STOPP CORONA APP

Project Overview

ÖSTERREICHISCHES ROTES KREUZ   Aus Liebe zum Menschen.

CONTAINMENT 2.0 STRATEGY

THE HAMMER

Lock-down

Massive restrictions

Avoid collapse of health system

THE DANCE

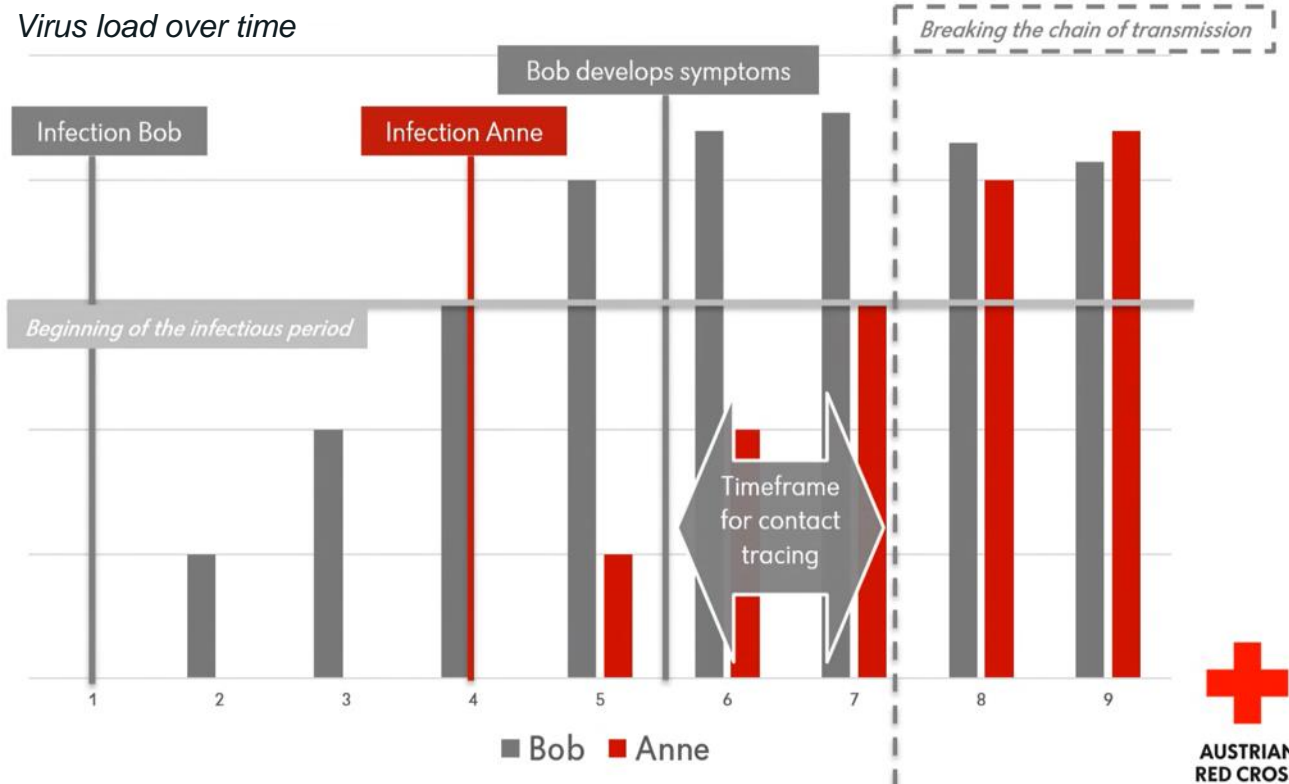Start isolating contacts based on **sensitive symptom check** (high false-positive)

Do **quick testing** with potential infections (24h median) and inform isolated contacts in timely manner

Manage open society without fallbacks

STOPP CORONA

https://medium.com/@tomaspueyo/coronavirus-the-hammer-and-the-dance-be9337092b56

WHY CONTRACT TRACING IS IMPORTANT

Virus load over time

Breaking the chain of transmission

Bob develops symptoms

Infection Bob

Infection Anne

Beginning of the infectious period

Timeframe for contact tracing

■ Bob ■ Anne

AUSTRIAN RED CROSS

3

APP DEVELOPMENT HIGHLIGHTS

GitHub

Closed source ✓

Trusted source ✓

Open source ✓

Apple | Google

Closed collaboration to define functional requirements for their interfaces

Data protection / de-central system

#1

#1 first contact tracing app in Europe

#1 shortest go-to-market time in the world

#1 de-central app in the world

#1 broadest vision & functionality

dp³t

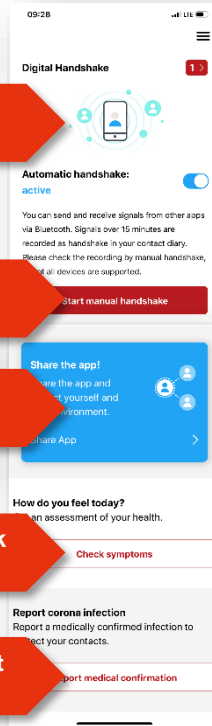Co-Author of DP-3T interoperability protocol

Beacon Concept

SBA Research   EPICENTER.WORKS for digital rights   **noyb**

Close collaboration with NGOs and Universities

‹animation in presentation mode›

> Single purpose application

> Decentral and GDPR compliant

> Input from 230+ experts

> Globally scalable

> Red Cross as trusted organization

> Approved by Austrian authorities

> Supported by NGOs

> International reference model

ÖSTERREICHISCHES
ROTES KREUZ

Aus Liebe zum Menschen.

MAJOR APP FUNCTIONALITY

Homescreen

Questionnaire

Authorization (SMS/TAN)

Different States (green / yellow / red)
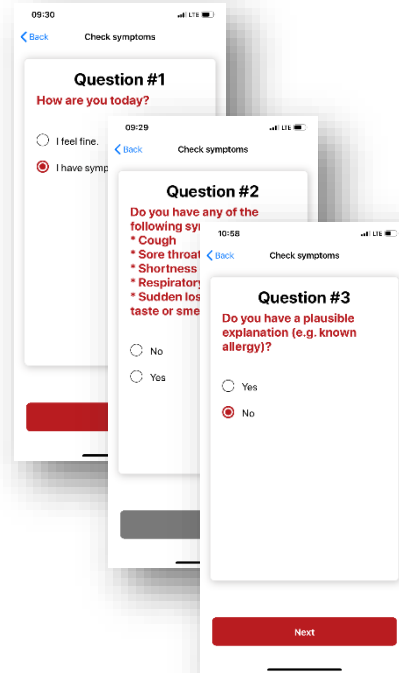
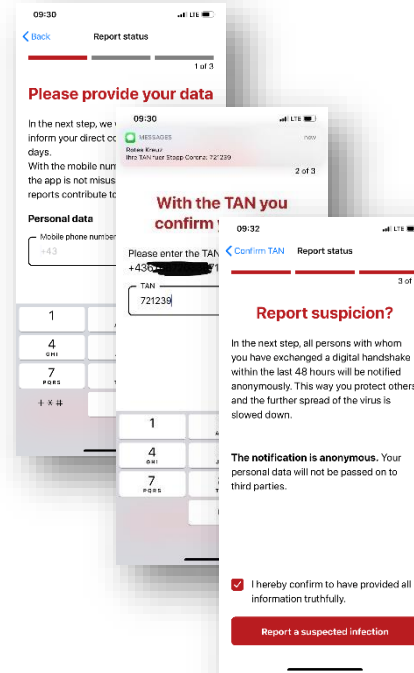1. Automatic Handshake

2. Manuell Handshake

3. Share App Link

4. Symptom Check (yellow warning)

5. Positiv Lab Test (red warning)
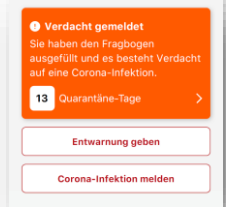
STOPP CORONA
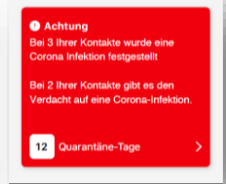
Take a look:
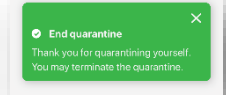https://tinyurl.com/stoppcorona

Wenn das nicht möglich ist, hilft ihnen gerne das **Team Österreich** unter:
0800 600 600

5 Der Amtsarzt beendet die Quarantäne.

09.03.2020	11:00–12:00	#120
12.03.2020	22:00–23:00	#119
11.03.2020	8:00–9:00	#118
10.03.2020	16:00–17:00	#117
10.03.2020	17:00–18:00	#116

‹ Start   Digitaler Handshake

Begegnung auswählen & speichern
Wie funktioniert's? ❶

Smartphones in der Umgebung
Sie sind: **1136**

☐ alle
☑ 2453   ✓ Gespeichert
☐ 2398
☐ 4755
☐ 1616
☐ 8845

Kontakt nicht gefunden?   ›

Speichern

Willkommen!

Mit der Installation der COVID-19 App helfen Sie dabei, die **Ausbreitung** des neuartigen Corona-Virus zu **verlangsamen.**

Weiter

Gemeinsam gegen COVID-19

✓ **Erkrankt gemeldet**
Sie haben sich als offiziell COVID-19 erkrankt gemeldet.

Begeben Sie sich in Quarantäne   ›

Begegnung speichern
Starten Sie den digitalen Handshake um eine Begegnung zu speichern. Die Kontakte werden im Krankheitsfall anonym benachrichtigt.

‹ Check symptoms

Result
Stay healthy and help to protect others.

In the current situation it is important to follow a few basic rules.
Care for you, care for me.

Wash your hands regularly: with soap, warm water and for at least 20 seconds.

Keep at least 1-2 meters distance to other people.

Keep in touch via electronic media.

If you feel ill, please stay home.

‹ Start   Digitaler Handshake

STARTING POINT

Accenture was requested to support the Austrian Government's Crisis Management Team and the National Red Cross

Key Question

„How can technology support the current situation in 2-4 weeks from now?"

How did it start on March 9th 2020?

Within 12 hours…	Ideate & prioritize
Within 24 hours…	Prototype & test
Within 1 week…	Define & implement
Within 2 weeks…	Go live & scale

Guidelines

1) Fast & Impactful

2) Secure & Robust

3) Scalable

STOPP CORONA APP
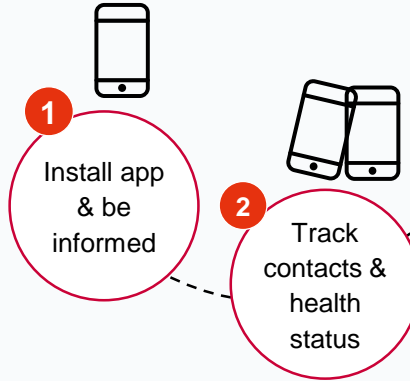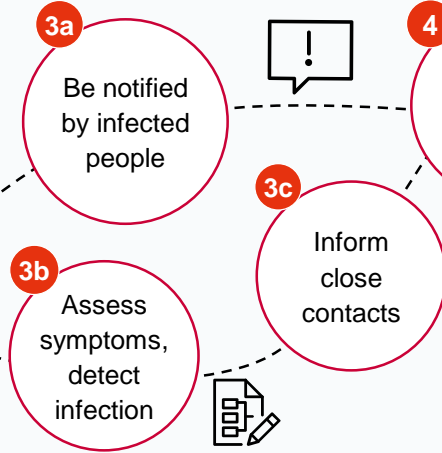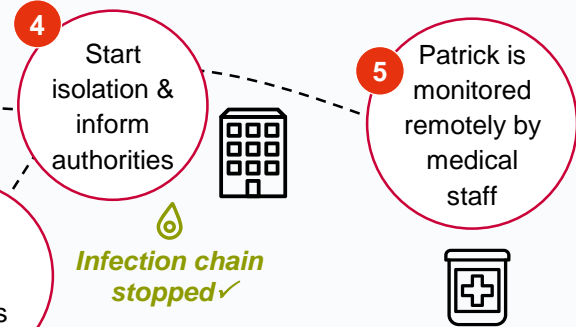
RELEASEPLAN

	Design	Implementation	Rollout
V1.0 Manual Handshake, Confirmed Infection	✓	✓	✓
V1.1 Warning / De-warning, Symptom Check, Automatic Pairing (opt-in)	✓	✓	✓
V1.2 & 1.3 Further Enhancements & Security Features, Open Source	✓	✓	✓

CONTAINMENT 2.0[1)]

Quantifying SARS-CoV-2 transmission suggests **epidemic control with digital contact tracing** (Prof. Fraser Oxford):

- **Pre-symptomatic infection** is a critical factor (see Figure 1 – blue area), people do not know that they are already infecting others

- **Time** from symptom → labor test → test result → trace contacts → inform contact → isolate potentially infected people **takes too long** to effectively break infection chains

- In theory, if **60% of population** would use an app and **60% do isolate** based on the app, the pandemic would be solved (Figure-2)

The red cross app design is based on notification when symptoms are starting, to be even more efficient

Figure-1: Model of infectiousness

$R_0 = 2.0$:
$R_p = 0.9$ from pre-symptomatic
$R_s = 0.8$ from symptomatic
$R_e = 0.2$ from environmental
$R_a = 0.1$ from asymptomatic
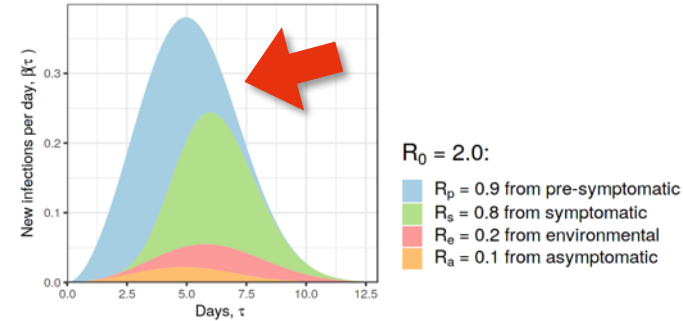
Figure-2: Intervention success

r -0,05 per day

growth rate r after interventio
0.10
0.05
0.00
-0.05
-0.10
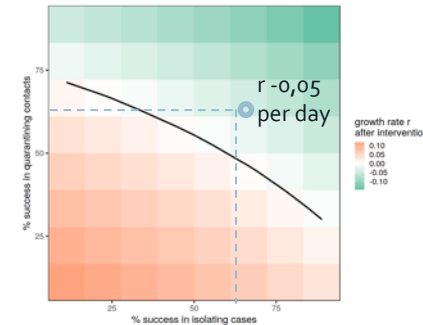
REFERENCES

Penetration Test Link to press statement	SBA Research	**SBA Research is a research center for Information Security** Principle of data minimalization, data protection and security is fulfilled
Data Protection & GDPR Compliance Link to press statement	research institute	**Digital Human Rights Center & Smart Right Consulting** App fullfills "Human Dignity by Design"
Data Protection NGOs Link to press statement	noyb EPICENTER.WORKS	**Impactful Data Protection NGOS (e.g. Facebook vs. Europe)** Decentral app is role model for Europe

GLOBALE APP OVERVIEW COVID-19

Business Specific solution: **SaferMe** Released in Feb 2020, unsure

Alberta, Canada: **ABTraceTogether** 6000 downloads first day lauching 1 May 2020

Part of US states, and EU except UK & France(planed): **Apple& Google sdk** Yet to release in May 2020

Austria: **Stopp Corona** 400k+ downloads

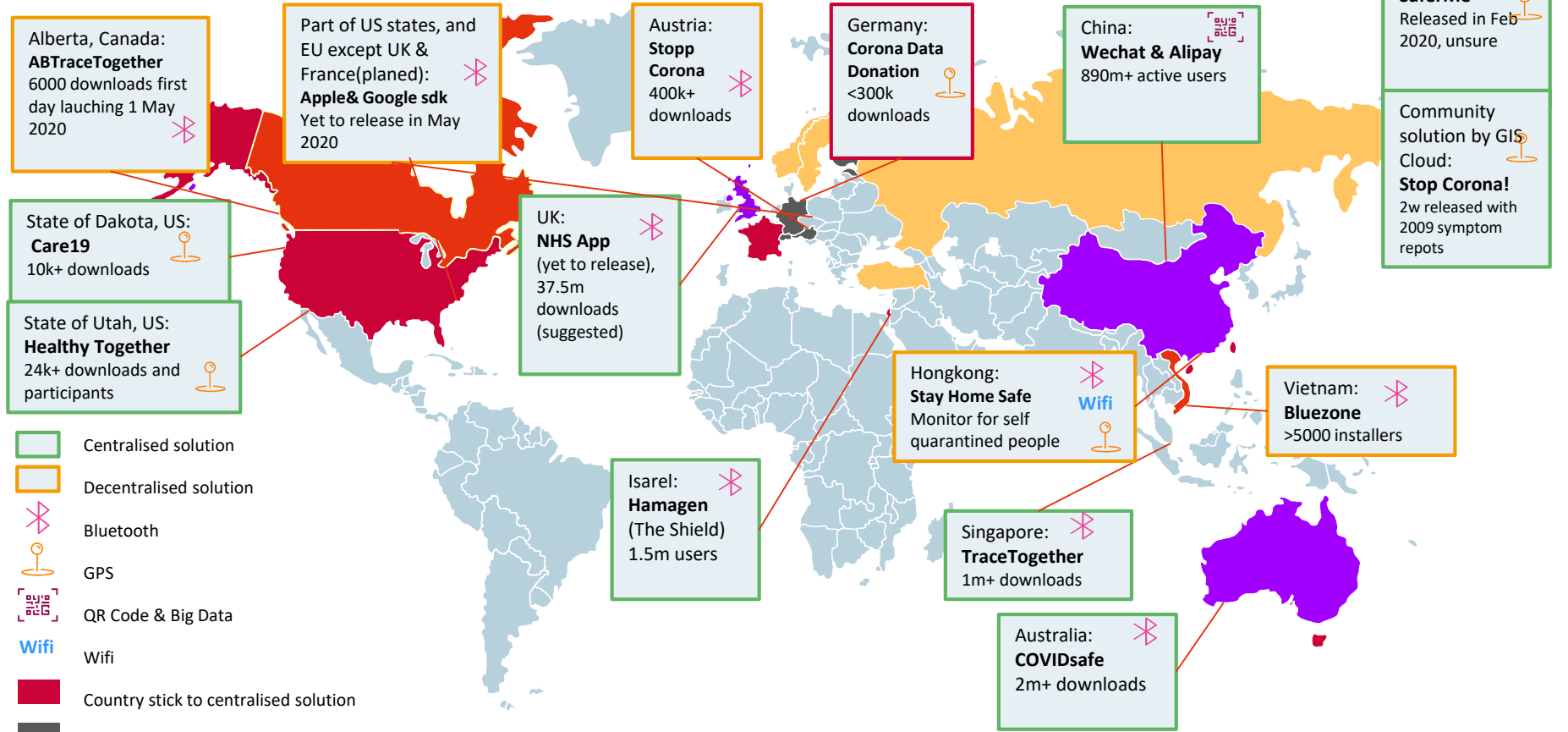**Germany:** **Corona Data Donation** <300k downloads

China: **Wechat & Alipay** 890m+ active users

Community solution by GIS Cloud: **Stop Corona!** 2w released with 2009 symptom repots

State of Dakota, US: **Care19** 10k+ downloads

UK: **NHS App** (yet to release), 37.5m downloads (suggested)

State of Utah, US: **Healthy Together** 24k+ downloads and participants

Hongkong: **Stay Home Safe** Monitor for self quarantined people **Wifi**

Vietnam: **Bluezone** >5000 installers

Isarel: **Hamagen** (The Shield) 1.5m users

Singapore: **TraceTogether** 1m+ downloads

Australia: **COVIDsafe** 2m+ downloads

Legend

- Centralised solution
- Decentralised solution
- Bluetooth
- GPS
- QR Code & Big Data
- **Wifi** Wifi
- Country stick to centralised solution
- Country initiating/migrating to decentralised solution (Austria, Swiss, Estonia, Finland, Germany, Alberta of Canada, Vietnam)

Data until 30 April 2020

PRESS OVERVIEW

INNOVATIONEN
Coronavirus: Rotes Kreuz launcht kommende Woche "Stopp Corona"-App
Soll Amtsärzte entlasten und Infektionskette unterbrechen
19. März 2020, 14:29 24 Postings

CORONA-TRACING
Das österreichische App-Wunder

PREMIUM

von Thomas Kuhn
30. April 2020

19. April 2020

Österreichs Coronavirus-App sorgt für Verblüffung in Europa
Der positiv verlaufene Datenschutzaudit der App des Roten Kreuzes platzt mitten in einen erbittert geführten europäischen Richtungsstreit um eine zukünftige Corona-App. Nur Österreich verfügt bereits über eine solche Applikation.

10. Mai 2020   ERICH MOECHEL   STOPP CORONA

Österreichische Coronavirus-App wird europatauglich

ERICH MOECHEL
Österreich als EU-Testlabor für Corona-Apps

trend.
WIRTSCHAFT GELD BRANCHEN STANDPUNKTE STARTUPS PRIVAT
trend.at › Branchen › Gesundheit, Medizin & Pharma
Stopp-Corona-App: Technologie, die Freiheit gibt

Corona-App-Entwickler im Interview
"Deutschland hat sich für einen anderen Weg entschieden"
Österreich steht bereits kurz davor, eine Corona-Tracing-App herauszubringen. Michael Zettels Unternehmen Accenture hat sie mitentwickelt. Im Interview spricht er über die grundsätzlichen Konflikte der Angelegenheit und wo es im Moment noch hakt.

14

RELEASEPLAN - OUTLOOK

	Design	Implementation	Rollout
V1.0 Manual Handshake, Confirmed Infection	✓	✓	✓
V1.1 Warning / De-warning, Symptom Check, Automatic Pairing (opt-in)	✓	✓	✓
V1.2 & 1.3 Further Enhancements & Security Features, Open Source	✓	✓	✓
V1.4 Personal data in local data center, recommendation feature	Started	6th May	8th May
V2.x Switch to Apple&Google & Interoperability	Analysis started	May (tbc)	June (tbc)

CONTACT

Contact Austria:

Christian Winkelhofer
c.winkelhofer@accenture.com

Contact International:

Christopher Stephan
Christopher.stephan@accenture.com