Business Modelling Panel

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PANEL Digital Society Trends: Business modelling for design & implementation of Healthcare Technology

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The Netherlands
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South Africa
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Panel procedures

- Self-Introduction of panelists
- Short propositions
- Discussion-statements
  - Response from the audience
  - Response from the panel
  - Interaction between/among panel and audience
Business models and eHealth (Maarten)

- A Business model is ‘the rationale of how an organization creates, delivers and captures value’.

- Going from ‘traditional healthcare services’ to eHealth services requires health organizations to reinvent themselves.

- Business modelling facilitates that step!
A business model

Infrastructure
- Partner network
- Core capabilities
- Value configuration

Value Proposition
- Value proposition

Customer
- Customer relationship
- Distribution channels
- Target customers

Finances
- Cost structure

Revenue model

Business *modelling* is a collaborative process with clients as most relevant stakes (Lisette)

- Different from business casus, models
  - Different from cost benefit analysis

- Multi-perspective focus
- Service (intangible) oriented
- Clients as drivers
- Co-creation of values
- Consensus-driven
- Formative evaluation
Examples business *models* other industries

3 successful, different business models:
- Philips Senseo (co-creation)
- Ryan Air (collaboration of stakeholders)
- Apple (user-centered innovation)

And in eHealth ???
Statement #1 (Maarten)

- The *process* of business modelling is just as important as the business model itself.
  - High # of stakeholders
  - Conflicting interests
  - Complex money flows
Process is equally important as the numbers (Bart)

- aspects
  - prevention, diagnostics, therapy, quality, medication, medical aid, personnel, reimbursement, payment

- actor types
  - insurance company
  - general practitioner
  - pharmacist
  - home care
  - physiotherapist
  - nursing houses
  - mental health care
  - hospital – specialists
  - hospital – logistics
  - insurer
  - network provider
  - clearing house
Process to analyze impact of a new service

- more/less work
- more/less failures
- more/less quality
- ...
- ...

1. actor
2. effect
3. process
4. process effect
5. process volume
6. process effect owner
7. actor effect value
8. period
Statement # 2  Upside down approach (Bart)

- Upside down approach is important!
- Business modelling in an early design phase
- Calculation on costs in an early phase, upside down approach
Statement # 3  Emphasize organisational design
(Marike)

- Early stage in a project
- Stakeholders participate from start
- Formative evaluation of alternative role divisions

*(switch presentation)*
Statement # 4 “it’s about economy, stupid” (Bart)

Costs health Care 1998 - 2005

- Verstrekkers ondersteunende diensten
- Verstr. geestelijke gezondheidszorg
- Tandartsenpraktijken
- Specialistenpraktijken
- Paramedische-/verloskundigenpraktijken
- Overige verstrekkers gezondheidszorg
- Leveranciers therapeutische midd.
- Leveranciers geneesmiddelen
- Huisartsenpraktijken
- Gemeentelijke gezondheidsdiensten
- Categorale ziekenhuizen
- ARBO-diensten
- Algemene ziekenhuizen
- Academische ziekenhuizen
Size of population in nl in 2007

Source: Centraal Bureau voor de Statistiek, Voorburg/Heerlen 2007
Size of population in nl in 2007 and 2020

Source: Centraal Bureau voor de Statistiek, Voorburg/Heerlen 2007
Illness related costs/capita in nl - 2003

Health costs during the last years of life
Labor productivity developments
PUBLIC AND MARKET SERVICES

Publieke prestaties in perspectief, SCP, Jan 2007, page 46
Well-known effects of ICT in health care

- cost reduction due to re-use of medical information
- cost reduction due to decrease of medication errors
  - reduction of costs required for additional health care
- cost reduction due to improved labour productivity
- increased cost/benefit ratio due to increased quality
Statement #5 Patients complicate business modelling (Maarten en Marike)

- Patients have a delicate role in healthcare
  - Patients are no real customers
  - Patients are not the deciding or paying stakeholder
  - Asymmetric relationships, heavily dependant on trust
  - ‘What do patients want’ vs. ‘We know what’s best’
Statement #6  Business modelling implies a holistic approach (Maarten, Hans)

- Collaborating health organizations
- Collaborating with patients
- Empowering patients
- Iterative process stimulating reconsideration of deep-rooted assumptions
New Patients

1. Multi-language
2. Userfriendliness of website
3. Privacy
4. Free usage of services
5. Medicine records
6. SHTTP for delicate info
7. Link in DB of pharmacy
8. Freemium
9. Ads
10. Support with IE5
Statement # 7  Cooperation a multidisciplinary effort, but... (Liezl)

• Telemedicine is a multidisciplinary effort

(Switch presentation)
Statement #8 Business modeling is overlooked or poorly understood in health care (Maarten)

- Existing business models are “simple sums”-models
- Based on fuzzy assumptions
- Skewed Critical Design Issues
- Borrowed Business models
Thank you
Merci beaucoup
Baaie dankie
Bedankt
Telemedicine:
A multidisciplinary effort

Why to use Business Modeling for Design and Implementation of Healthcare Technology

Liezl van Dyk
(Stellenbosch University)
• “Bedryfsingenieur”
  • Operations Research (Mathematical Modeling for Decision Making)
  • Systems/ Business/ Enterprize Engineering

• 2005-2008 - E-learning Advisor
• From 2009: Engineering Management
  • Engineering Faculty Telemedicine project
Telemedicine: A multidisciplinary effort

Business (Process) Modeling ≠ Business Model

Management business processes

Operational processes

Supporting processes
Telemedicine: A multidisciplinary effort

Technology push

Top-down

Needs pull

Bottom-up
Regional Systems of Innovation

Who is the customer?

- Individual patient? Family of individual patient?
- Hospital (hospital group)? / Pharmacy? / Drug developer?
- Government (public health)? Private Healthcare provider?
- Medical School? / Medical Student? / Government?

Regional socio-economic and cultural setting

Knowledge application and exploitation subsystem

- Customer
- Collaborators
- Contractors
- Competitors

Knowledge generation and diffusion subsystem

- Technology mediating organizations
- Public research organizations
- Workforce mediating organizations
- Educational organizations

Knowledge, resource and capital flows and interactions
Open Business Models as answer to eTELEMED initiatives?

Open innovation (OI) is a strategy by which companies allow a flow of knowledge across their boundaries as they look for ways to enhance their innovation capability. Company boundaries become ‘permeable’, enabling the matching and integration of resources between the company and external collaborators. In a closed approach to innovation, a company relies on internal resources only.
## Telemedicine: A multidisciplinary effort

### “How to” Open Innovation

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<th>HOW DOES THIS ALL FIT TOGETHER? A FRAMEWORK</th>
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<td>Functions and sub-cultures</td>
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• Is Open Innovation and Open Business Models the answer to getting things work in a multidisciplinary environment?
• Is Web 2.0 an answer to the need for Knowledge Networks within context of eTELEMED?
Organisational design as requirement for sustainable embedding of telemedicine

Panel contribution e-Telemed, February 12, 2010

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gap between project and practice is too deep:
- too often: end-of-project equals end-of-telmed-innovation
- too late during project: anticipation on sustainable embedding of innovation in regular care practice

opportunity using business model method:
- perspective switch: telmed-innovation as a service instead of a solely technological innovation
- development of a viable business model for this service
Viable Telemedicine!

Business model

Services
  e.g., Value proposition, Target group

Technology
  e.g., Service delivery system

Organisations
  e.g., Division roles, Network strategy

Financial
  e.g., Revenue model

Value for customers

Value for providers

Creating successful ICT-services, practical guidelines based on the STOF method, Edward Faber en Henny de Vos (2008)
See also: www.stofmethod.com
An example:

Organizational arrangements for a Personalized Dementia Directory (PDD)
Hoe werkt de DementieWijzer?

De DementieWijzer helpt u gericht te zoeken naar antwoorden op uw vragen over de zorg voor mensen met dementie. Daarnaast biedt de DementieWijzer actueel nieuws rondom dementie en de mogelijkheid om door te linken naar interessante landelijke en regionale websites. U kunt zelf een regio kiezen door deze op het landkaartje rechts op het scherm aan te klikken.

Veel gestelde vragen


Informatie op maat

Naast algemene informatie over uw regio kunt u ook informatie op maat krijgen, die aansluit bij uw persoonlijke situatie. Wil je dit, klik dan in het menu op
in an **early stage** of the project:

- draw an inventory of all activities needed to offer this service

- cluster these activities in roles
General role model for PDD

- Advertisers
- Sponsors
- Care or welfare service providers
- Information service providers
- PDD-service provider
- Users
Alternative organizational arrangements

- Commercial model
- Government model
- Patient community model
- Care provider model
- Insurer model
discuss alternative models with stakeholders

graphical presentation makes it concrete and serves as a vehicle for discussion
Think of your own telemedicine projects…

How and when did you anticipate on the organizational role division for the sustainable offering of the service?

Please share your best practices!