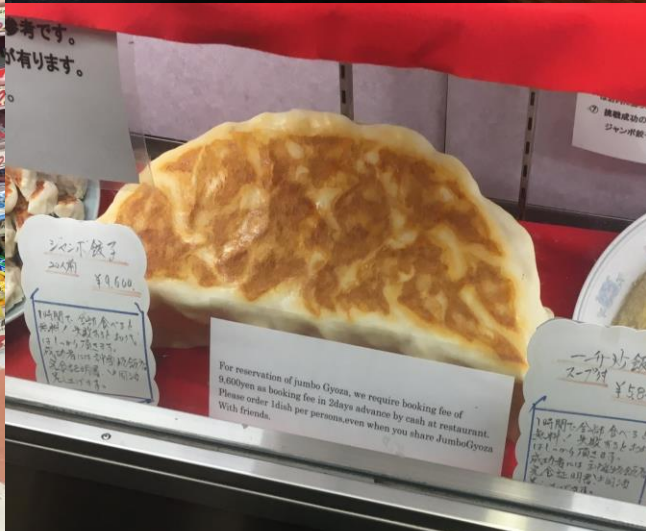
- Chemicals
- Civil Nuclear
- Communications
- Defence
- Emergency Services
- Energy
- Finance
- Food
- Government
- Health
- Space
- Transport
- Water

7 Eleven?



7 Eleven?

- There are 20,904 7-elevens in Japan in 2019. (Liam O'Connell 2019)
- 7 – Eleven services:
 - pay for utility bills
 - buy event tickets
 - make copies of emails
 - emergency support centers
 - aiding public
 - Safe places for lost people
 - ATMs
 - Home food deliveries
 - Social services for the elderly
 - Wifi
 - Etc!!!



Itamae

A cook/chef of a restaurant.



1. Start of apprenticeship: preparation of the sushi rice, most importantly, the washing of the rice.



2. Becomes *wakiita*: daily preparation of the fresh ingredients



3. Becomes Itamae: fully authorized to stand in front of the cutting board.





Fluffy Japanese Souffle Pancakes

Okonomiyaki



**Soba Noodles,
Wanko Soba Style**



Brunch anyone?

Ingredients

2 large eggs
25 ml of whole milk
¼ tsp pure vanilla extract
35g of cake/all purpose flour
½ tsp baking powder
2 Tbsp sugar
1 Tbsp neutral-flavored oil

- Japanese Souffle Pancakes are pillows of delicious fluffiness!
- It's all about the eggs! – Souffle!
- When you are preparing to do this, you need to separate the yolks and whites as the white are needed to make the meringue.
- It is best if you separate the eggs while they are cold and keep the whites at chilled temperature.

So let's start!

1. Firstly whisk together egg yolks, milk, and vanilla.
2. While whisking, sift in the flour and baking powder.
3. Gently whisk until batter is creamy and smooth.
4. Beat the chilled egg whites in another bowl with an electric mixer on medium-high speed while , gradually add in sugar, until stiff peaks form, about 2 minutes.
5. Scoop out one third of the beaten egg whites and add to your batter. Gently fold from the bottom the beaten egg whites into the batter. Then gently fold in the remaining egg whites and carefully mix until you have a foamy smooth batter.



Raspberry or Blueberry team?



- Lightly remove any visible oil after brushing the pan or the pancakes will have spotty pattern)
- Cook slow, covered with lid, on low heat. Because if you use higher heat, the pancakes may look done, but the inside will be too raw.

So let's continue

6. Heat the frying pan to the lowest heat. Brush with the oil.
7. Now, scoop the batter and place on the frying pan. Next, stack one more scoop to the first pancake. Then move on to the next two pancakes giving each 2 small scoops. Keep scooping out the batter between the pancakes.
8. Cover with a lid and cook until the batter rises to the top of the ring moulds and is cooked on the bottom, about 4 minutes.
9. Then using a spatula, very gently flip the pancakes over.
10. Cover and cook for a further 4 minutes until the pancakes are completely cooked and golden on both sides.
11. Top the pancakes with your favourite toppings and serve immediately.

Japanese pizza, or Japanese pancakes? Okonomiyaki!

- “Grilled as you like it”
- Perfect dish for left overs.
- You can put nearly anything in the batter.
- Adaptable – can be vegan, pescatarian, or a mix of everything



Ingredients

230 g of cabbage
¼ tsp baking powder
120 g of all purpose flour
½ green onion
2 eggs
2 Tbsp of mayonnaise
180 ml of dashi
2 Tbsp/35 ml of milk
1 Tbsp vegetable oil
1 Tbsp of butter
Optional topping:
Worcestershire sauce
Dried bonito flakes
1 sheet of nori
Extra mayonnaise

So let's start!

1. Prepare the vegetable (and meat), slice the cabbage, dice the green onion, etc.
2. Combine dashi, flour, eggs, milk, baking powder, mayonnaise, butter, and vegetables in a large bowl, Mix well.
3. Pour the oil into the pan, over a medium heat.
4. Add half of the mixture and cover. Cook until firm but not brown! (if you have meat, add it on top of the halved mixture in the pan)
5. This is where you add the toppings, and a chance to draw a master piece with mayonnaise!

Excuse? What soba?



- Wanko soba is a Iwate regional style of eating soba noodles.
- Wanko locally means “bowl”
- Famous between global noodle lovers!
- It is also known as the great wanko soba food challenge: all you can eat noodle challenge.

There are a few rules involved:

For starters, you have to eat continuously. You can't take a break at all!

To finish, You have to put the lid on your bowl or your server, standing by with their tray full of soba, will quickly dump another serving in.

A taste of Japan as a student!



- Instant noodles, especially instant ramen is a staple food of students around the world!
- So how about some ways to spice up these key stones of uni life?
 - Add a egg is a classic! Good amount of protein
 - Add herbs like dill
 - KIMICHI!
 - Flavoured oil is always a good shout.
 - Frozen vegetables
 - A dash of soy sauce
 - Additional toppings like seaweed!
 - Add more noodles!



Thank you for listening.

I hope you enjoyed the talk and learnt something from it.

Please feel free to talk to me or ask me any questions at any time.

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