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SOCIAL INNOVATIONS AND E-HEALTH BUSINESS MODELS

MOTIVATION AND THE MARKET POTENTIAL

Ageing population

The longer people live, the more healthcare services they require

BY 2050 PEOPLE OVER 60 TO INCREASE BY MORE THAN 1 BILLION (United Nations)

Rising number of chronic patients and long-term conditions

By 2030 there will be 171 million persons with chronic conditions in the US

Over one third of the European population above the age of 15 have a chronic disease (WHO).

Rising demand for long-term treatment and routine checks

Healthcare budget challenges

Rising cost for long-term treatment and routine checks

Patients want to proactively manage their condition and match it to their lives and careers

Many cancellations (ca 20% of all bookings)

Care given at home

Maintain or increase care delivery quality

Shortage of staff — long waiting times

Physician visit is ca 20 minutes

Different policies related to participation of patients, safety

Technological innovations

Rapid growth health IT

Mobile device

Tele-health

Cloud and exchanges

SOCIAL INNOVATIONS AND DIGITAL COORDINATION

- Many countries in Europe develop strategies to foster the use of e-Health services and develop a systems centric knowledge two side market

- Business models are perceived as important:
  - Achieve a sustainable implementation and use of social innovations
  - Develop cost- effectiveness at the organizational level

THE NEW INNOVATION PARADIGM

- **This implies an increasing importance of social innovation as compared to technological innovation**
  - *several challenges that has to be over-win to develop sustainable business models*

From single to complex ecosystems

Innovations (EHR) Single market				**Social innovation (Digital patient)**		
Technological innovations economic effectiveness		One single application/enterprise		**Social innovations in business, civil society, state**		
Information/ organizations	Process	Quality	Costs Control	**Participation Collective expertise**	**Procedures**	**Behaviours**

Partnership between governement ,non-profits and/or private organizations, academia, and all levels of government

social in both their ends and their means – new ideas, products, services and models that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations. (02/02/2015 EU)

Changing roles: Buyers and Sellers / Sellers and Sellers/ Buyers and Buyers

Buyers and sellers transact business. A market exists whenever there is buying and selling
The law of Demand. *As price increases the quantity demanded will decrease and as price decreases the quantity demanded will decrease*

Society becomes an annex to the economy and market forces
Individual participation
collaboration of stakeholders
Interdisciplinarity

The Market
Products and Services
Price (demand and

Society/Consumers

Public sector
Society
Non-profit
Taxes
Reimbursements

Environment

Society/Co-producers

Co-production
Social challenges
Goods, services, products , models
Patients understand his/her health issue

Goods, services ,products or models
That meet social needs
(more effectively
than alternatives) and create
new social relationships or
Collaborations
Social innovations are new practices
for resolving societal challenges,
which are adopted and utilized by the individuals,
social groups and organizations concerned

A SOCIETAL INNOVATION: A NATIONAL HEALTH ACCOUNT

- Initiative from the Swedish Ministry of Health and Social Affairs
- An “account” where all citizens can save, overview and manage health information
  - Personal identity
  - Electronic signature
- Third-party applications can be connected to the account
  - Fitness, relatives, alternative medicine, primary and specialized care
- The Swedish eHealth Agency will certify third-parties according to ethical and technical requirements

VIRTUAL AND DIGITAL

Individual Information

Demographic Profile





Born: 1966

Health Habit Profile



- Self-assessments
- Tracking
- Usage pattern
- Social network

Personalization Profile



Surveillance
Alerts prevent
Real time information
Big data
Reduce incidence or progression of chronic diseases
Nearly patients

Tools for Self-Management
(Mobile, Web & Email)

Interactions with HC

- Messages
- Health tips
- Questions

Engagement Tools

- Biometric feedback





- Incentives
  - Carrots
  - Sticks





- Friends & Community



- Competition



Health Behaviors & Measurable Outcomes

Engagement Profile

- Biometric trends
- Health habit modifications
- Self-tracks most days





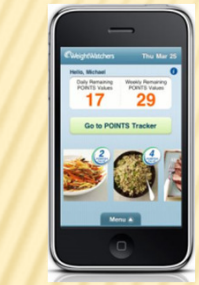


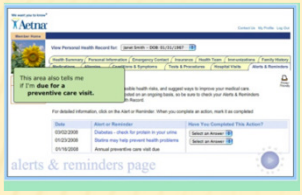
Outcomes

- Weight
- Blood sugar
- Blood pressure
- Physical activity
- Self assessment responses
- Reallocation of resources
- Improve outcomes and life quality

Interactions tailored at increasingly personal levels as more data is collected over time

BUSINESS MODELS FOR OUTSIDE AND INSIDE PROVIDERS/SUPPLIERS/CUSTOMERS





AetnaPersonal Health record



Healthrageous



Chronic Care Management



Asthmapolis



mySymbicord



Heartwise

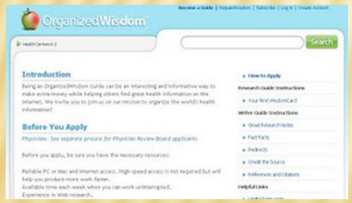




WellApps

Education





Organized Wisdom



Pregnancy

Adherance



CVS / Walgreens Application for Refills



Refill by Scan



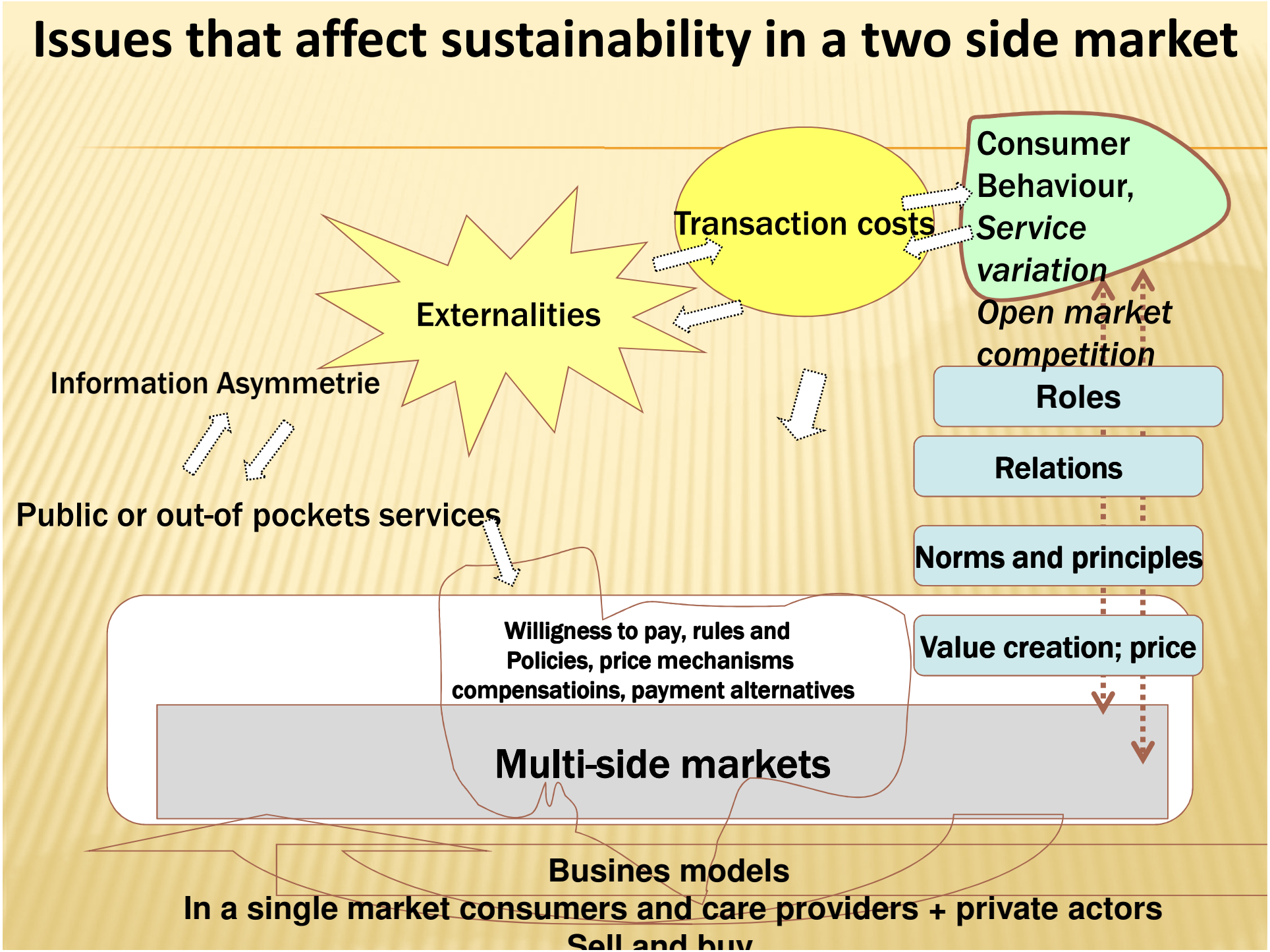
Pill Phone

BUSINESS MODELS:

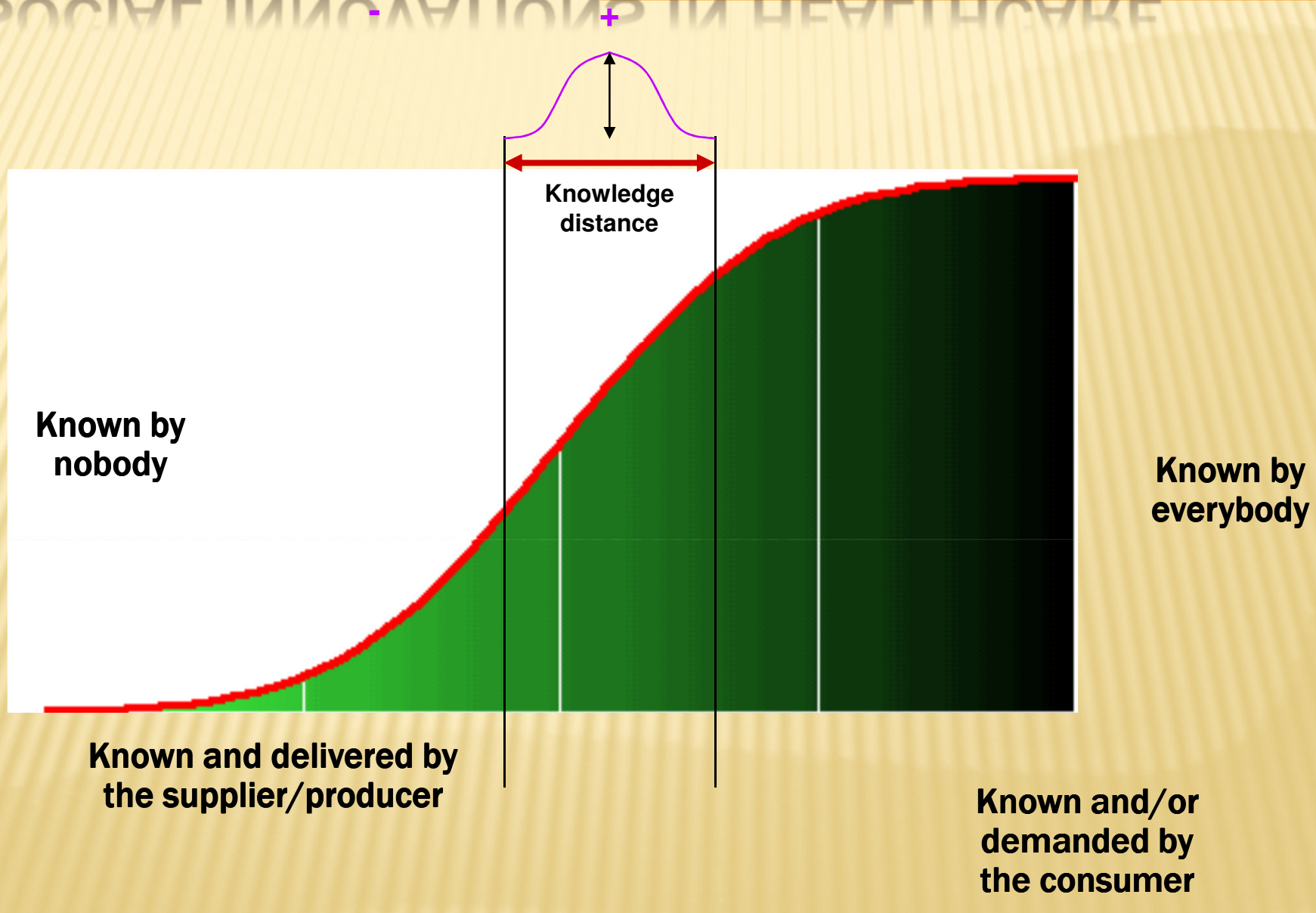
THE PLAN IMPLEMENTED BY A COMPANY TO GENERATE REVENUE AND MAKE A PROFIT FROM OPERATIONS. THE MODEL INCLUDES THE COMPONENTS AND FUNCTIONS OF THE BUSINESS, AS WELL AS THE REVENUES IT GENERATES AND THE EXPENSES IT INCURS

- Crowdsourcing
  - on e-collaboration and e-participation
  - selling users a service rather than product
- Social Networking,
  - online collaboration and file sharing and public participation and collaboration.
  - to influence consumer opinions and behaviors
- Mashup,
  - interactive web-based model application hybrid that combines data and content from the third party sources, resulting in new and distinct information (Wikipedia)
- Product customization,
  - *customized products and services*
  - customer can be directly involved in designing the products and purchasing products
- Open Market
  - an individual do business as buyers and sellers
    - Subscription
    - Two tariff principle

Issues that affect sustainability in a two side market



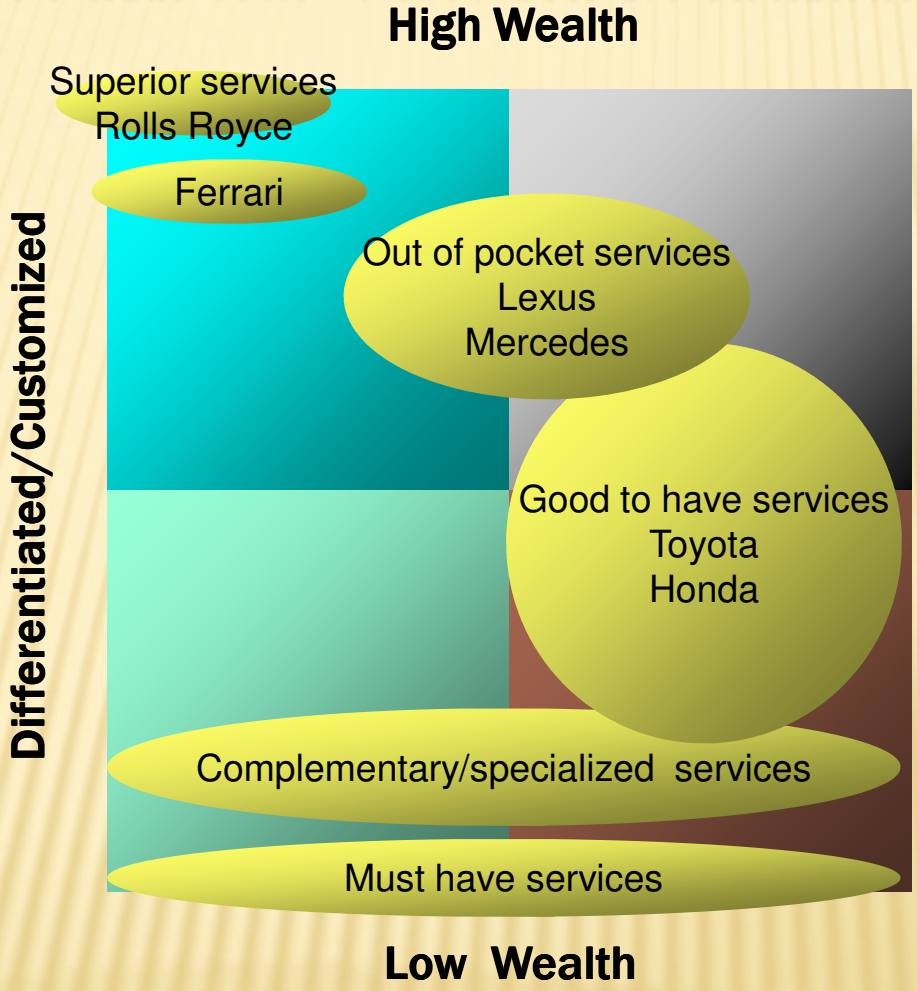
SOCIAL INNOVATIONS IN HEALTHCARE



KNOWN BY EVERYBODY?

Prerequisites	Users / Citizens	Care provider	Entrepreneur / Private actors
Knowledge about the health account and added services	x		
Service quality and trust	x		
Clear use of expression and concepts		x	
Lab results are shared with the patient		x	
Shared access to patient data		x	
Quality of data gathering		x	
An open market that allows actors to compete			x
Clear guidelines concerning certification and rules			x
A new view of doing business, innovative business models and payment alternatives			x

INFORMATION ASSYMETRIE / TC/ AGENT PRINCIPAL



ASSYMETRIC KNOWLEDGE

- Customers often lack reference prices for service
- Service variability limits knowledge
- Collection of price information by customers is difficult
- Why to pay twice?
- Temporary or permanent?
- Reallocation of resources

BUSINESS MODELS AS A COMPLEMENT : P4 ALL

- Social innovations unclear value

1. **Revenue stream** – How revenue is generated and its frequency
2. **Distribution channel** – The required mechanism for getting the innovation into customers' hands. Who push the bottom ?
3. **Price** – How much the business/organization can charge for its products or services
4. **Competitive differentiation** – The degree to which the innovation is unique
5. **Intellectual property (IP)** – The importance of IP protection to the success of the business model.
6. **Other barriers to entry** – Factors that could serve as barriers to adoption (e.g., high switching cost, bran or customer loyalty, access to distribution channels, etc.).
7. **Training requirements** – The extent to which specialized training is required to utilize the innovation.
8. **Clinical hurdles** – The complexity and duration of the clinical requirements that need to addressed in order to commercialize the innovation.
9. **Financial requirements** – The level of investment necessary to develop and commercialize the innovation.
10. **Risk/liability** – The level of risk to all stakeholders from either adopting of failing to adopt the innovation

Thank you for your attention

QUESTIONS ?