Homework 12 Design Thinking

Design Thinking Method

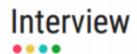
















Name: Ungkool W.

Occupation: Project consultant

Profile: Normal people who want to travel around the world, and already got the COVID-19 vaccination.

Life Style: Interested in new technologies and online social networking, enjoy party, like to outing, love meeting new people, love experiencing new things, love seeing new places, love travelling, love tasting new foods, concern for the pollution & toxic, care about food and healthy, etc. (Characteristics of people who love traveling)

Additional Information: At present, when you need to travel around the world, you have to go to Department of Disease Control, Ministry of Public Health in Nonthaburi or Institute for Urban Disease Control and Prevention to get the Certificate of Vaccination e.g. COVID-19 vaccine, Yellow fever vaccine, etc.

กำหนดกรอบของปัญหา



User Description:

- Due to the COVID-19 pandemic, many countries have announced requirements for immunization with COVID 19 vaccination. As such this could be New regulation and restriction for other vaccines in the future on traveling for many countries.
- We don't have much time to get the vaccine passport all the time when we go abroad.
- All Thai people along the country will get bored to go to the Ministry of Public Health in Nonthaburi or Institute for Urban Disease Control and Prevention, they are outside Bangkok.

Need a way to (user's need):

- Can get update the vaccine information to your ID card due to passport e.g. COVID-19 vaccination.
- All Thai people would be certified by the WHO Global Systems and it is cross-checking to WHO Database around the world to get Vaccine Passport. Save time and safety to submit more documents at the Ministry of Public Health in Nonthaburi for go abroad.
- When you get another vaccine, you will be recorded it to Thai Government System.
- Can print out your vaccine passport to be a paper if the immigration officer want it, check it with KIOSK at the airport same as the boarding pass or be able to use QR Code for credentialed prove of vaccination.

Surprisingly/Because/But (user's insight):

All Thai people must go to do the Vaccine Certificate at Department of Disease Control, Ministry of Public Health in Nonthaburi. Surprisingly, most of our vaccination certificate that people got from this country can't be approved from some countries.

We don't meet the global standard of COVID-19 Vaccine Passport.



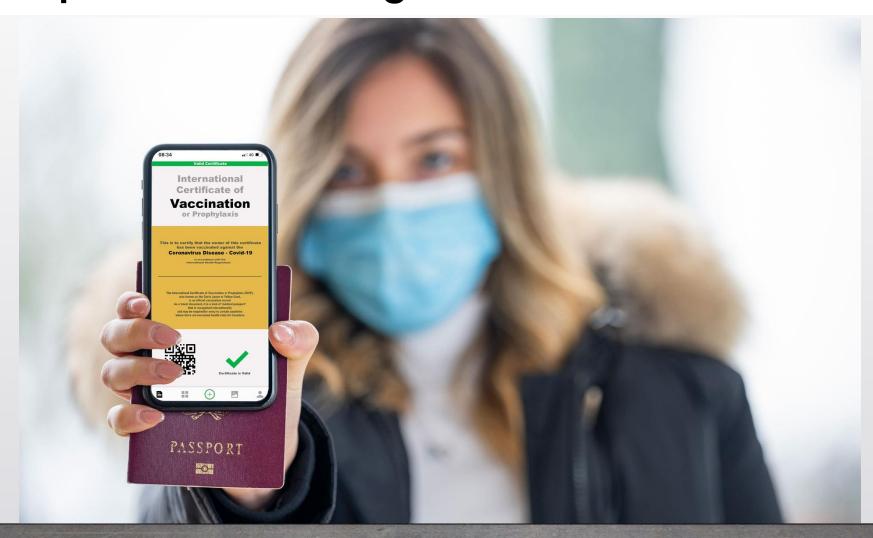




เรื่อง แบบหนังสือรับรองการสร้างเสริมภูมิคุ้มกันโรค รณ์โรคติดเพื่อไรรัฐโดโรมา 2019 หรือโรคโตวิต 19 (Corpositive Disease 2019 (COVID-19)



Many developed countries has already been implemented the Digital Vaccine Certificates.



Additional Information:

- As more people are inoculated, there will likely be aspects of public life in which only people who have been vaccinated are allowed to participate.
- In order to travel internationally, government and health authorities will need to know if you have been vaccinated or have tested negative for the virus.
- Many countries are already requiring proof of a negative test for entry.
- Zurab Pololikashvili, secretary general of the United Nations World Tourism Organization said that such passes could be essential to restarting the tourism industry.
- Dakota Gruener; one expert in a World Health Organization-sponsored group tasked with establishing global standards for digital vaccination certificates said that One key element vital for the restart of tourism is consistency and harmonization of rules and protocols regarding international travel. Evidence of vaccination, for example, through the coordinated introduction of what may be called 'health passports' can offer this. They can also eliminate the need for quarantine on arrival, a policy which is also standing in the way of the return of international tourism.

How will the certificate work?



The EU Digital COVID Certificate contains a QR code with a digital signature to protect it against falsification.



When the certificate is checked, the QR code is scanned and the signature verified.



Each issuing body (e.g. a hospital, a test centre, a health authority) has its own digital signature key. All of these are stored in a secure database in each country.



The European Commission has built a gateway through which all certificate signatures can be verified across the EU. The personal data of the certificate holder does not pass through the gateway, as this is not necessary to verify the digital signature. The European Commission also helped Member States to develop national software and apps to issue, store and verify certificates and supported them in the necessary tests to on-board the gateway.

IMMUNE or Immunity Passport Service Design

The purpose of this research project is to apply a user-centred design approach to conduct research that contributes to our understanding of immunity and vaccination passport services as part of the UK's COVID-19 exit strategy. These immunity or vaccination passports would allow individuals who have antibodies of the SARS-COV-2 to return back to work, travel or socialize without restrictions. Their use has formed part of many countries' exit plans. Yet, there is dispute among scientists, policy makers and the public that such interventions are based on many uncertainties that could put public health at risk, infringe privacy and lead to inequalities in society.

To better understand this phenomenon, we will engage with key stakeholders to address the following two questions:

- 1. What are the possible unintended consequences and risks of immunity passports?
- 2. What are the key stakeholders' requirements, resources, Al technologies and processes needed in the design of services around immunity or vaccination passports in order to mitigate any unintended consequences?

Our approach will involve interviews, focus groups and participatory design workshops. Key deliverables will be specifications for service design including blueprints, user journey maps and systems modelling.

Credit by: Panos Balatsoukas, and et al., Loughborough University



While the Vaccine Certificates in Thailand are still paper.



หรือโรคโควิต 19 เพื่อใช้สำหรับการเดินทางระหว่างประเทศ

๑. สถานที่ออกเอกสารรับรองฯ

๑.๑ คลินิกเวชศาสตร์การเดินทางและท่องเที่ยว สถาบันบำราศนราคร จ.นนทบรี

- วัน เวลาเปิดให้บริการ : ตั้งแต่วันจันทร์ ศกร์ (หยดเสาร์ อาทิตย์ และวันหยดนักขัตถุกษ์) เวลา ๘.๓๐ - ๑๑.๐๐ น. และ ๑๓.๐๐ - ๑๕.๐๐ น.
- ติดต่อสอบถามได้ที่ : โทร o ๒๙๕๑ ๑๑๗๐ ๗๙ ต่อ ๓๔๓๐, Email : tmcbamras@gmail.com

๓.๒ คลินิกเวชศาสตร์การเดินทางและท่องเที่ยว สถาบันป้องกันควบคุมโรคเขตเมือง (สปคม.) กรุงเทพฯ

- วัน เวลาเปิดให้บริการ : ตั้งแต่วันจันทร์ ศุกร์ (หยุดเสาร์ อาทิตย์ และวันหยุดนักขัตฤกษ์) เวลา ๑๓.๐๐ - ๑๕.๐๐ น. เฉพาะผู้ที่นัดหมายล่วงหน้าไว้เท่านั้น
- ติดต่อนัดหมายได้ที่ : โทร ๐ ๒๕๒๑ ๑๖๖๘ หรือ กล่องข้อความเฟลบุ๊ค : ศูนย์บริการโรคในเขตเมือง สถาบันป้องกันควบคุมโรคเขตเมือง

๑.๓ ด่านควบคุมโรคติดต่อระหว่างประเทศ ท่าอากาศยานสวรรณภูมิ จ.สมทรปราการ

- เปิดให้บริการทางไปรษณีย์อิเล็กทรอนิกส์ : porthealth_bkk@ddc.mail.go.th โดยให้บริการ เฉพาะผู้ที่มีตั๋วเครื่องบินเดินทางไปต่างประเทศ และมีภูมิลำเนาต่างจังหวัดและจังหวัดสมุทรปราการ
 - ติดต่อสอบถามได้ที่ : โทร ๐ ๒๑๓๔ ๐๑๓๙

๑.๔ กองโรคติดต่อทั่วไป อาคาร ๕ ชั้น ๖ กรมควบคุมโรค จ.นนทบุรี

- วัน - เวลาเปิดให้บริการ : เฉพาะวันจันทร์ และพุธ (ยกเว้น วันหยุดนักขัตฤกษ์)

เวลา ๐๙.๐๐ - ๑๒.๐๐ น. เฉพาะผู้ที่นัดหมายล่วงหน้าไว้เท่านั้น

- ติดต่อนัดหมายใต้ที่ : โทร o ๒๕๙๐ ๓๒๓๒, ๓๒๓๔-๓๕, Email : travelhealth@ddc.mail.go.th

เอกสารหลักฐานที่ใช้

๒.๑ กรณีมาขอเอกสารรับรองฯ ด้วยตนเอง

- ๑) หนังสือเดินทาง (Passport) ที่มีอายุการใช้งานเหลือมากกว่า ๖ เดือน ฉบับตัวจริงและสำเนา (พร้อมลงนามสำเนาถกต้อง)
- ๒) บัตรประชาชน ฉบับตัวจริงและสำเนา (พร้อมลงนามสำเนาถูกต้อง)
- ๓) ค่าใช้จ่ายในการออกเอกสารรับรองฯ ๕๐ บาทต่อเล่ม
- ๔) เอกสารรับรองการได้รับวัคซีนป้องกันโรคโควิต 19 ของประเทศไทย ที่ยืนยันได้ว่าบุคคลนั้น ได้รับวัคซีนป้องกันโรคโควิต 19 ครบถ้วนแล้ว ฉบับตัวจริงและสำเนา (พร้อมลงนามสำเนาถูกต้อง)

Version 17

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๒.๒ กรณีผู้ขอเอกสารรับรองฯ มอบอำนาจให้ผู้รับมอบอำนาจดำเนินการแทน มีเอกสารหลักฐาน ๒ ส่วน รวม ๖ รายการ ได้แก่

- ส่วนที่ ๑ เอกสารของผู้มอบอำนาจ

- ๑) หนังสือเดินทาง (Passport) ที่มีอายุการใช้งานเหลือมากกว่า ๖ เดือน ฉบับตัวจริงและสำเนา (พร้อมลงนามสำเนาถูกต้อง)
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- ส่วนที่ ь เอกสารของผู้รับมอบอำนาจ

- ๑) หนังสือมอบอำนาจ ฉบับตัวจริง (ผู้มอบอำนาจ ๑ คนต่อ ๑ ฉบับ)
- บัตรประชาชน ฉบับตัวจริง และสำเนา (พร้อมลงนามสำเนาถูกต้อง)

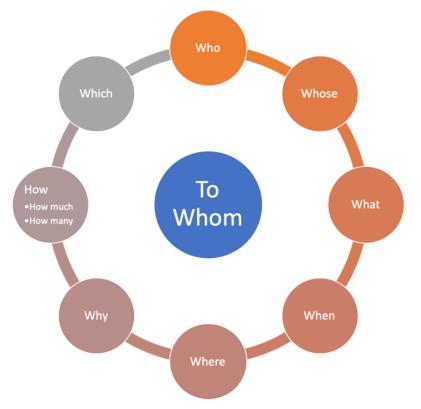
ผังแสดงขั้นตอนการขอเอกสารรับรองการสร้างเสริมภูมิคุ้มกันโรค กรณีวัคซีนป้องกันโรคติดเชื้อไวรัสโคโรนา 2019 หรือโรคโควิต 19 เพื่อใช้สำหรับการเดินทางระหว่างประเทศ (กรณีมารับบริการที่หน่วยงาน)



However, if Thailand can be further developed, we can receive more benefit for this project.

Back to 'Basics' Idea of this project - 8W 2H

If such the systems were developed, the benefits to Thai people would be immense.



To whom – ประโยชน์ไปถึงใคร

Major: All Thai people who want to get the certification on their ID Card that are related to Thai Government. They can sync all information to 'WHO' and many countries around the world. Minor: The Foreigners who want to travel to Thailand, bring our economy back.

Whose - ใครเป็นเจ้าของ

Corporation of WHO, Thai Gevernment and all the people.

What - ทำแล้วได้อะไร

Many countires got the problem with the expiration of Vaccines and some vaccine are unacceptable to their country. This method will help all the solutions that people can travel around the world with this 'Digital Vaccination Card'.

When – เมื่อไหร่จะทำ

Immediately if Thai Government say 'Yes'.

Where – ปัญหาอยู่ที่ใหน

Thai politics is very complicated, the statistics of Thai Death is increasing everyday. We are still waiting for Vaccine without doing our Certificate to help our country. Many Official Thai ministry won't work together because of politics.

Why - ทำทำไม

If we don't plan to do, it will affect to all Thai people and the foreigners who want to travel soon. We should be aware of many people who won't have the Vaccine Certificate', they might bring 'the new COVID-19 species to our country.

How much - ใช้เงินเท่าไหร่

It might approximately use around 15 to 20 million Baht to operate the system.

How many - ใช้คนเท่าไหร่

20 Ministries could work together if we got the same direction.

Which - ใช้อะไรเป็นเครื่องมือ

Hardware, Software and WHO Protocols.

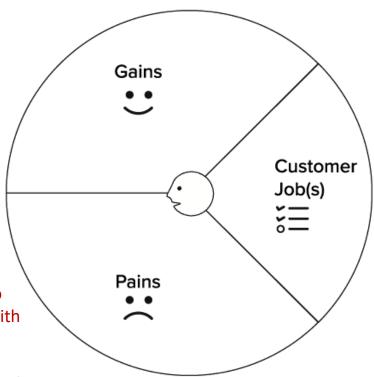
Value Proposition Canvas

Gain

- Record how many times you got vaccination to your national ID card, where you got it, when you got the 1st or 2nd time and what type of Vaccine you got.
- Get the standard of Global Vaccination Cerification to go around the world.
- Record all the vaccination data that people come to our country and take people who go abroad with WHO and Thai government certification.
- To be able to predict the likelihood of being infected or sick from many disease from a vaccination history.

Pain

- You have to get the paper of Certification everytime when you go outside the country without the global Certify.
- If you lost the paper of Vaccine Passport, you have to waste time for contact and submit more document with the government to get the new one.
- Some countires will not accept your kind of vaccine.
 Can they believe that your Vaccine passport is effective?
 Do we have to get another kind of vaccines?
- Wasting time to do the Vaccine passport again and again when you go abroad.
- You have to bring the paper of Vaccine Passport every time to travel. If you lost it, it might be trouble.



Job: Digital Vaccine Certificates Change the vaccine certificates paper to Digital on your Mobile phone.

- You can get update your Vaccine information to your ID card e.g. COVID-19 vaccination.
- All Thai people would be certified by the WHO Global Systems.
- It is cross-checking to WHO Database around the world.
- Save time and saftety to go abroad.
- Get another vaccine, you will be recorded it to Thai Government System.
- You can print out your Vaccine passort to be a paper if the immigration officer want it check it with KIOSK at the airport same as the boarding pass.

Background

- Due to the COVID-19 pandemic, many countries have announced requirements for immunization with COVID 19 vaccination. As such this could be New regulation and restriction for other vaccines in the future on traveling for many countries.
- We don't have much time to get the vaccine passport all the time when we go abroad.
- All Thai people along the country will get bored to go to the Ministry of Public Health, they are outside Bangkok.

"Passport vaccine in Thailand"

"Passport vaccines" or what is called "The yellow book" are not new, with certain diseases requiring travelers in certain countries to be vaccinated against a given disease first.

Travel and Tourism Medicine Clinic Bamrasnaradura Institute, Department of Disease Control, Ministry of Public Health which provides vaccination services to prevent diseases for traveling abroad and issuing a certificate of immunization against communicable diseases internationally (yellow book), including giving advice before, during and after travel and assessing the risks associated with travel.

There are vaccines that serve those who will travel abroad, divided into 5 groups:

- 1. Yellow fever vaccine There are 42 countries that require injections before walking under international health rules, 13 of which are Central and South America and Africa 29 countries.
- * It must be injected at least 10 days before the trip and the body will have lifelong immunity.
- **2. Meningococcal vaccine** Those who need the injections are those who have traveled to religious ceremonies in Saudi Arabia and in Africa, from the Gambia, Burkina Faso, Senegal, Guinea and east to Ethiopia or enter an area where there is an outbreak.
- * It must be injected at least 10 days before the trip and the body will have immunity for 3 years.
- **3. Cholera vaccine** Those who need injections are people who work in international shipping or go in a high-risk area or an outbreak. * This vaccine is administered in two doses, 14-42 days apart. Must abstain from food and water for at least 2 hours before, and then withhold food and water for at least 1 hour after the vaccination. After the first dose, immunity will be available for 7 days and after the end of immunity for 2 years.
- **4. Influenza Vaccine** Those who need the injection are those who travel to religious ceremonies in Saudi Arabia. or countries that are having an outbreak of this disease.
- * It must be injected at least 2 weeks before the trip. The body will have 1 year immunity.
- 5. Other vaccines such as diphtheria, pertussis, tetanus, chickenpox, hepatitis A, hepatitis B, typhoid fever, etc.

COVID-19 vaccines As for which vaccines are accepted, the EU has confirmed that it will accept Pfizer, Moderna, Johnson & Johnson, AstraZeneca and Sinopharm vaccines.





Ideate Sketch solution

- Change Vaccine certificates from paper version to digital version.
- To developed the application that collects comprehensive health information for analyze health history and warnings about various aspects of health.

- The process of applying for a Vaccine Passport is not difficult, convenient, fast.
- Can record and get update the vaccine information to your ID card due to passport e.g. COVID-19 vaccine, hepatitis B vaccine., etc
- Only a mobile phone, no need to have a lot of documents to prevent lost.
- Thai Government can use the AI (Artificial Intelligence) to collect and analyst all data from Thai People.
- In the application for Digital vaccine certificates, a notification is displayed for the next vaccination and recommend other vaccines that must be injected when traveling abroad.

- Save time and safety to submit more documents at the designated government agency for go abroad.
- When you get another vaccine, you will be recorded it to Thai Government System.
- Can print out your vaccine certificates to be a paper if the immigration officer want it, check it with KIOSK at the airport same as the boarding pass or be able to use QR Code for credentialed prove of vaccination.
- Vaccination notification.
- Can show information about which country to travel what vaccinations are required.

- All Thai people would be certified by the WHO Global Systems and it is crosschecking to WHO Database around the world to get Vaccine Passport.
- Get the standard of Global Vaccine certificates to go around the world.
- Record all the vaccination data that people come to our country and the people who go abroad with WHO and Thai government certification.
- Can show information about credentialed prove of vaccination.
- Can show report health status and history of illness and treatment.

- If the people died from some Vaccines, the results can show and do the prediction. Thai Government can control all the Vaccines which one we should ban if it is very dangerous for the people.
- Protect all Thai people, we get more confidences to travel around the world and the foreigners could got our certify as well. Thai Tourism and our economy will be back to grow up again.
- To be able to predict the likelihood of being infected or sick from many disease from a vaccination history.
- Can suggest the health insurance/life insurance.

Draw your prototype





Carry

Bring it with you (mobile phone) or check it with KIOSK at the airport same as the boarding pass or be able to use QR Code for credentialed prove of vaccination for any immigration around the world.



Download

Don't travel to do the paper anymore, just download and fill in your form online.









- Profile/Personal information
 - Type of vaccination
- Vaccination notification
- Credentialed prove of vaccination
 - Vaccines required for each type of travel
 - Report health status
 - History of illness/treatment
 - Health insurance/life insurance

Draw your prototype





TRANSFORMATION



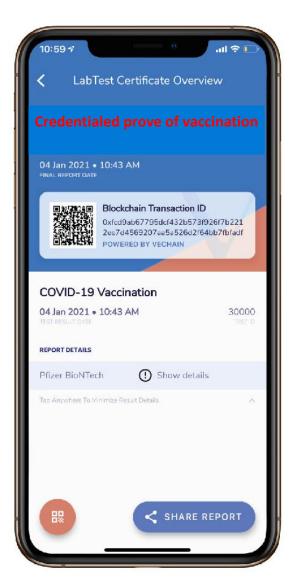


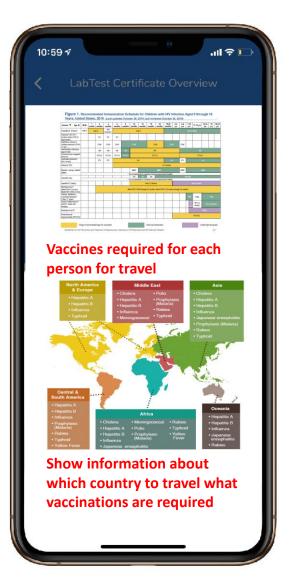


Draw your prototype



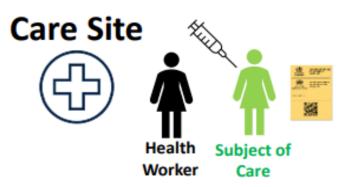


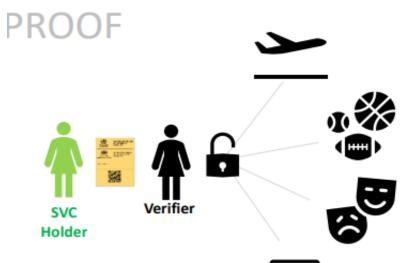




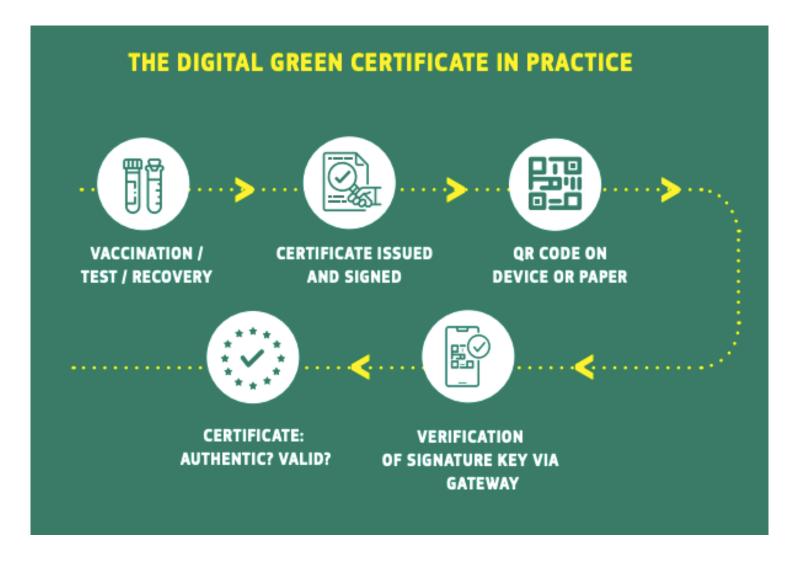


CARE











Share your solution and get feedbac test



Like

- Easy to use
- Don't waste you time and money to do the certification paper.
- Just show it when you travel.
- Have more functions with health service.



Dislike

- Old people or someone who don't use smartphone.
- Wait for Thai Government to verify identity for long time.
- insurance company ads are most annoying



Question

- When will we do it?
- Politics in Thailand is more than benefits of people lives?
- Is it expensive to do this application?
- How do I make sure my personal data is protected and how they protect your identity & secure your private information?



Idea

Should develop the application that collects comprehensive health information for analyze health history and warnings about various aspects of health.