INNOVATIVE BUSINESS MODELS IN HEALTHCARE

June 20th 2025

Irene Fialka, https://www.linkedin.com/in/irenefialka/

BEEN THERE – DONE THIS!

Key Partners

Who are our Key Partners?
Who are our key suppliers?
Which Key Resources are we acquiring from partners?
Which Key Activities do partners perform?

MOTIVATIONS FOR PARTNERSHIPS:
Optimization and economy
Reduction of risk and uncertainty
Acquisition of particular resources and activities

Hypotheses

Key Activities

What Key Activities do our Value Propositions require?
Our Distribution Channels?
Customer Relationships?
Revenue streams?

CATEGORIES
Production
Problem Solving
Platform/Network

Hypotheses

Key Resources

What Key Resources do our Value Propositions require?
Our Distribution Channels? Customer Relationships?
Revenue Streams?

TYPES OF RESOURCES:
Physical
Intellectual (brand patents, copyrights, data)
Human
Financial

Hypotheses

Value Propositions

What value do we deliver to the customer?
Which one of our customer's problems are we helping to solve?
What bundles of products and services are we offering to each Customer Segment?
Which customer needs are we satisfying?

CHARACTERISTICS
Newness
Performance
Customization
"Getting the Job Done"
Design
Brand/Status
Price
Cost Reduction
Risk Reduction
Accessibility
Convenience/Usability

Hypotheses

Customer Relationships

What type of relationship does each of our Customer Segments expect us to establish and maintain with them?
Which ones have we established?
How are they integrated with the rest of our business model?
How costly are they?

EXAMPLES
Personal assistance
Dedicated Personal Assistance
Self-Service
Automated Services
Communities
Co-creation

Hypotheses

Channels

Through which Channels do our Customer Segments want to be reached?
How are we reaching them now?
How are our Channels integrated?
Which ones work best?
Which ones are most cost-efficient?
How are we integrating them with customer routines?

CHANNEL PHASES:
1. Awareness
   How do we raise awareness about our company's products and services?
2. Evaluation
   How do we help customers evaluate our organization's Value Proposition?
3. Purchase
   How do we allow customers to purchase specific products and services?
4. Delivery
   How do we deliver a Value Proposition to customers?
5. After sales
   How do we provide post-purchase customer support?

Hypotheses

Customer Segments

For whom are we creating value?
Who are our most important customers?

Mass Market
Niche Market
Segmented
Diversified
Multi-sided Platform

Hypotheses

Cost Structure

What are the most important costs inherent in our business model?
Which Key Resources are most expensive?
Which Key Activities are most expensive?

IS YOUR BUSINESS MORE:
Cost Driven (leanest cost structure, low price value proposition, maximum automation, extensive outsourcing)
Value Driven (focused on value creation, premium value proposition)

SAMPLE CHARACTERISTICS:
Fixed Costs (salaries, rents, utilities)
Variable costs
Economies of scale
Economies of scope

Hypotheses

Revenue Streams

For what value are our customers really willing to pay?
For what do they currently pay?
How are they currently paying?
How would they prefer to pay?
How much does each Revenue Stream contribute to overall revenues?

TYPES:
Asset sale
Usage fee
Subscription Fees
Lending/Renting/Leasing
Licensing
Brokerage fees
Advertising

FIXED PRICING
List Price
Product features dependent
Customer segment dependent
Volume dependent

DYNAMIC PRICING
Negotiation(bargaining)
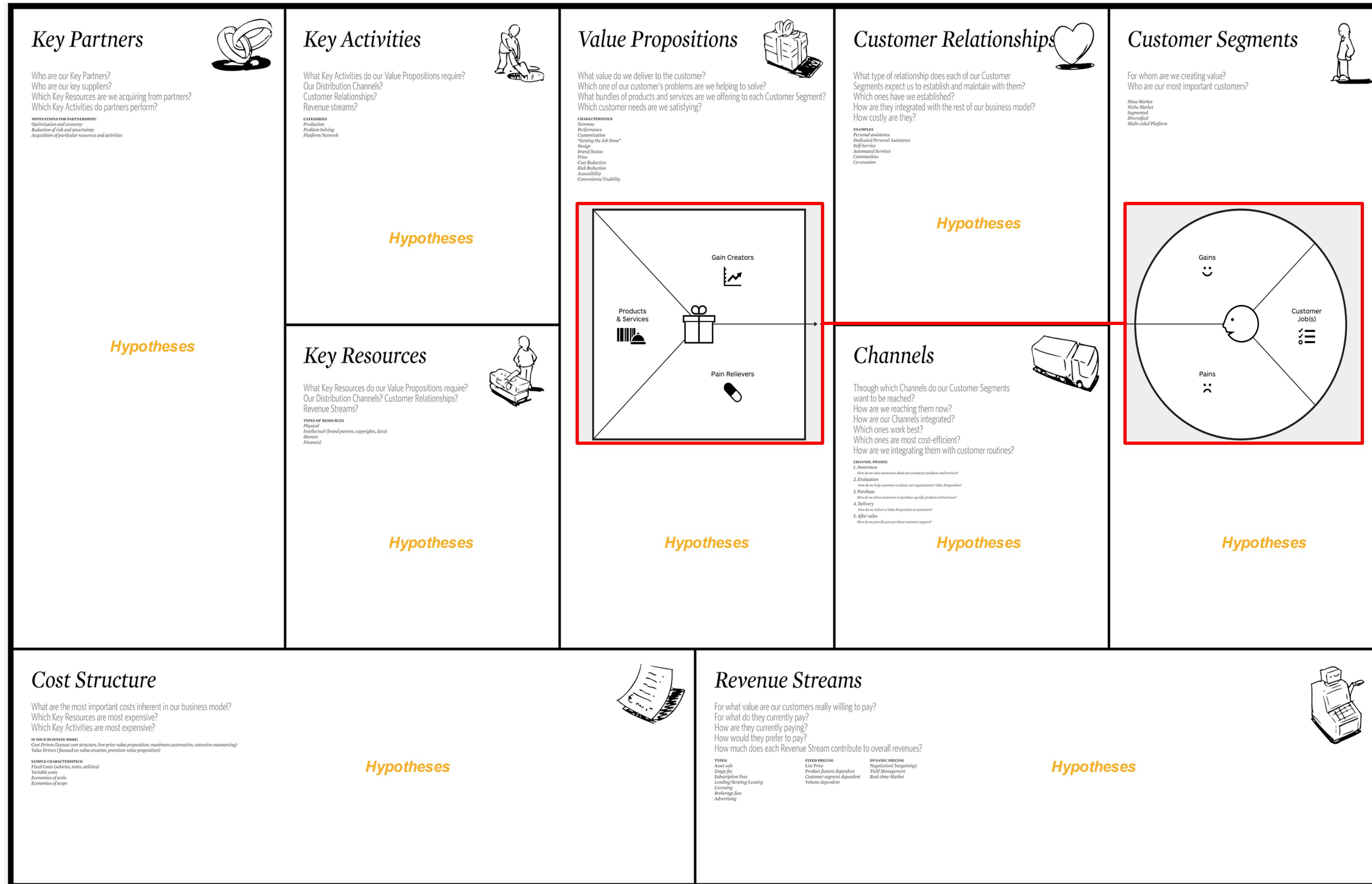Yield Management
Real-time-Market

Hypotheses

Reference: Osterwalder, A., Pigneur, Y., Bernarda, G., Smith, A. (2014) Value Proposition Design: How to Create Products and Services Customers Want, John Wiley & Sons.
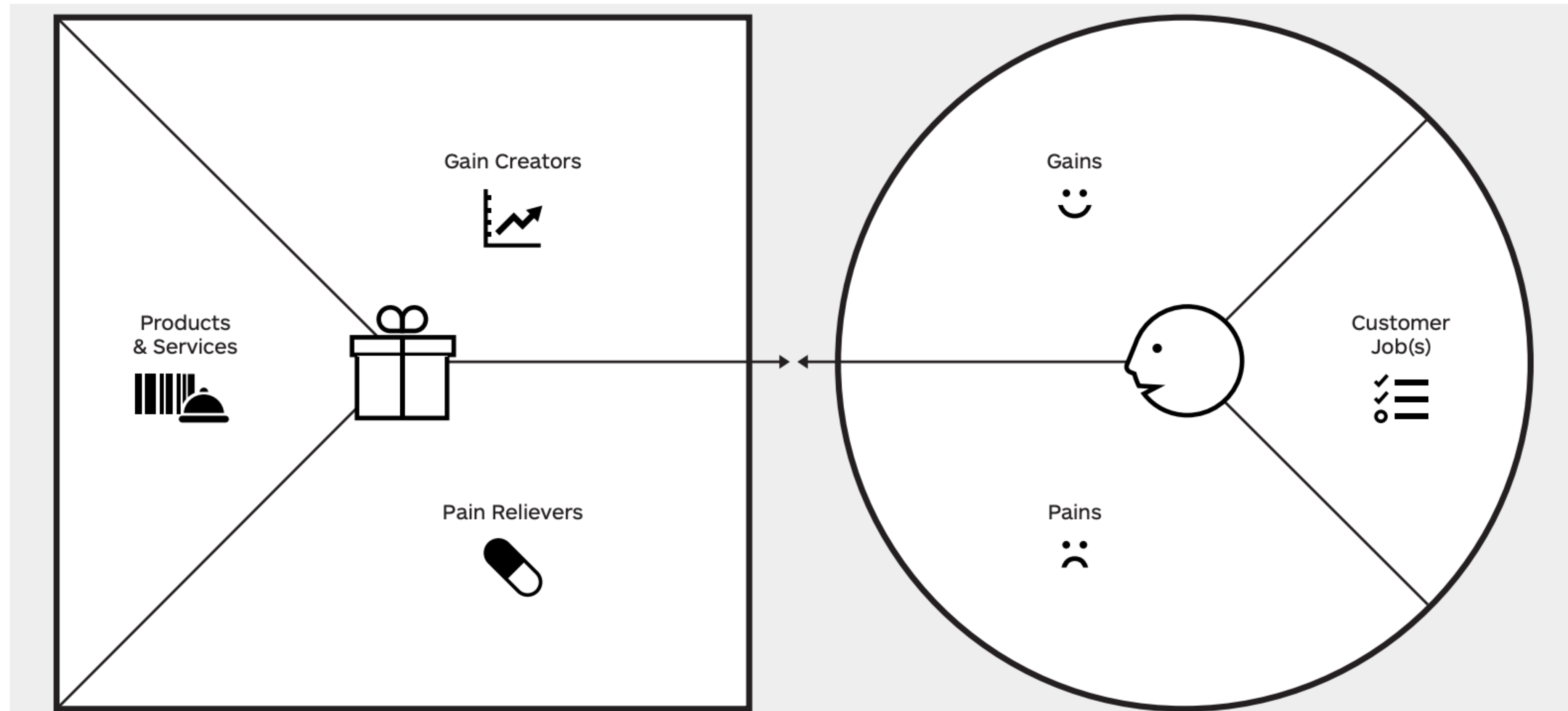
DIGTAL HEALTH IN EUROPE
Recommendations by European Experts

- Ensure clear and consistent internal and external **communications, DO NOT overpromise** (watch out: MDR!)

- In developing new services, ensure they are **safe, effective and person-centred** (as complex as this is, it's healthcare!)

- Do not simply focus on technology innovation. Give equal **consideration to service innovation** (the service design) and **business innovation** (the reimbursement models) to secure adoption and scale (Europe's healthcare is unique!!)

- Ensure that the health **care workforce** is supported with **training and education**; improve **citizen participation**.

- Agree on a **minimum data set** (GDPR!!) for disease management and have a robust data governance structure to **allow data to flow safely and securely** to where it is needed, **transforming data to information and intelligence**

- Utilise **data-driven evidence-based practice** to build trust (all professional groups, citizens) from the planning stage onwards

- Support organisations to **better understand, acquire and utilise digital tools and services** that support citizen empowerment ("the patient is the most underused resource in healthcare", Bertalan Meskó, June 2023)

- Review and refresh digital health and care strategies in light of experience, including **connectivity, standards, interoperability, data governance and security**, **consent and trust issues**.

BEEN THERE – DONE THIS!

eit Health

Key Partners

Who are our Key Partners?
Who are our key suppliers?
Which Key Resources are we acquiring from partners?
Which Key Activities do partners perform?

MOTIVATIONS FOR PARTNERSHIPS:
Optimization and economy
Reduction of risk and uncertainty
Acquisition of particular resources and activities

Hypotheses

Key Activities

What Key Activities do our Value Propositions require?
Our Distribution Channels?
Customer Relationships?
Revenue streams?

CATEGORIES
Production
Problem Solving
Platform/Network

Hypotheses

Key Resources

What Key Resources do our Value Propositions require?
Our Distribution Channels? Customer Relationships?
Revenue Streams?

TYPES OF RESOURCES
Physical
Intellectual (brand patents, copyrights, data)
Human
Financial

Hypotheses

Value Propositions

What value do we deliver to the customer?
Which one of our customer's problems are we helping to solve?
What bundles of products and services are we offering to each Customer Segment?
Which customer needs are we satisfying?

CHARACTERISTICS
Newness
Performance
Customization
"Getting the Job Done"
Design
Brand/Status
Price
Cost Reduction
Risk Reduction
Accessibility
Convenience/Usability

Gain Creators

Products & Services

Pain Relievers

Hypotheses

Customer Relationships

What type of relationship does each of our Customer Segments expect us to establish and maintain with them?
Which ones have we established?
How are they integrated with the rest of our business model?
How costly are they?

EXAMPLES
Personal assistance
Dedicated Personal Assistance
Self-Service
Automated Services
Communities
Co-creation

Hypotheses

Channels

Through which Channels do our Customer Segments want to be reached?
How are we reaching them now?
How are our Channels integrated?
Which ones work best?
Which ones are most cost-efficient?
How are we integrating them with customer routines?

CHANNEL PHASES:
1. Awareness
   How do we raise awareness about our company's products and services?
2. Evaluation
   How do we help customers evaluate our organization's Value Proposition?
3. Purchase
   How do we allow customers to purchase specific products and services?
4. Delivery
   How do we deliver a Value Proposition to customers?
5. After sales
   How do we provide post-purchase customer support?

Hypotheses

Customer Segments

For whom are we creating value?
Who are our most important customers?

Mass Market
Niche Market
Segmented
Diversified
Multi-sided Platform

Gains

Customer Job(s)

Pains

Hypotheses

Cost Structure

What are the most important costs inherent in our business model?
Which Key Resources are most expensive?
Which Key Activities are most expensive?

IS YOUR BUSINESS MORE:
Cost Driven (leanest cost structure, low price value proposition, maximum automation, extensive outsourcing)
Value Driven (focused on value creation, premium value proposition)

SAMPLE CHARACTERISTICS:
Fixed Costs (salaries, rents, utilities)
Variable costs
Economies of scale
Economies of scope

Hypotheses

Revenue Streams

For what value are our customers really willing to pay?
For what do they currently pay?
How are they currently paying?
How would they prefer to pay?
How much does each Revenue Stream contribute to overall revenues?

TYPES:
Asset sale
Usage fee
Subscription Fees
Lending/Renting/Leasing
Licensing
Brokerage fees
Advertising

FIXED PRICING
List Price
Product feature dependent
Customer segment dependent
Volume dependent

DYNAMIC PRICING
Negotiation(bargaining)
Yield Management
Real-time-Market

Hypotheses

INiTS

BEEN THERE – DONE THIS

A PORTABLE DIALYSIS UNIT

HEALTHCARESYSTEM IN AUSTRIA

The Austrian social insurance system

Main Association of Austrian Social Security Institutions		
Accident insurance	Health insurance	Pension insurance
General Accident Insurance Fund (AUVA)	9 Regional Social Health Insurance Funds	Pension Insurance Fund (PVA)
	5 Company Social Health Insurance Funds	
	Social Insurance Fund for the self-employed (trade, commerce, industry)	
Social Insurance Fund for the Austrian Railway and Mining Industries		
Social Insurance Fund for Farmers		
Social Insurance Fund for Public Service Wage and Salary Earners		
		Insurance Fund for Austrian Notaries

The Austrian social insurance system – NEW structure

Umbrella association		
Accident insurance	Health insurance	Pension insurance
General Accident Insurance Fund (AUVA)	Austrian Social Health Insurance Fund (ÖGK)	Pension Insurance Fund (PVA)
Social Insurance Fund for the self-employed (trade, commerce, industry, farmers) (SVS)		
Social Insurance Fund for Public Service Wage and Salary Earners (including Austrian Railway and Mining Industries) (BVAEB)		

https://www.expatica.com/at/healthcare/healthcare-basics/austria-healthcare-79673/

HEALTHCARESYSTEM IN AUSTRIA
The Flow of Money between Healtcare Organisations in A

Abbildung 1:   Akteure und Dienstleistungen des Gesundheitssystems (vereinfachte Darstellung)
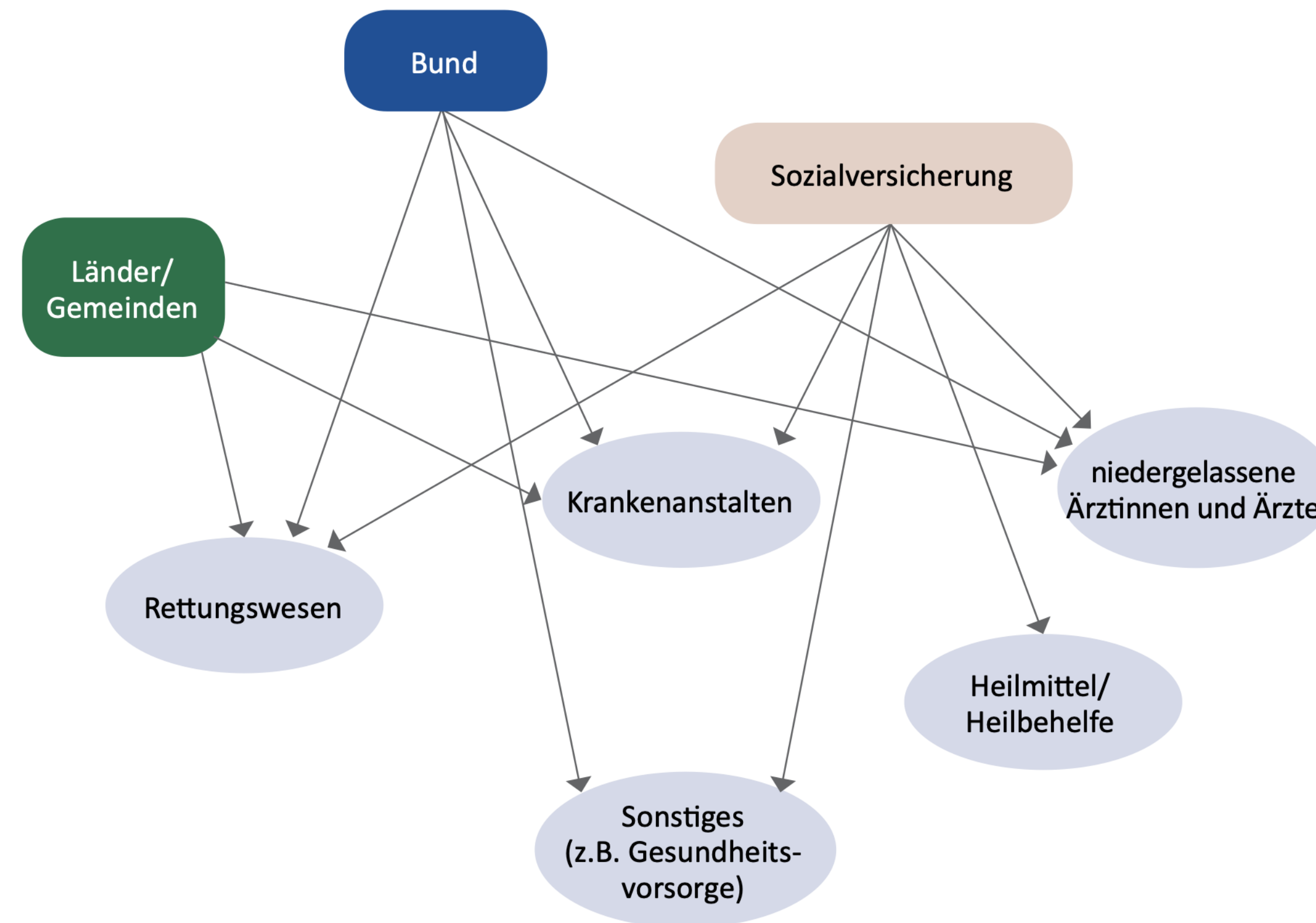
https://www.rechnungshof.gv.at/rh/home/home/Bund_Mittelfluesse_im_Gesundheitswesen_2017_10_1.pdf

HEALTHCARESYSTEM IN AUSTRIA

The Flow of Money between Healtcare Organisations in A

Abbildung 2: Mittelflüsse im Gesundheitssystem (aggregiert)[1,2]
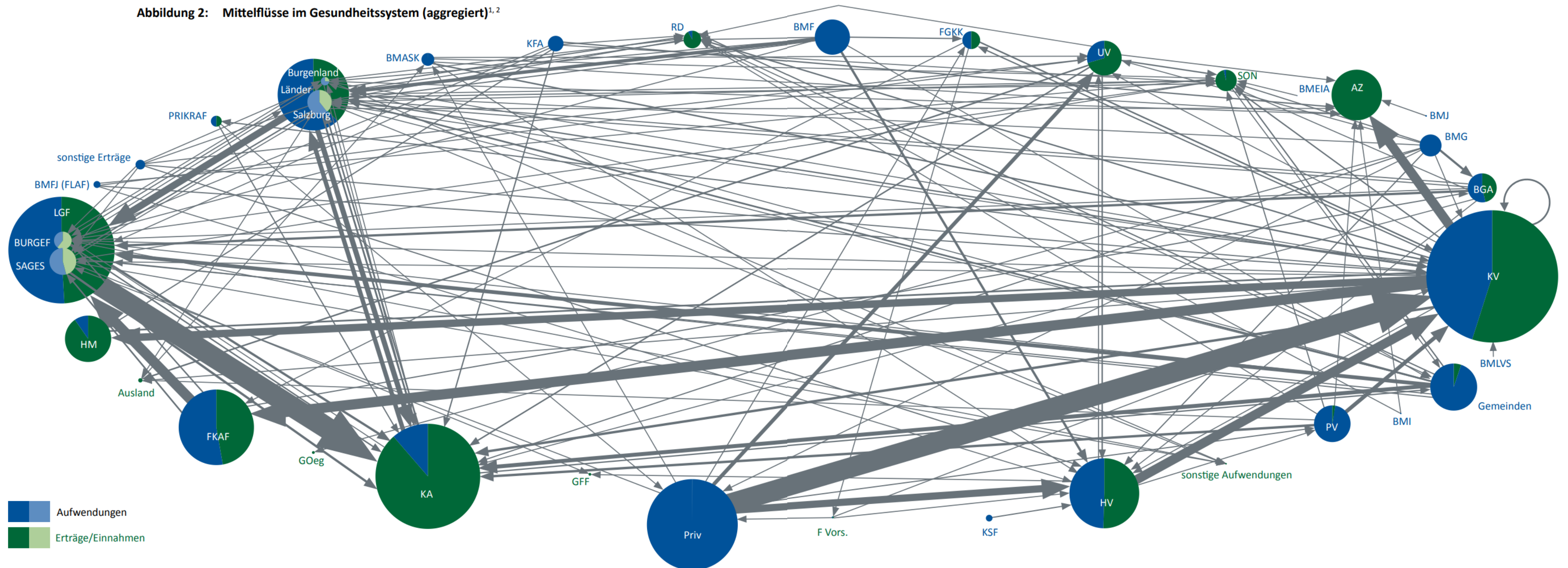
https://www.rechnungshof.gv.at/rh/home/home/Bund_Mittelfluesse_im_Gesundheitswesen_2017_10_1.pdf

HEALTH IMPACT IN AUSTRIA
Auditors Checking Impact of Measures

Abbildung 3:   Maßnahmen Frauengesundheit

Österreichischer
Frauengesundheitsbericht
2010/11

Beschluss Gesundheitsziele
Österreich

Veröffentlichung Aktionsplan
Frauengesundheit

überparteiliche Zustimmung
zu Aktionsplan Frauen-
gesundheit im Nationalrat

1. FrauenGesundheitsDialog

Fortführung
FrauenGesundheitsDialoge

2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021

Einrichtung Focal Points
in Bundesländern

Toolbox
Opferschutz

Gender–Gesundheitsbericht mit dem
Schwerpunkt Psychische Gesundheit

Gesundheit Österreich GmbH
als österreichweiter Focal Point

https://www.rechnungshof.gv.at/rh/home/home/2023-1_Gesundheitsfoerderung.pdf

Quelle: Gesundheitsministerium; Darstellung: RH

HEALTHCARE PROFESSIONALS IN LATVIA 2023

Figure 10. Latvia has fewer doctors and nurses than most EU countries

Practising nurses per 1 000 population

Doctors Low Nurses High

Doctors High Nurses High

Doctors Low Nurses Low

Doctors High Nurses Low

EU average: 8.5

EU average: 4.1

Practising doctors per 1 000 population

https://www.oecd-ilibrary.org/docserver/bf2b15d6-en.pdf
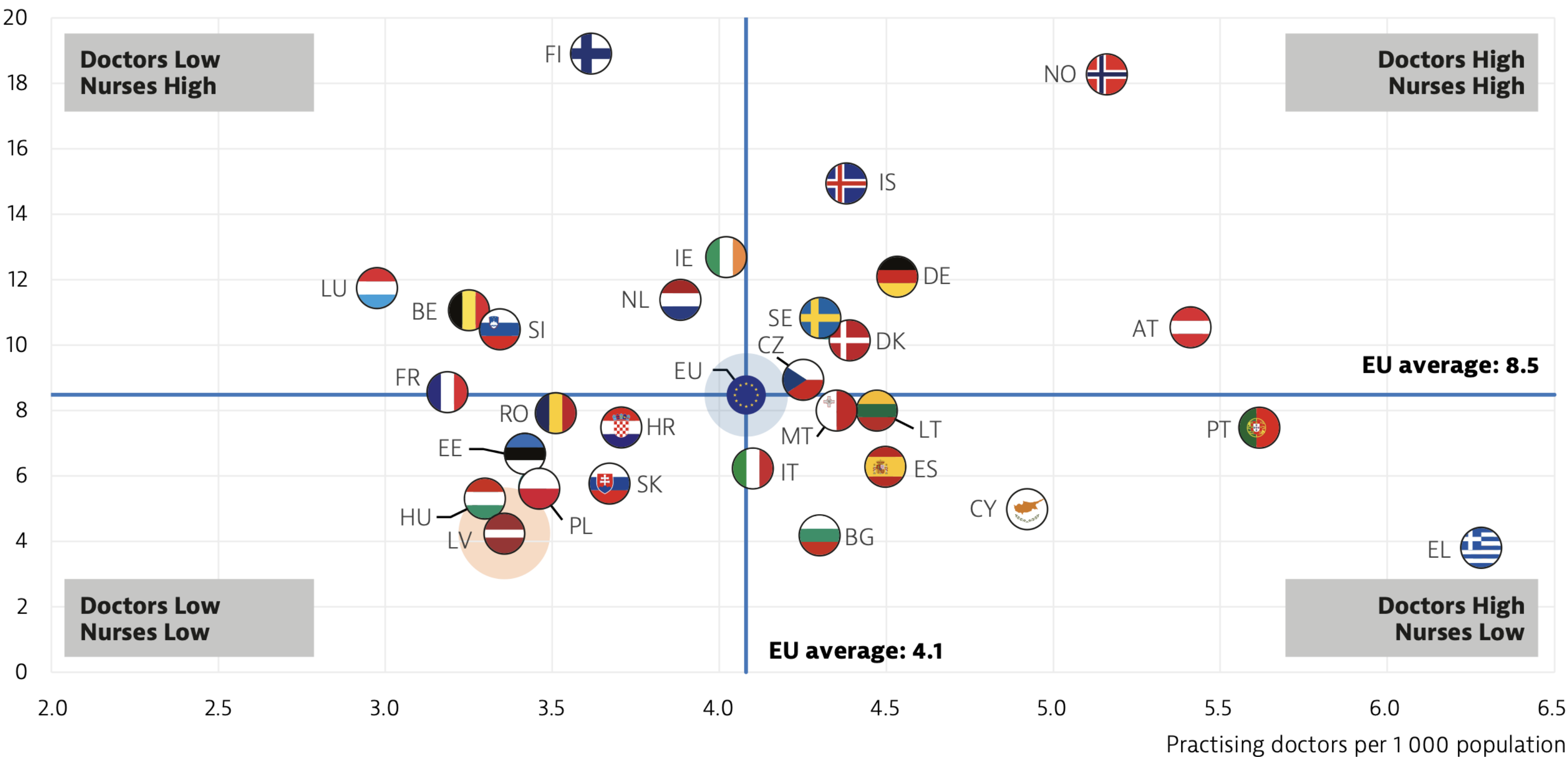
NATIONAL ACTION PLAN - LATVIA

As an example: Alcoholism – two years earlier

Box 1.1. **National Action Plan on the Consumption of Alcoholic Beverages and Limitation of Alcoholism 2020-22**

On 30 July 2020 Latvia's National Action Plan on the Consumption of Alcoholic Beverages and Limitation of Alcoholism 2020-22 was adopted by the Cabinet of Ministers. Under this plan, a number of policies will be implemented:

- Labelling of alcoholic beverages with warnings against drinking while pregnant and when driving, as well as nutrient labels that include the energy content;
- Exploring whether it is possible to reduce the legal blood alcohol concentration limit for all drivers 0.2%;
- Exploring the possibility of reviewing the sales hours of alcoholic beverages, taking into account the experience of other countries;
- Prohibiting the trade promotion activities (like discounts, sales, for buying multiple alcoholic beverages at the same time or purchase of alcoholic beverages together with other products or services with a discount);
- Prohibiting TV, radio, and internet advertising of special offers (sales and discounts) for all alcohol products;
- Exploring whether it is possible to prohibit the sale of alcoholic beverages with over 22% alcohol-by-volume packaged as a single serving intended for immediate consumption;
- The plan also suggests exploring the potential for setting up a public health promotion fund, earmarking 0.5% of excise tax revenue on alcohol, tobacco and gambling and lottery taxes.

Source: Latvian Ministry of Health (2020[13]), *Order of the Cabinet of Ministers No. 412 – Action Plan for Reducing Alcohol Consumption and Limiting Alcoholism 2020-22,* https://likumi.lv/ta/id/316448-par-alkoholisko-dzerienu-paterina-mazinasanas-un-alkoholisma-ierobezosanas-ricibas-planu-20202022-gadam

https://www.oecd-ilibrary.org/docserver/bf2b15d6-en.pdf

HEALTHCARE – LATVIA 2023

Figure 7. Several behavioural risk factors are more prevalent in Latvia than in most EU countries

- Smoking (adolescents)
- Smoking (adults)
- Fruit and vegetable consumption (adults)
- Drunkenness (adolescents)
- Vegetable consumption (adolescents)
- Heavy drinking (adults)
- Fruit consumption (adolescents)
- Overweight and obesity (adolescents)
- Physical activity (adults)
- Obesity (adults)
- Physical activity (adolescents)

https://www.oecd-ilibrary.org/docserver/bf2b15d6-en.pdf
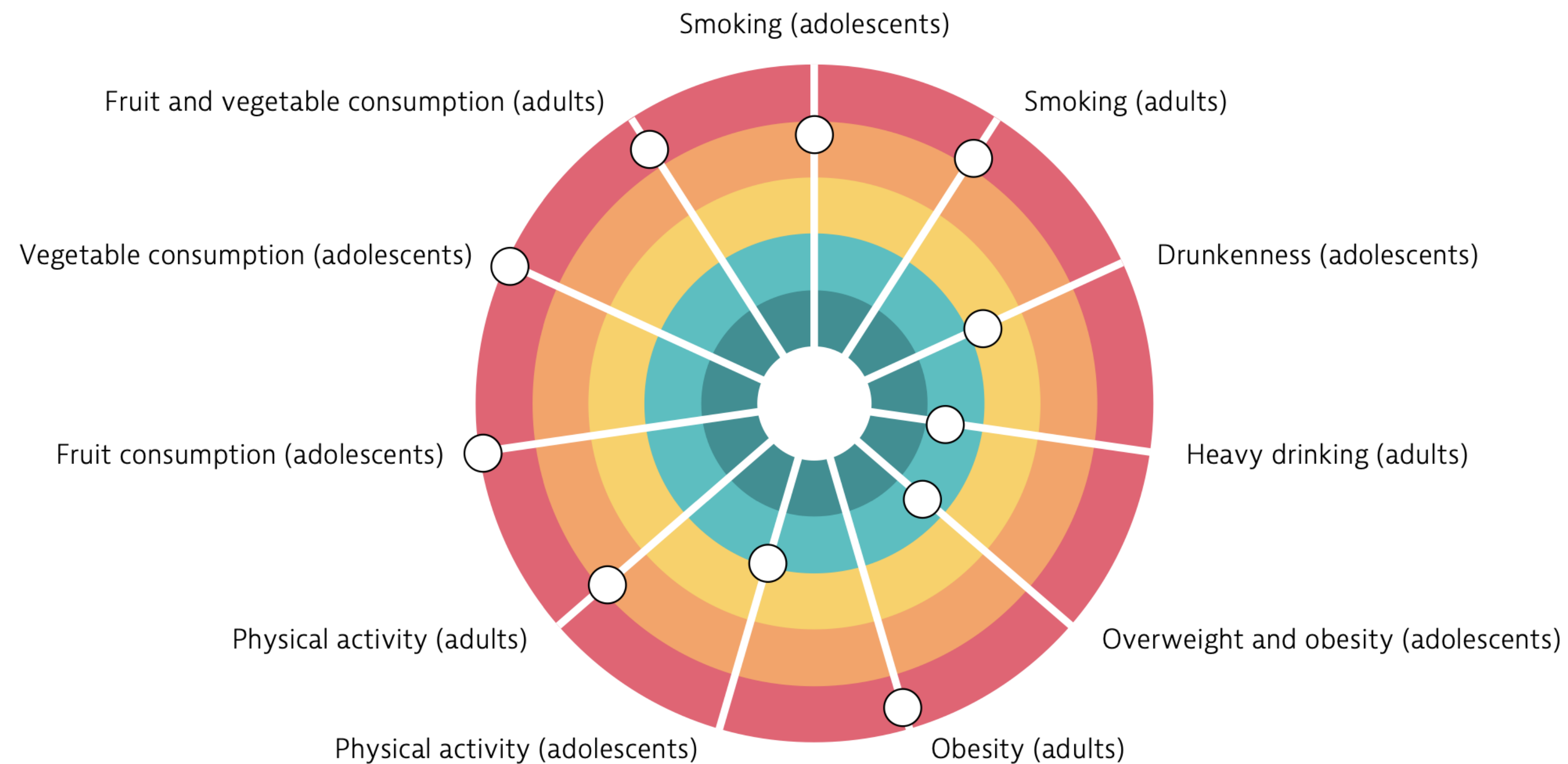
HEALTH AT A GLANCE - BY OECD

Risk factors might point you to where to get started

Figure 1.3. Risk factors for health across the OECD, 2021 (or nearest year)

	LOW	OECD	HIGH	LARGEST IMPROVEMENT
Smoking Daily smokers (% population aged 15+)	Iceland 7.2	16.0	Türkiye 28.0	Norway -9.0 (53%) Estonia -8.3 (32%) Ireland -8.0 (33%)
Alcohol Litres consumed per capita (population aged 15+)	Türkiye 1.4	8.6	Latvia 12.2	Lithuania -2.6 (18%) Ireland -2.2 (19%) France -1.9 (15%)
Obesity Population with BMI ≥ 30 (% population aged 15+)	Korea 4.3 (7*)	19.5	United States 33.5 (42.8*)	Spain -1.7 (10%) Greece -0.9 (5%)
Air pollution Deaths due to pollution (per 100 000 population)	Iceland 5	29	Poland 73	Latvia -30.2 (34%) United Kingdom -28.4 (57%) Estonia -25.3 (68%)

HEALTH AT A GLANCE - BY OECD

Safer prescribing can help combat the looming threat of antimicrobial resistance

Volume of antibiotics prescribed, 2011 and 2021, Defined daily doses per 1 000 population per day

France
Italy
Korea
OECD   2021   2011
Finland
Slovenia
Germany
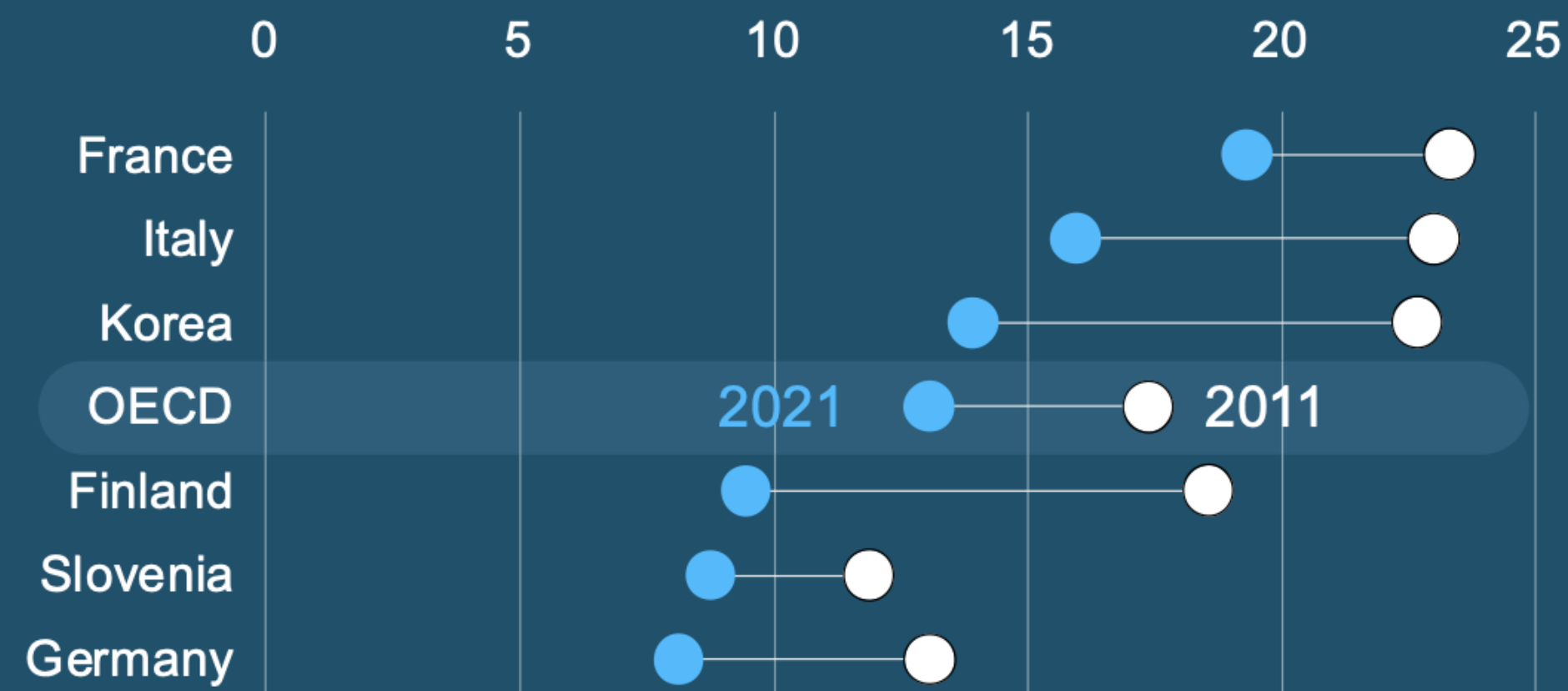
Antibiotic prescriptions have fallen in 90% of OECD countries, but antimicrobial resistance is still a major concern, and is projected to cost about USD PPP 26 per person annually.

Many countries are ill-prepared for a digital health transformation

Almost 90% of responding OECD countries reported having an online health portal in place. However, only 42% reported that the public could both access and interact with all their health data through the portal.

PATIENT PORTAL

42%
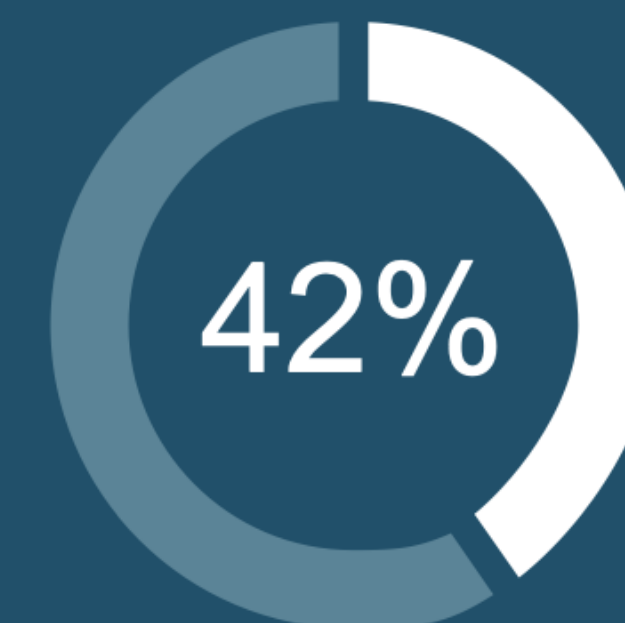
HEALTH AT A GLANCE - BY OECD

Health systems are under financial pressure

Annual real growth in health expenditure and GDP, per capita, OECD average, 2016 - 2022
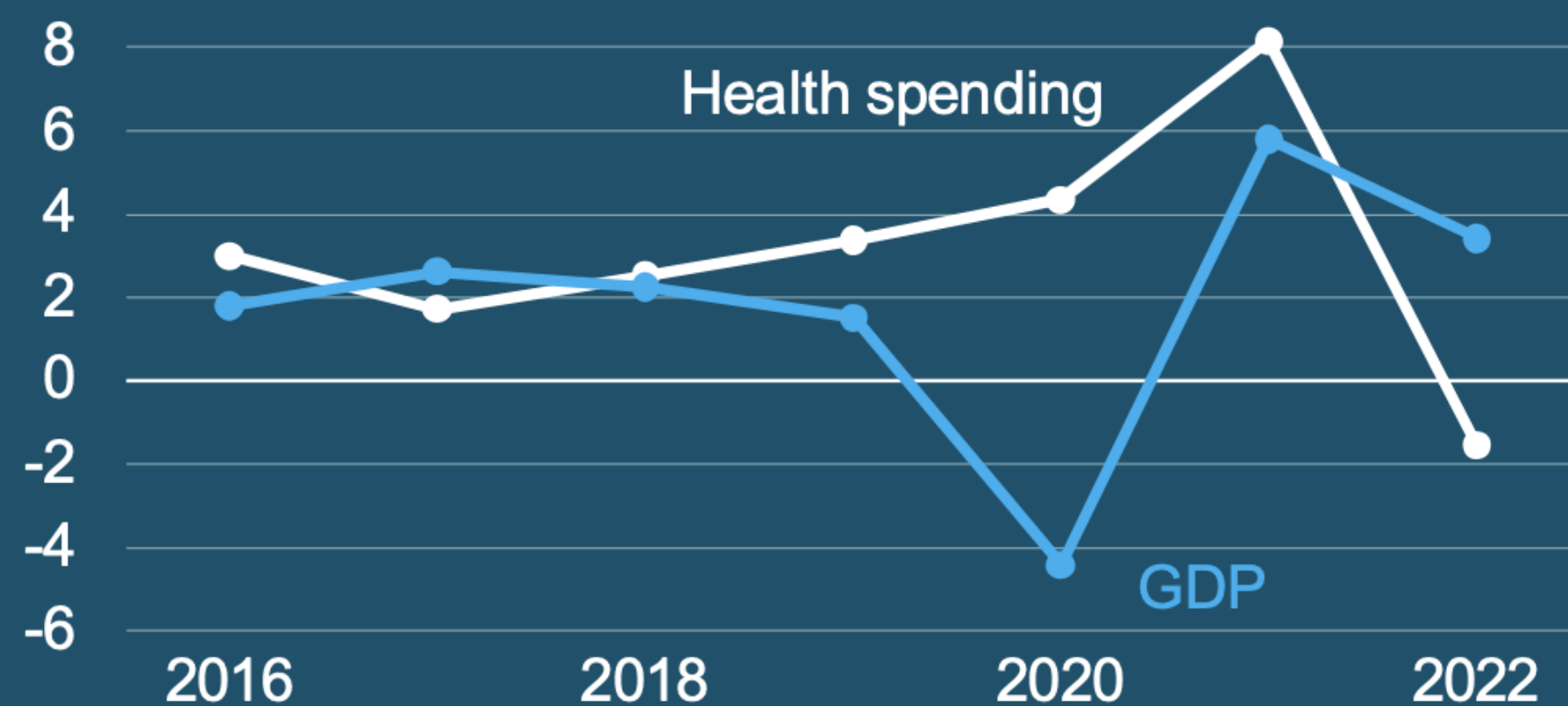
Health spending as a share of GDP fell in 2022 compared to 2021 in 33 of 38 OECD countries.

Mental health has still not recovered from the pandemic

National estimates of prevalence of depression or symptoms of depression, %, 2019 - 2022 (or nearest year)
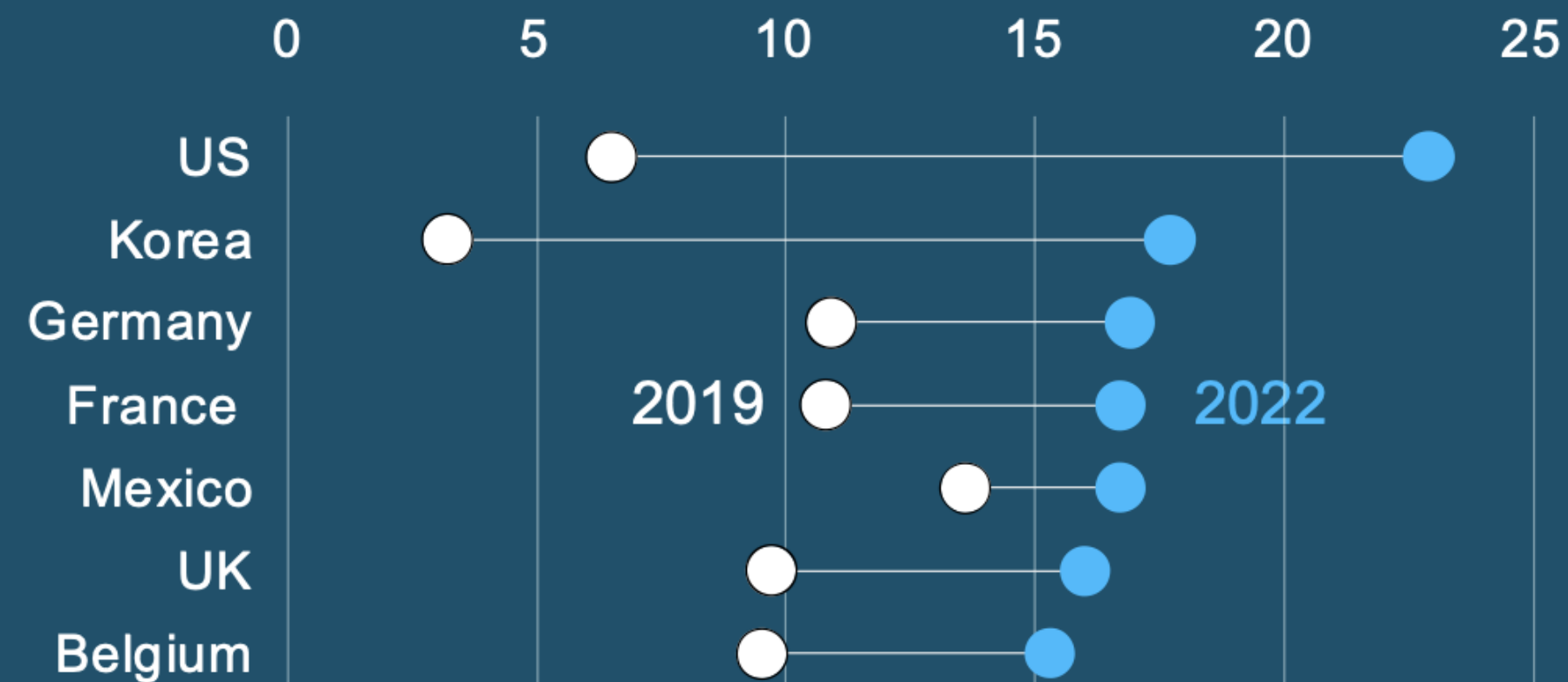
Levels of anxiety and depression have improved slightly in some countries, but still remain much higher than pre-pandemic levels.

DIGA – A NEW BLUEPRINT IN EU

https://diga.bfarm.de/de/verzeichnis

HEALTHCARE AT A GLANCE
Plenty of Resources – at least for Information

https://www.oecd.org/en/topics/sub-issues/health-workforce.html

HEALTCARE SYSTEM CROATIA
OECD analysis

Health system

Health expenditure per capita, at EUR 1 272, was among the lowest in the EU in 2017, where the average was EUR 2 884. Croatia devotes 6.8 % of its GDP to health compared to an EU average of 9.8 %. Nevertheless, the share of public expenditure, at 83 %, is above the EU average. The benefit package is broad, but services require co-payments, for which many Croatians take out voluntary health insurance. Overall, out-of-pocket payments, excluding voluntary health insurance, accounted for 10.5 % of health expenditure in 2017, below the EU average of 15.8 %.

Per capita spending (EUR PPP)

Effectiveness

Weak intersectoral policies to address key determinants of ill health contribute to high rates of deaths from preventable and treatable causes. The quality of care is also an issue, which a national strategy is trying to address.

Preventable mortality — 232
Treatable mortality — 140

Age-standardised mortality rate per 100 000 population, 2016

Accessibility

Self-reported access to health care is good, with low unmet needs for medical care. However, there is substantial variation between income groups and unmet needs are high among older people. Geographical distance is also an access barrier.

● High income ● All ● Low income

% reporting unmet medical needs, 2017

Resilience

The small pool of social health insurance contributors, combined with high hospital debt levels, raise concerns about the financial sustainability of the health system. Strengthening governance and building support among stakeholders will be crucial to implementing reforms.

State of Health in the EU · Croatia · Country Health Profile 2019   3

https://www.oecd.org/publications/croatia-country-health-profile-2019-b63e8c9f-en.htm
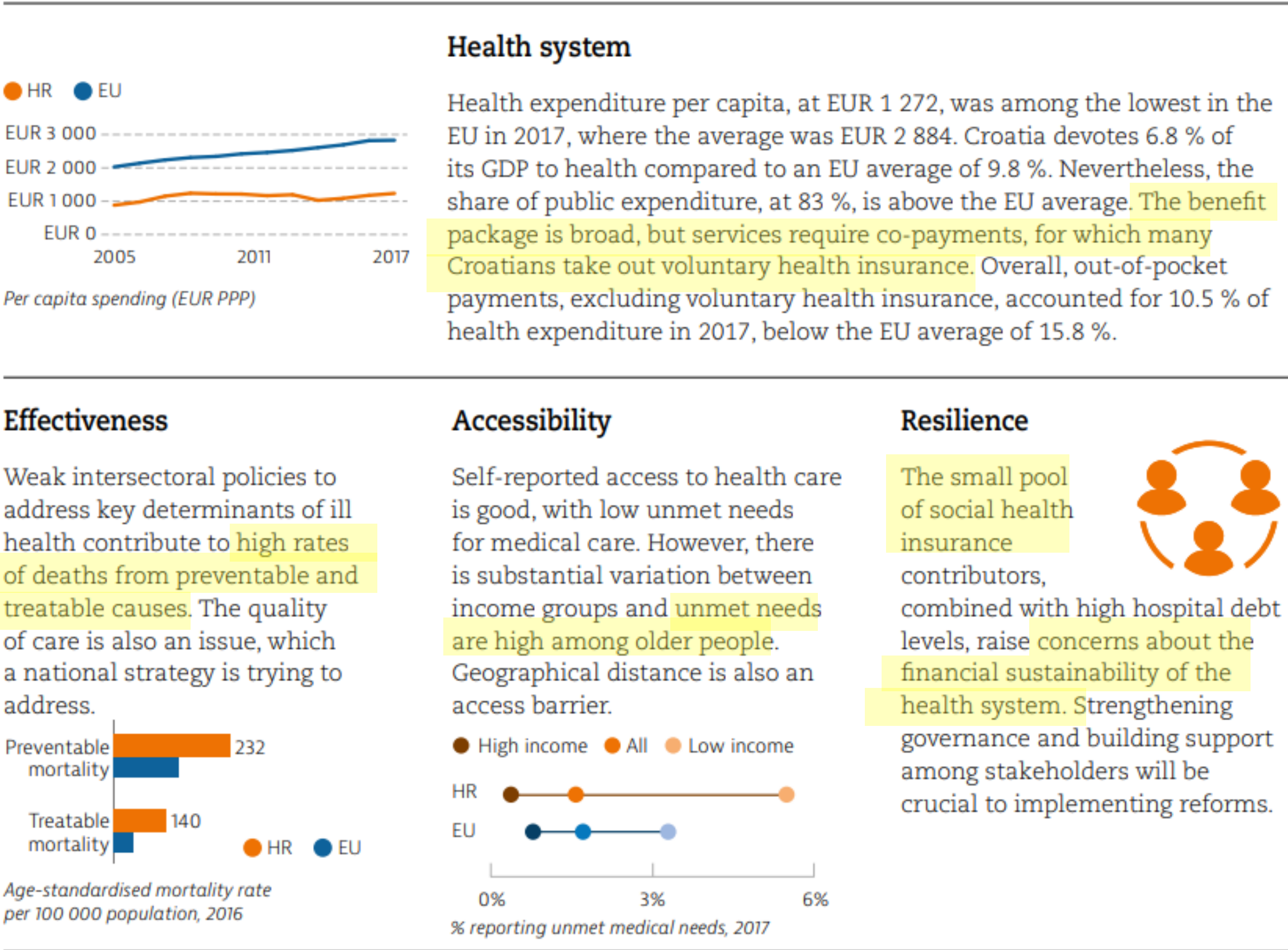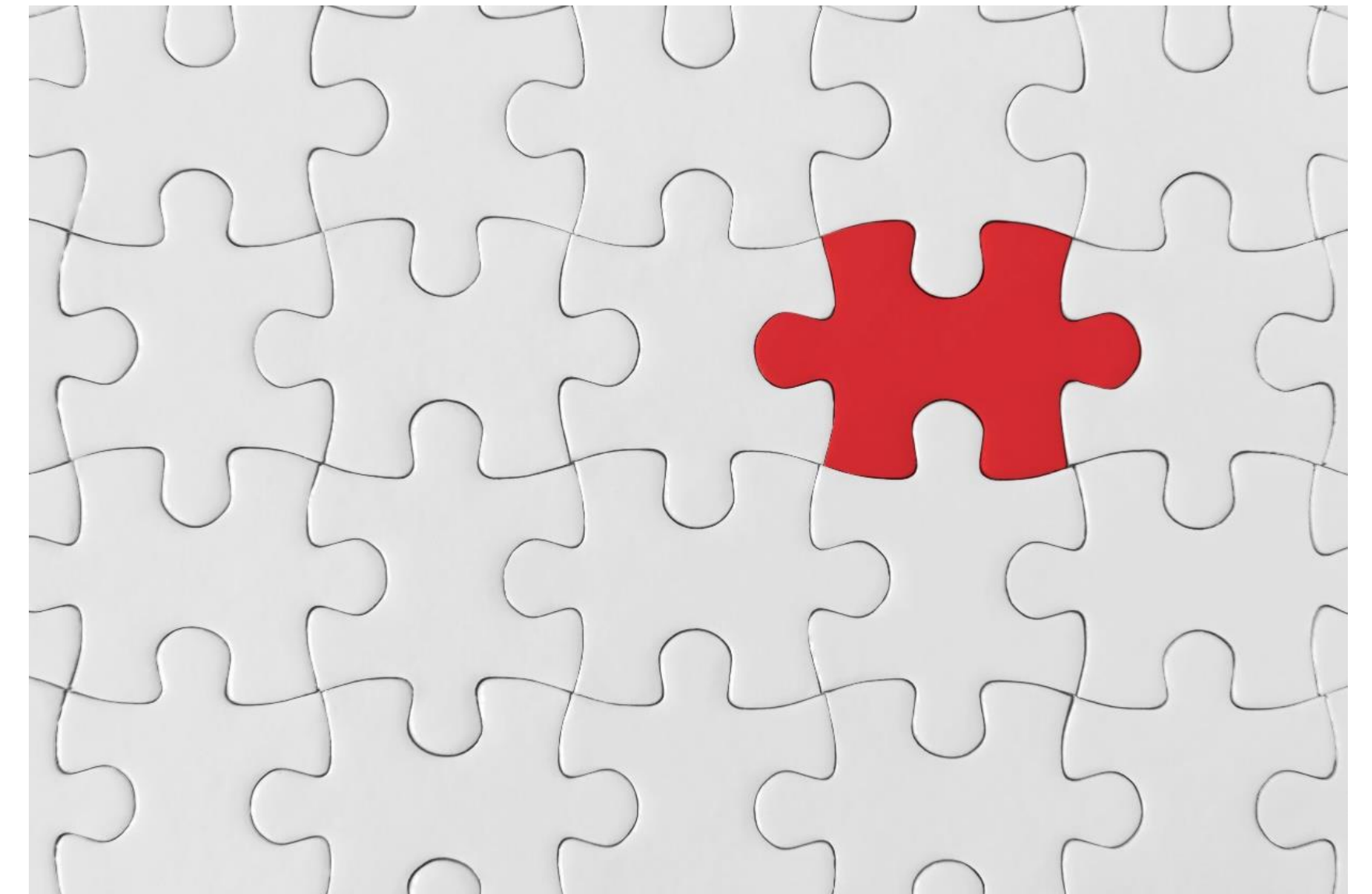
BUSINESS MODELS EMERGING (?)

The Strings Attached in Healthcare (by far not complete)

- Regulatory strings
  - EMA, FDA, regional bodies, ..
  - Ethics commissions
  - Clinical trials
  - MDR
  - …
- Legal strings
  - Patient protection
  - Regulations for professions (MDs, pharmacies, nurses, ..)
  - Regulations and rules in organisations (hospitals, nursing homes, ….)
  - National/regional regulations about e.g. genetherapy, sequencing, …..
  - Rules and regulations about data storage, access and ownership
  - Insurance law (private AND social insurances)
  - …..
  - PLUS all the others founders in other industries face, e.g. GDPR

YOUR JOB TO SCALE

- Define the missing puzzle piece you fill in
- Know your rules
- Talk to (national) experts
  - Use pyramiding
- Understand who really is YOUR customer
- Understand possible network effects
- Identify ambassadors and their motivation
- Find partners

YOUR JOB TO SCALE

- Define the missing puzzle piece you fill in
- Know your rules
- Talk to (national) experts
  - Use pyramiding
- Understand who really is YOUR customer
- Understand possible network effects
- Identify ambassadors and their motivation
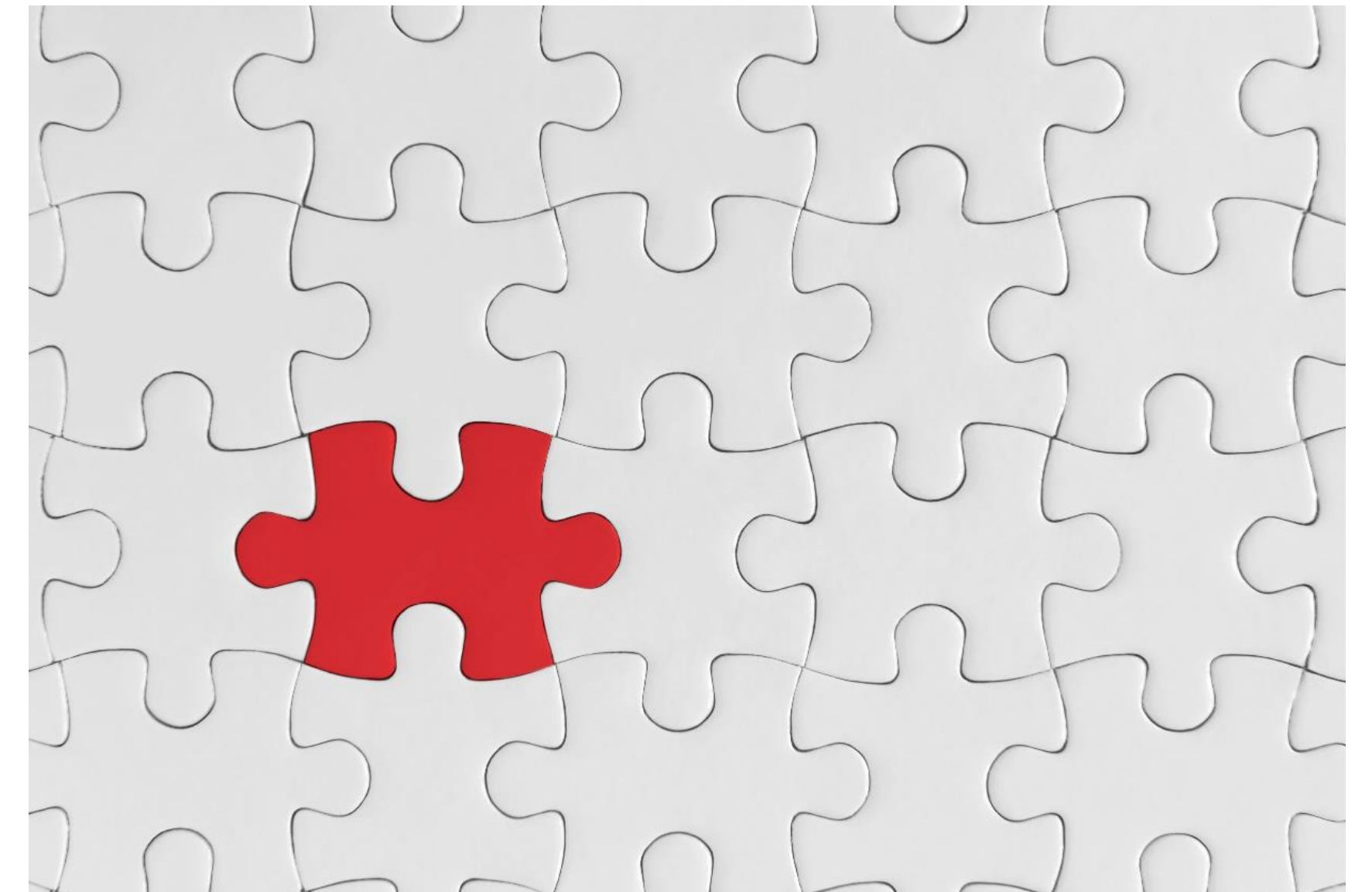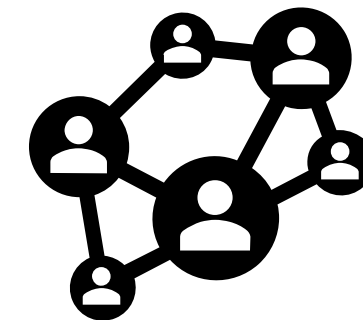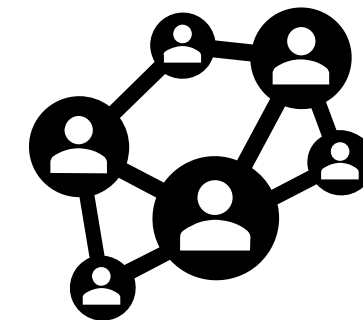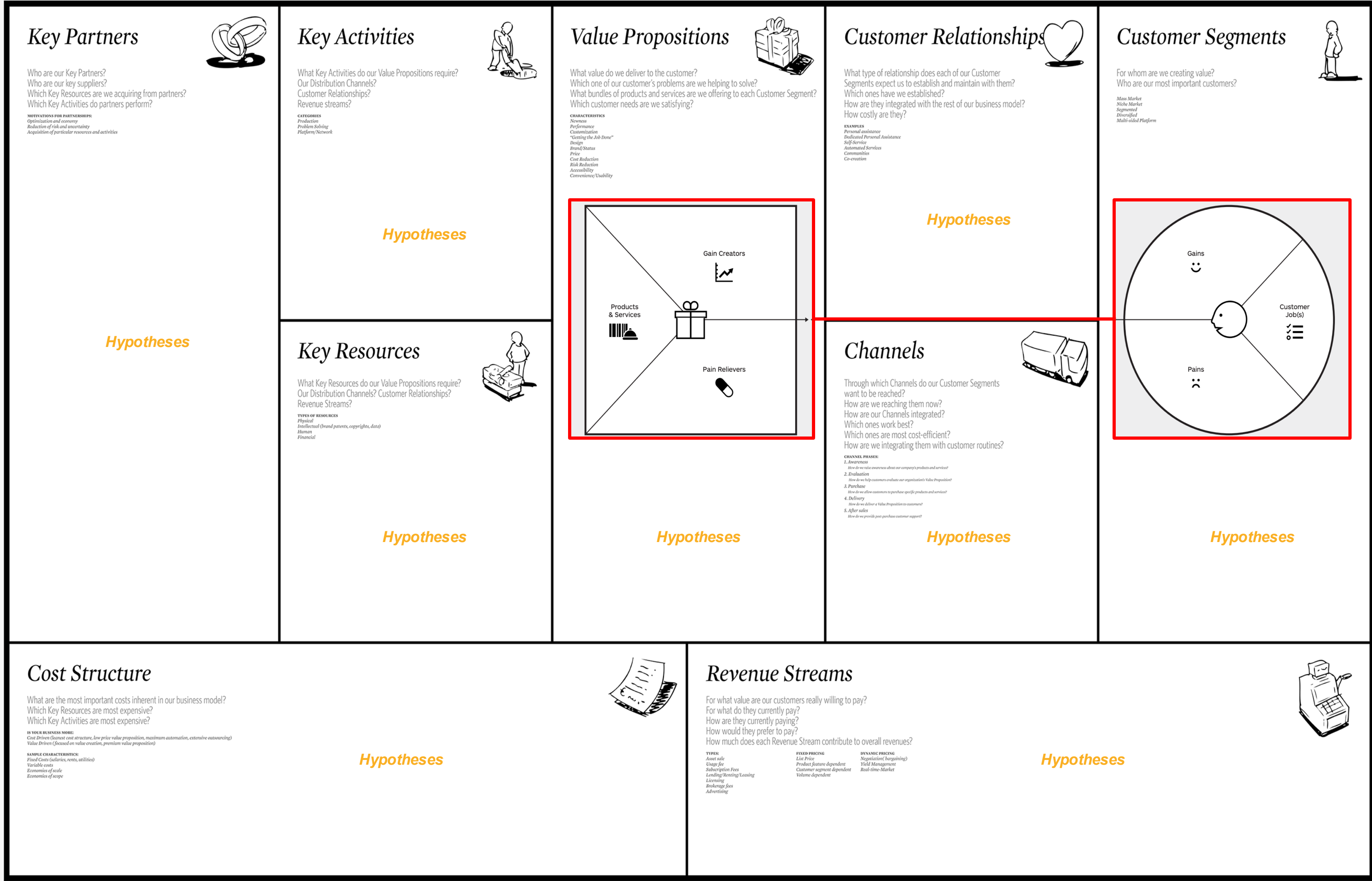- Find partners

YOUR JOB TO SCALE

- Define the missing puzzle piece you fill in
- Know your rules
- Talk to (national) experts
  - Use pyramiding
- Understand who really is YOUR customer
- Understand possible network effects
- Identify ambassadors and their motivation
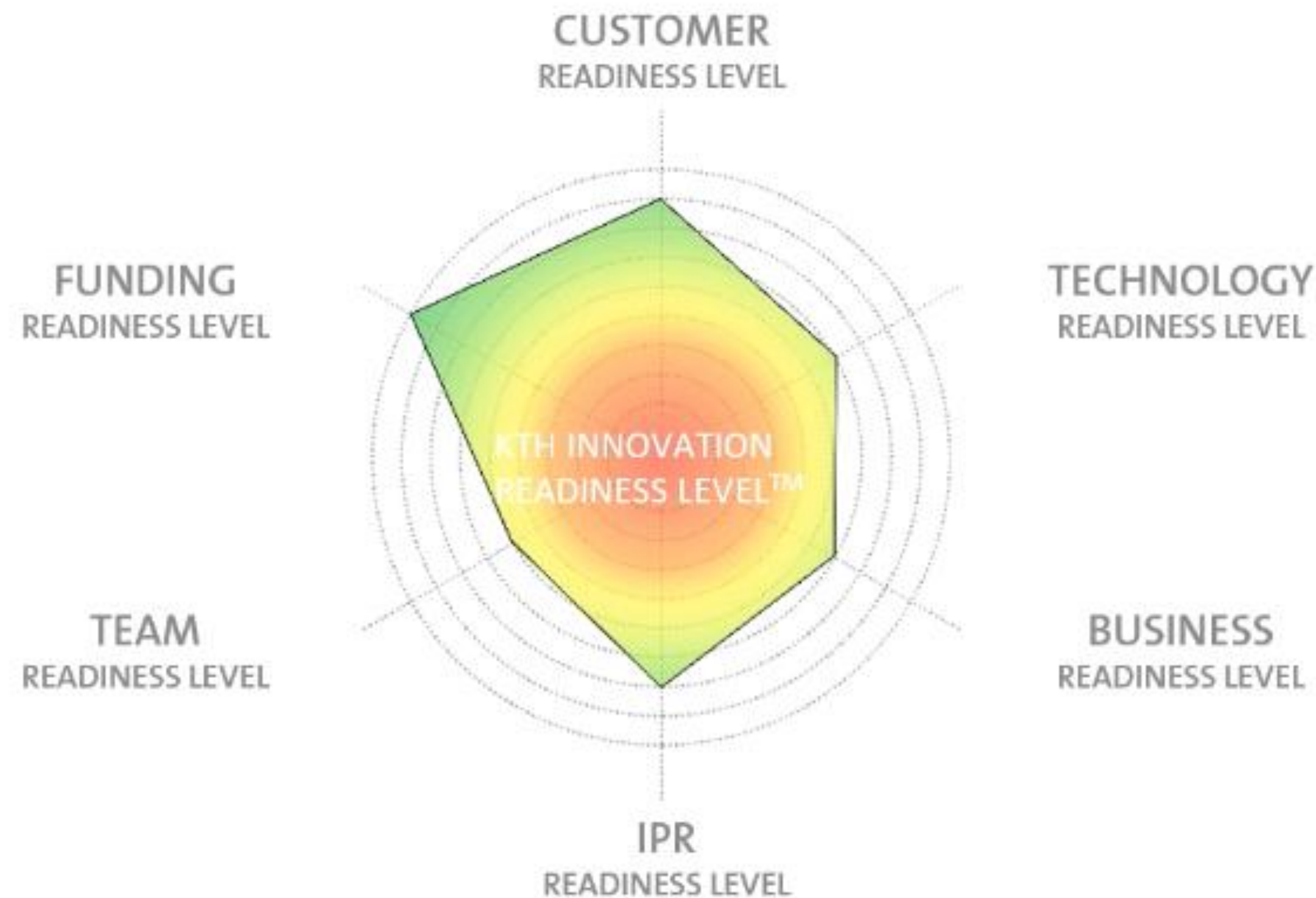- Find partners

eit Health

Key Partners

Who are our Key Partners?
Who are our key suppliers?
Which Key Resources are we acquiring from partners?
Which Key Activities do partners perform?

MOTIVATIONS FOR PARTNERSHIPS:
Optimization and economy
Reduction of risk and uncertainty
Acquisition of particular resources and activities

Hypotheses

Key Activities

What Key Activities do our Value Propositions require?
Our Distribution Channels?
Customer Relationships?
Revenue streams?

CATEGORIES
Production
Problem Solving
Platform/Network

Hypotheses

Key Resources

What Key Resources do our Value Propositions require?
Our Distribution Channels? Customer Relationships?
Revenue Streams?

TYPES OF RESOURCES
Physical
Intellectual (brand patents, copyrights, data)
Human
Financial

Hypotheses

Value Propositions

What value do we deliver to the customer?
Which one of our customer's problems are we helping to solve?
What bundles of products and services are we offering to each Customer Segment?
Which customer needs are we satisfying?

CHARACTERISTICS
Newness
Performance
Customization
"Getting the Job Done"
Design
Brand/Status
Price
Cost Reduction
Risk Reduction
Accessibility
Convenience/Usability

Gain Creators

Products & Services

Pain Relievers

Hypotheses

Customer Relationships

What type of relationship does each of our Customer Segments expect us to establish and maintain with them?
Which ones have we established?
How are they integrated with the rest of our business model?
How costly are they?

EXAMPLES
Personal assistance
Dedicated Personal Assistance
Self-Service
Automated Services
Communities
Co-creation

Hypotheses

Channels

Through which Channels do our Customer Segments want to be reached?
How are we reaching them now?
How are our Channels integrated?
Which ones work best?
Which ones are most cost-efficient?
How are we integrating them with customer routines?

CHANNEL PHASES:
1. Awareness
   How do we raise awareness about our company's products and services?
2. Evaluation
   How do we help customers evaluate our organization's Value Proposition?
3. Purchase
   How do we allow customers to purchase specific products and services?
4. Delivery
   How do we deliver a Value Proposition to customers?
5. After sales
   How do we provide post-purchase customer support?

Hypotheses

Customer Segments

For whom are we creating value?
Who are our most important customers?

Mass Market
Niche Market
Segmented
Diversified
Multi-sided Platform

Gains

Customer Job(s)

Pains

Hypotheses

Cost Structure

What are the most important costs inherent in our business model?
Which Key Resources are most expensive?
Which Key Activities are most expensive?

IS YOUR BUSINESS MORE:
Cost Driven (leanest cost structure, low price value proposition, maximum automation, extensive outsourcing)
Value Driven (focused on value creation, premium value proposition)

SAMPLE CHARACTERISTICS:
Fixed Costs (salaries, rents, utilities)
Variable costs
Economies of scale
Economies of scope

Hypotheses

Revenue Streams

For what value are our customers really willing to pay?
For what do they currently pay?
How are they currently paying?
How would they prefer to pay?
How much does each Revenue Stream contribute to overall revenues?

TYPES:
Asset sale
Usage fee
Subscription Fees
Lending/Renting/Leasing
Licensing
Brokerage fees
Advertising

FIXED PRICING
List Price
Product feature dependent
Customer segment dependent
Volume dependent

DYNAMIC PRICING
Negotiation(bargaining)
Yield Management
Real-time-Market

Hypotheses

INiTS

WATCH AND BUILD READINESS!!

https://kthinnovationreadinesslevel.com

GUIDANCE AND STRUCTURE

The model provides generic steps and standard questions that need to be addressed and provides support for both coaches and idea owners throughout the process.

USEFULL SOURCES
A Small Selection

- https://health.ec.europa.eu/rare-diseases-and-european-reference-networks/european-reference-networks_en

- https://www.who.int/europe/publications

- https://www.oecd-ilibrary.org/social-issues-migration-health/data/oecd-health-statistics_health-data-en

- https://www.statistik.at/en/medien/release-calendar, https://www.dzs.hr/en or https://stat.gov.lv/en (and all other national statistics organisations)

- https://health.ec.europa.eu/index_en

- ….

Use the trust of your audience in such sources!!

SPINOFF KNOWHOW SINCE 2002
YOUR QUESTIONS, PLEASE!

INITS | VIENNA'S HIGH-TECH INCUBATOR

> FOR STARTUPS   > FOR INVESTORS   > FOR ACADEMIA   > FOR CORPORATES

THANK YOU!!