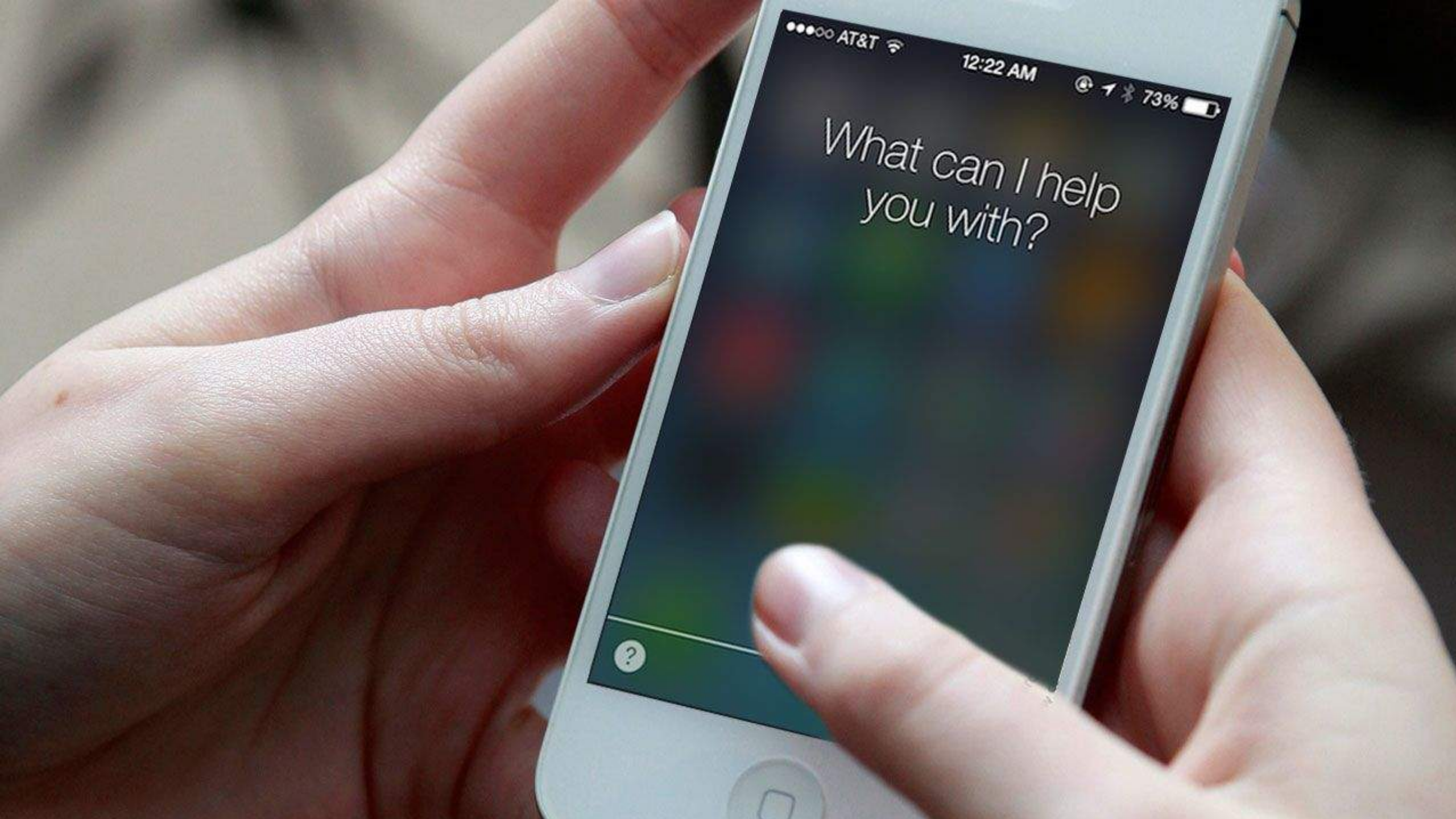
NEXT GENERATION ARCHITECTURE PRINCIPLES FOR E-ESTONIA

KRISTO VAHER | **GCIO OFFICE** | **REPUBLIC OF ESTONIA**

WHAT IF …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73%
What can I help you with?

Malmgatan 12a
McDonald's Helsinki Kamppi
Tiger of Sweden
Indiska
Sisley
Nettikasinot
Bruuveri
Flying Tiger Copenhagen Kamppi
Tavastia
Lääkärikeskus Aava Helsinki Kamppi
Simonkatu
Sinelli Oy
Forum
Fressi Kamppi
Partioaitta Yrjönkatu
Yrjönkadun uir
Sky Express
Alcatraz Exclusive Club
Solo Sokos Hotel Torni
Annantalo
Radisson Blu Royal Hotel Helsinki
Lidl Kamppi
Kampintori
Avis Helsinki, Kamppi
Kissakahvila Helkatti
Helsingin Saksalainen Koulu
Kino Andorra
MRoom Kamppi
R-Kioski
Sushibar + Wine
Eerikin Pippuri Kebab
Pii Poo Helsinki
China
Long Wall
Anna K
Tokyokan
Bar Loose
Lappi Ravintola
Domo
Golden Leaf
Happy Food Garden
Runebergingatu
Kampinkuja
Malminrinne
Fredrikinkatu
Annankatu
Kansakoulukatu
Yrjönkatu
Eerikinkatu
Kalevankatu
Lapinlahdenkatu
Lönnrotinkatu

VISA
mastercard
SOFORT
ÜBERWEISUNG
paysafecard
maestro.
Diners Club
International
eps
Überweisung
PayPal
SEPA
Single Euro Payments Area
AMERICAN
EXPRESS
giropay
JCB

Charlie-Ray
Sullivan
Connor
Jonathan
Axel
Isla
Berkeley
Jacob
Adekunle
Melody
Brooke
Theodore
Milly
Caroline
Huntleigh
Anthony
Austyn
Hunter
Ariannah
Brynlee
Evalina
Thorin
Medora
Joshua
Erin
Kay'Lonnie
Luka
Maple
Beau
Jace
Keston
Julianna
Delilah
Violet
Sawyer
Spencer
Virgil
Grayson
Callen
Alaric
Holden
Camden
Levi
Miguel
William
Sydney
Oakley
Signe
Isabelle
Waylon
Ryker
Azarih
Cody
Kade
Angel
Julius
Emmett
Silas
Ezzador
Ruby
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Kora
Mirra
Kimber
Tobias
Nikolai
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Leo
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Samuel
Carter
Anders
Wren
Gordon
Alice
Simon
Teo
Aiden
Willa
Vayda
Allen
Veronica
Olivia
Koen
Bodee
Haans
Trynity
Sloan
Tanner
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Cameron
Finn
Orion
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Freyja
Gianna
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Oliver
Amelia
George
Skylar
Keymod
Jovie
Kit
Palmer
Henry
Grey
Teddy
Oscar
Aspyn
Freya
Evelyn
Odin
Finley
Teagan
Roman
Malik
Jayden
Lillian
Brox
Nathan
Emry
Sophia
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Sumayo
Ariana
Zayden
Mason
Kiko
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Rowan
Logan
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Norah
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Jaxon
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Akira
Brady
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Kaylee
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Tucker
Finnegan
Layne
Lilyana
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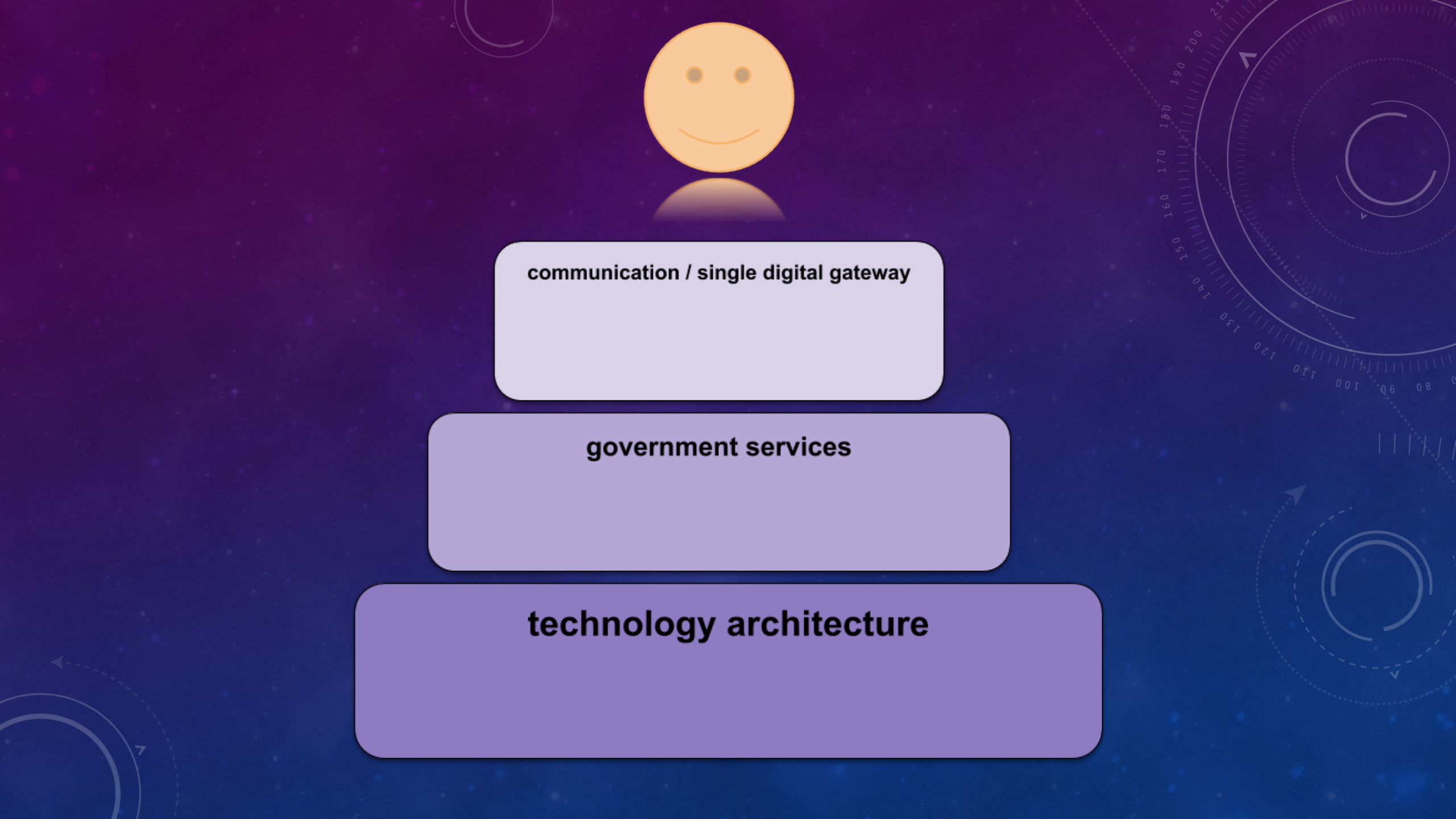
Reginald
Brooks
Amoraliyah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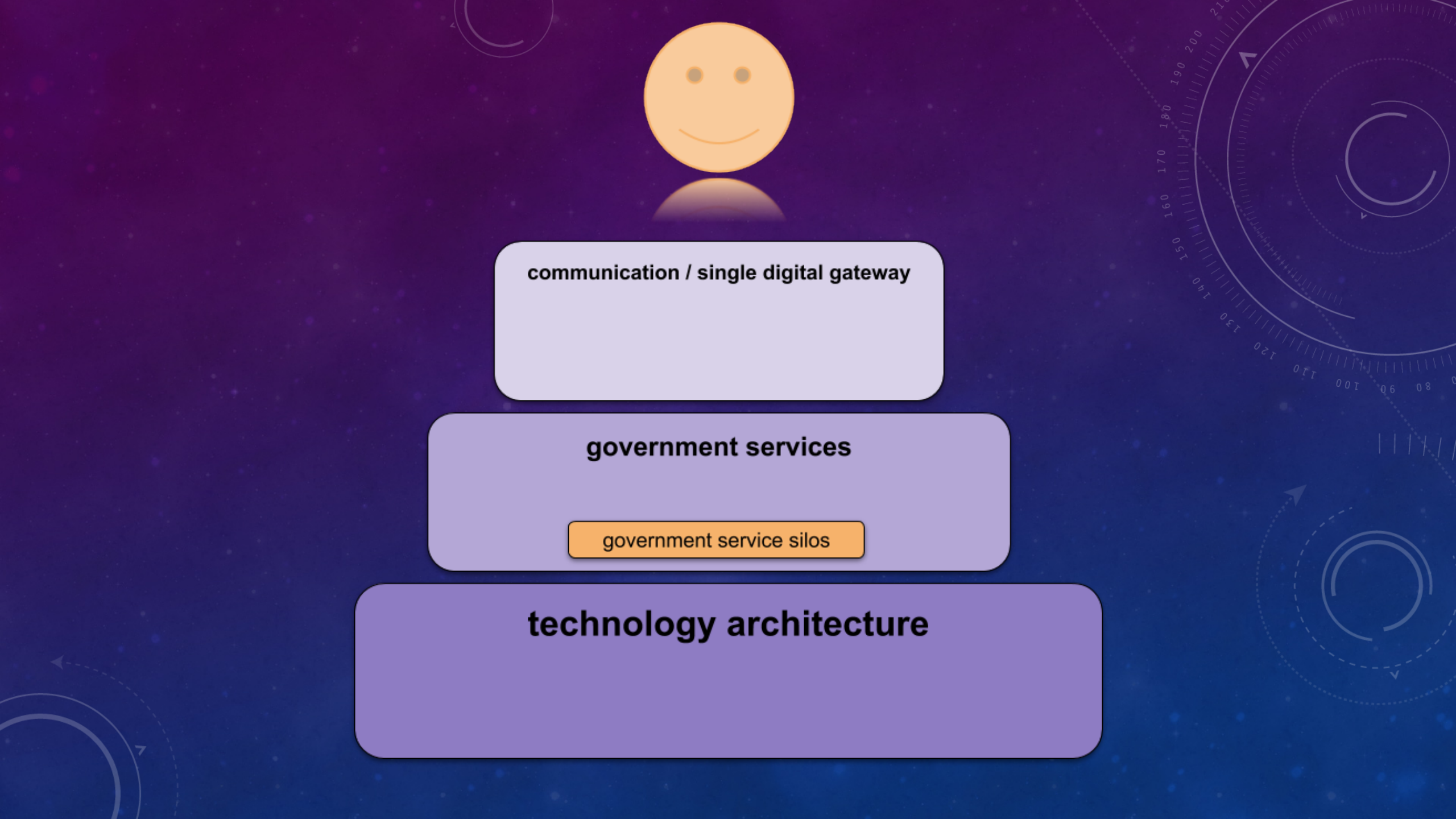
government services
technology architecture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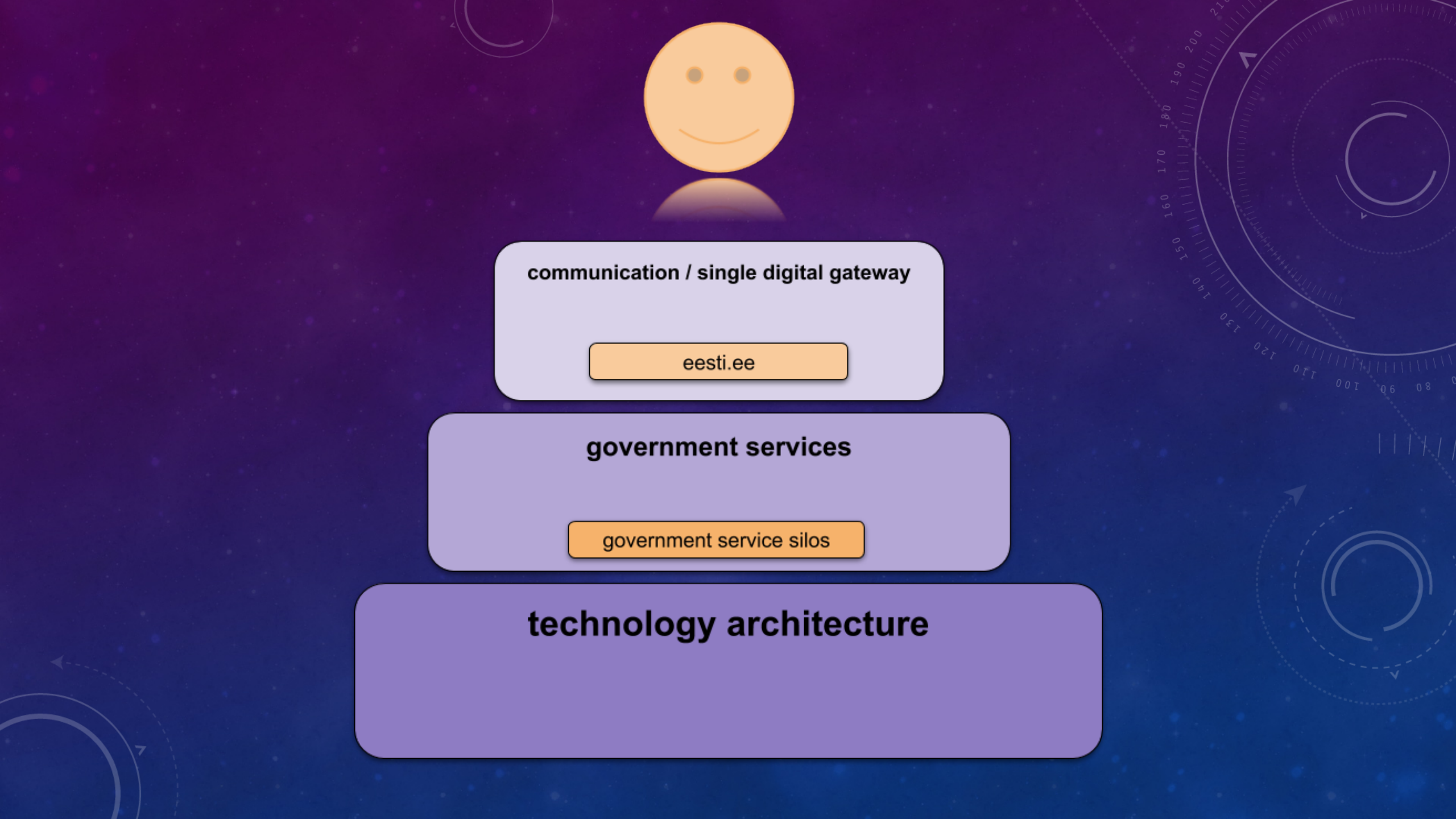
government service silos
technology architecture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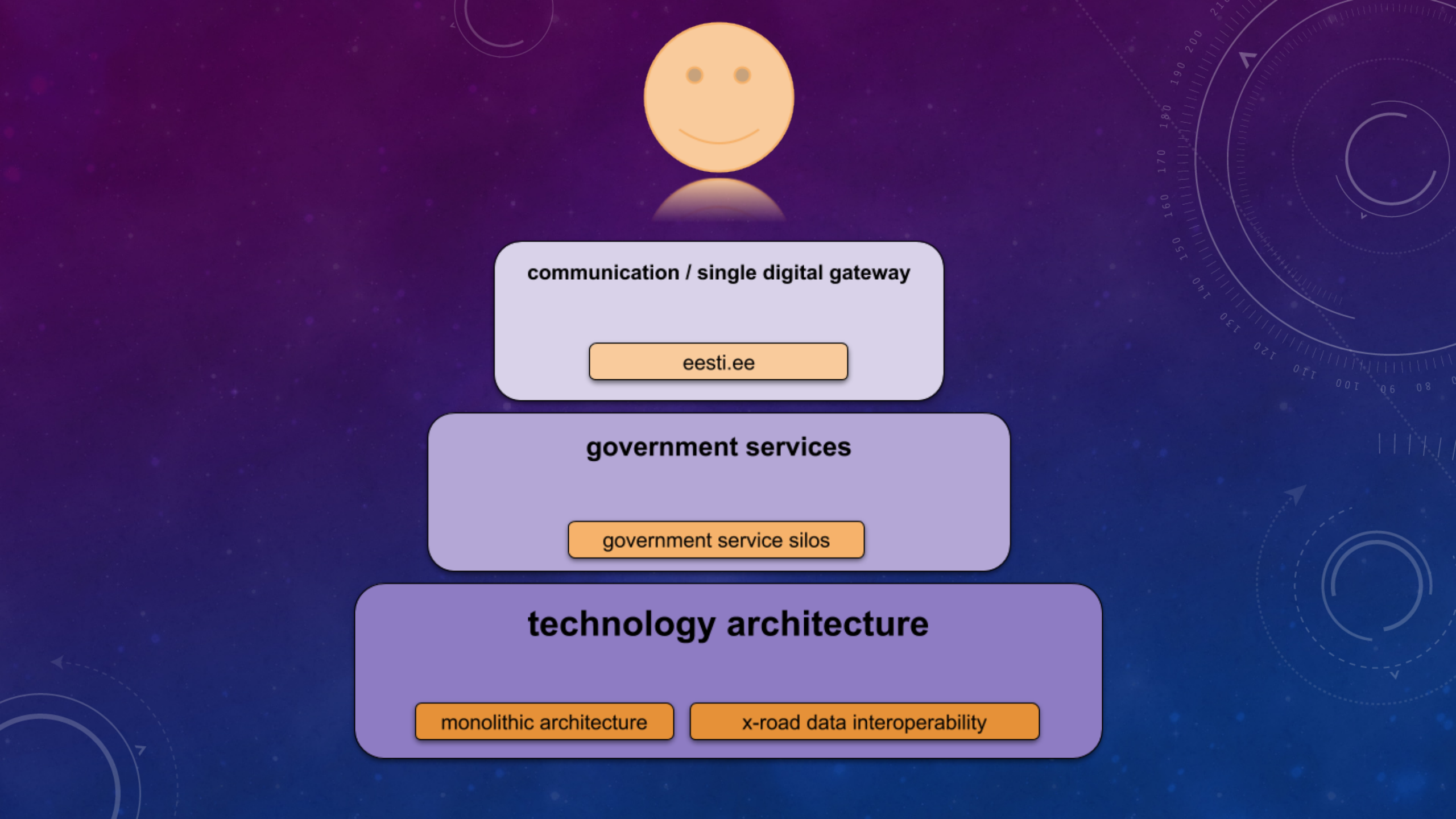
technology architecture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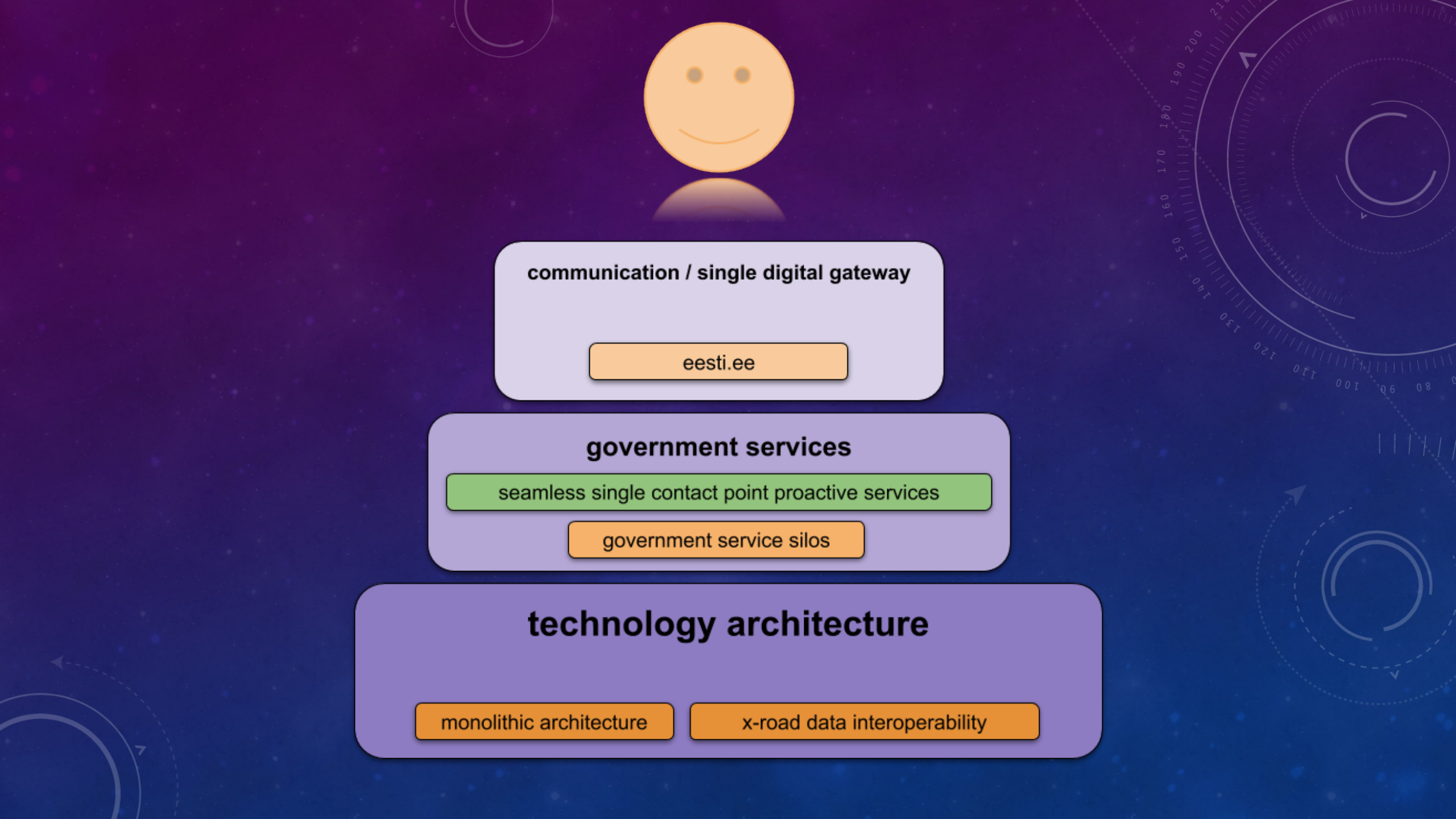
government service silos
technology architecture
monolithic architecture
x-road data interoperability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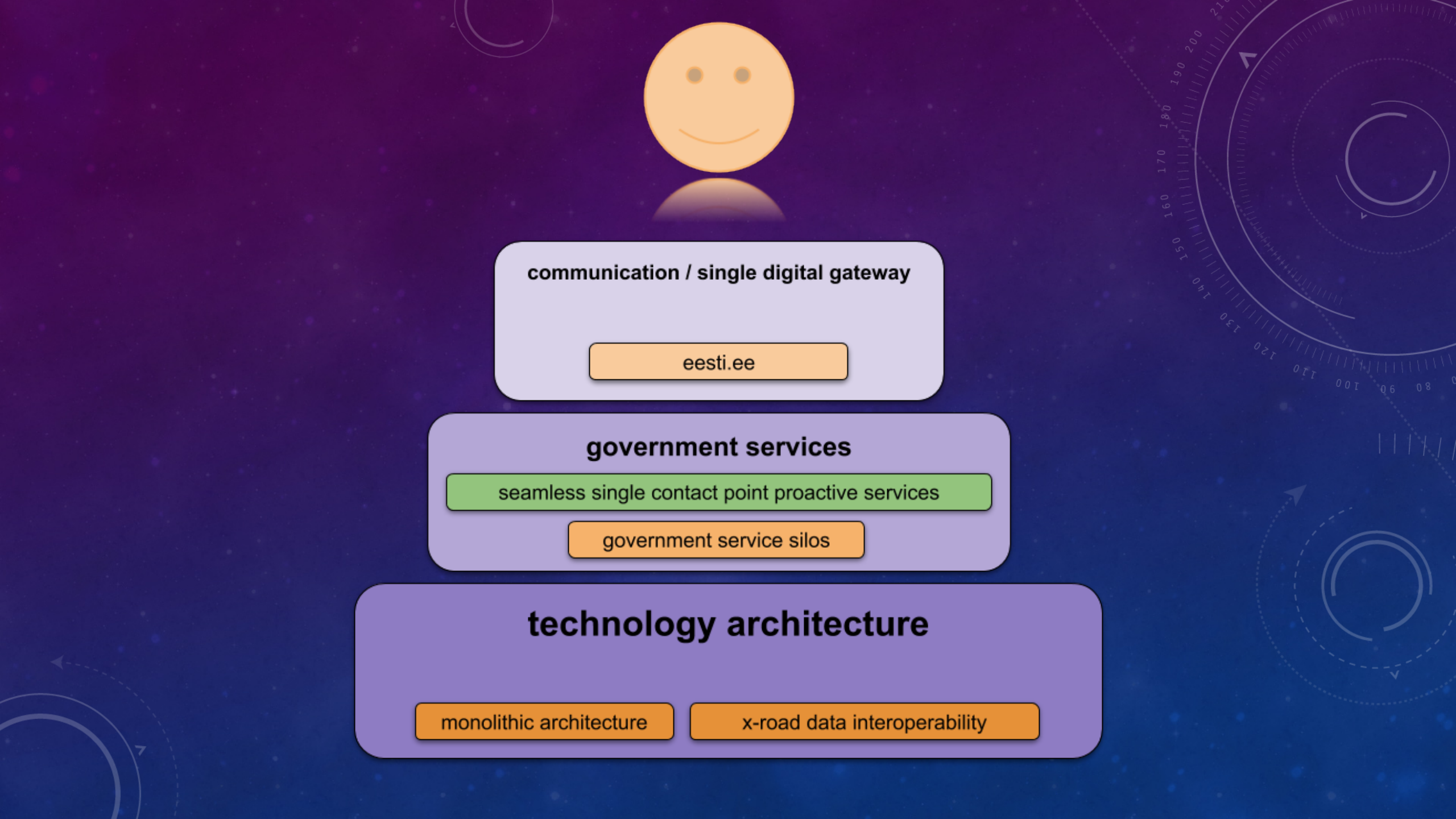
seamless single contact point proactive services
government service silos
technology architecture
monolithic architecture
x-road data interoperability

PROACTIVE SERVICES

- *„public services are going to be made to be user-friendly, proactive, seamless and automatic life event services“** **07.12.2018** government approval
- **Conway Law** and **Domain Driven Design**
- **Business Process Modeling** principles and tools
- **Interoperability Catalogue**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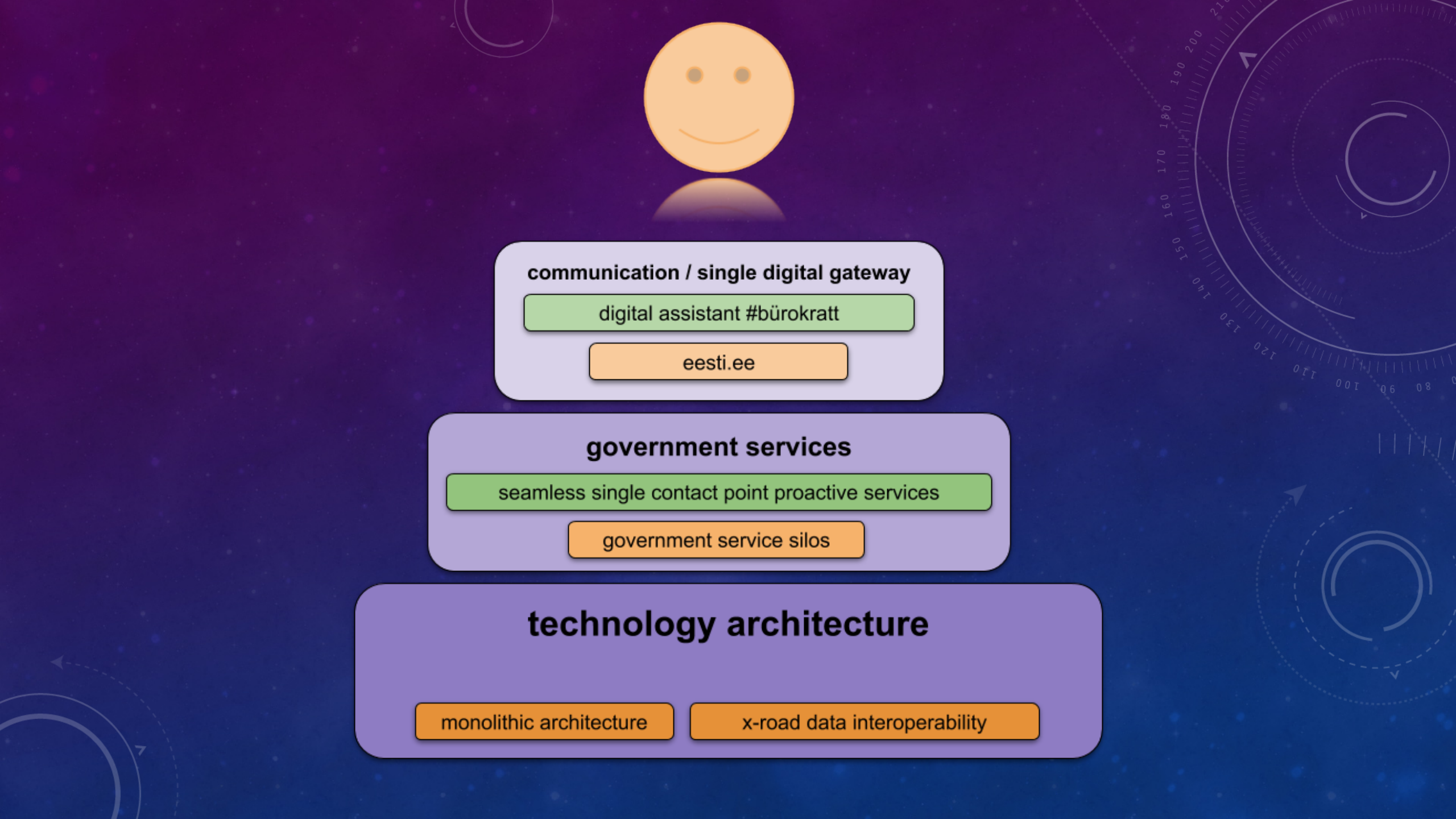
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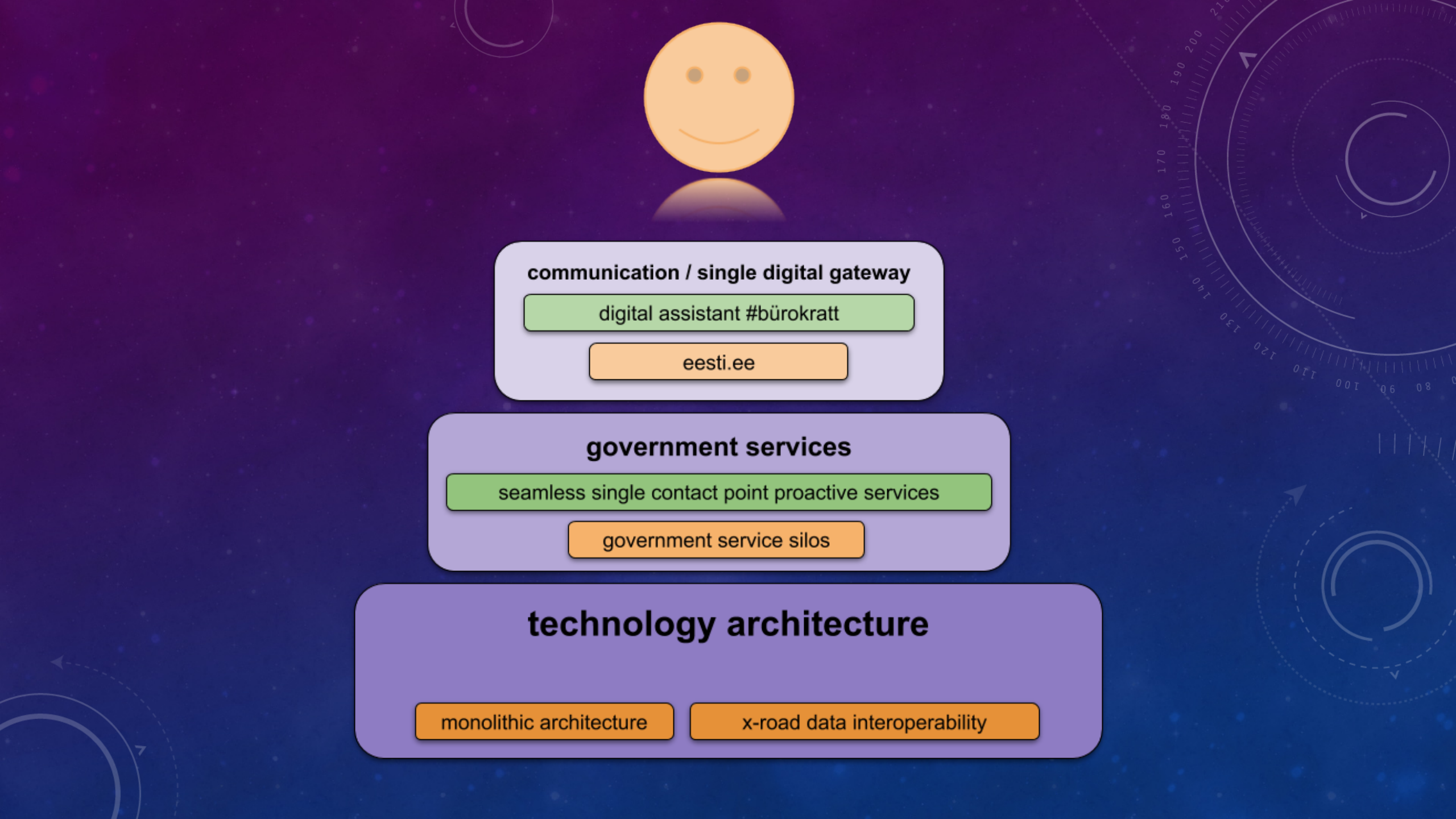
#BÜROKRATT

- **28.05.2019** publication of **Estonian AI strategy** *„supporting the use and implementation of AI components and enabling interoperability for the creation of a digital assistent“**
- Ecosystem of loosely coupled **virtual assistants**
- Cooperation with big-tech companies for **understanding domestic language**
- Possible solution for true **GDPR** and **MyData**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government service silos
technology architecture
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x-road data interoperability

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government services

seamless single contact point proactive services

government service silos

technology architecture

autonomous microservice architecture

x-road v7 + x-room

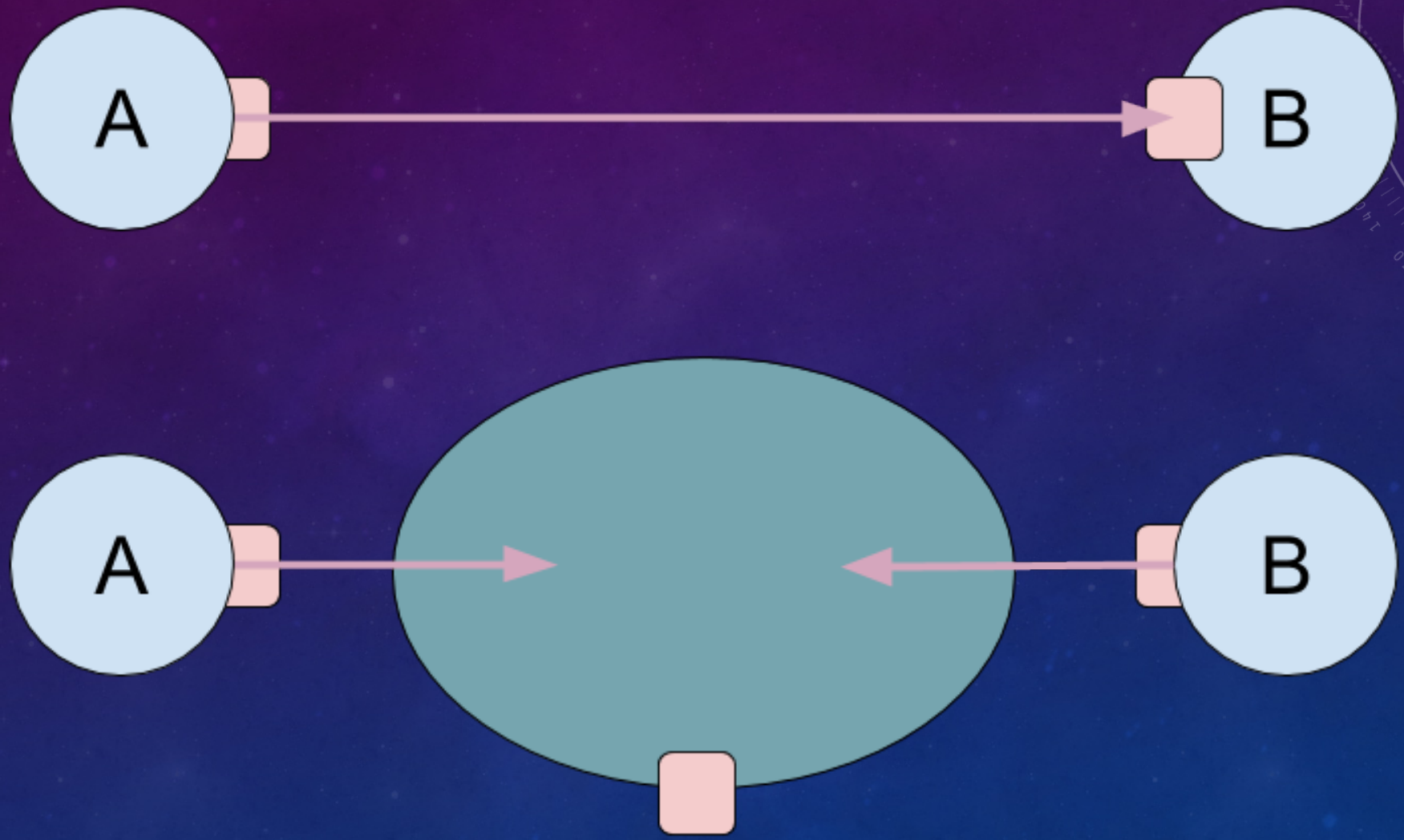
monolithic architecture

x-road data interoperability

AUTONOMOUS EVENT DRIVEN ARCHITECTURE

- Evolution of X-Road and support of„**REST**“
- Wider adoption of **autonomous microservices** and re-use
- **Cloud native**
- **Event driven loosely coupled** services and the **X-Room** concept

A
B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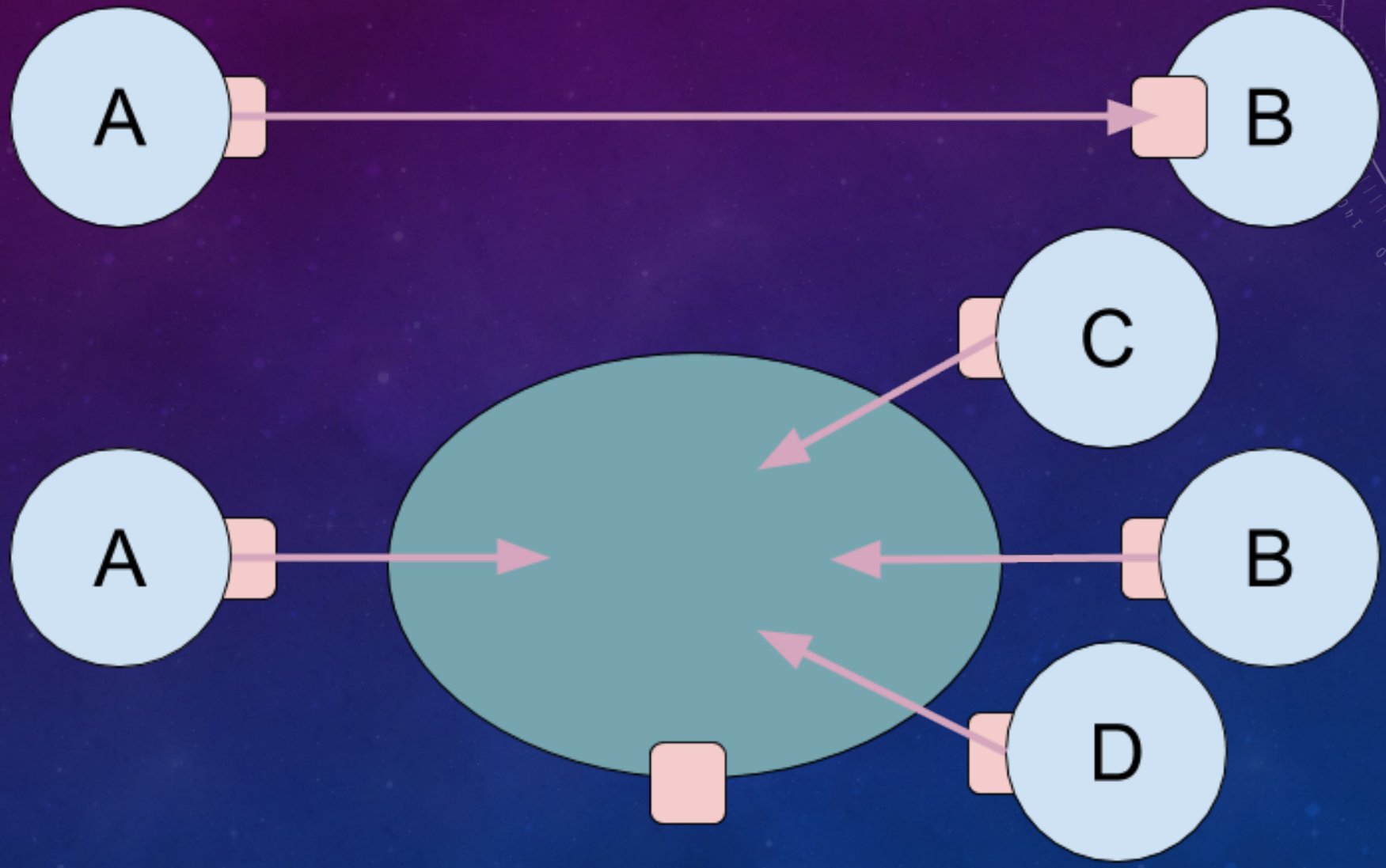
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ONWARD

- Don’t forget **the story**
- Some concepts are **already being implemented** in projects + many are planned as **proof of concepts for 2020** and beyond – *to see what works and what does not*
- Next generation will **not** happen as a Big Bang
- **16.03.2020** publication of **Next Generation Digital Government Architecture** vision paper

THANK YOU

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