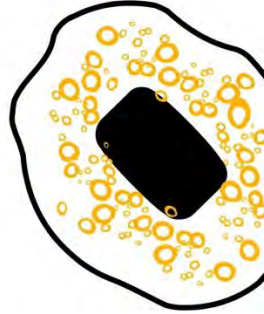
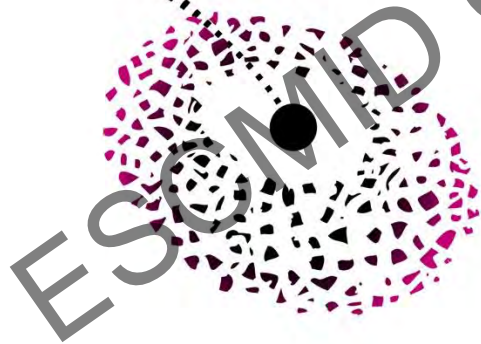


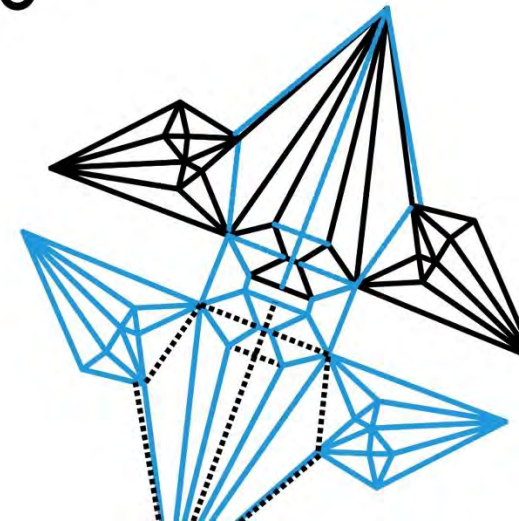
UNIVERSITY OF TWENTE.



Ezoon: Game-based eLearning Environment for Shared  
Decision Making Support & Risk Communication  
During Outbreaks



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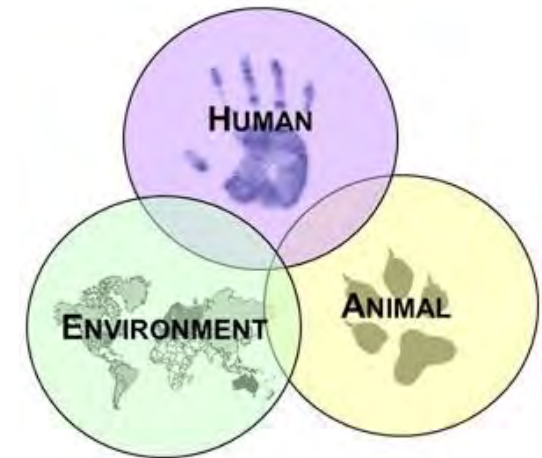
ESCMID, June 1, 2016

# WHY EZOON?

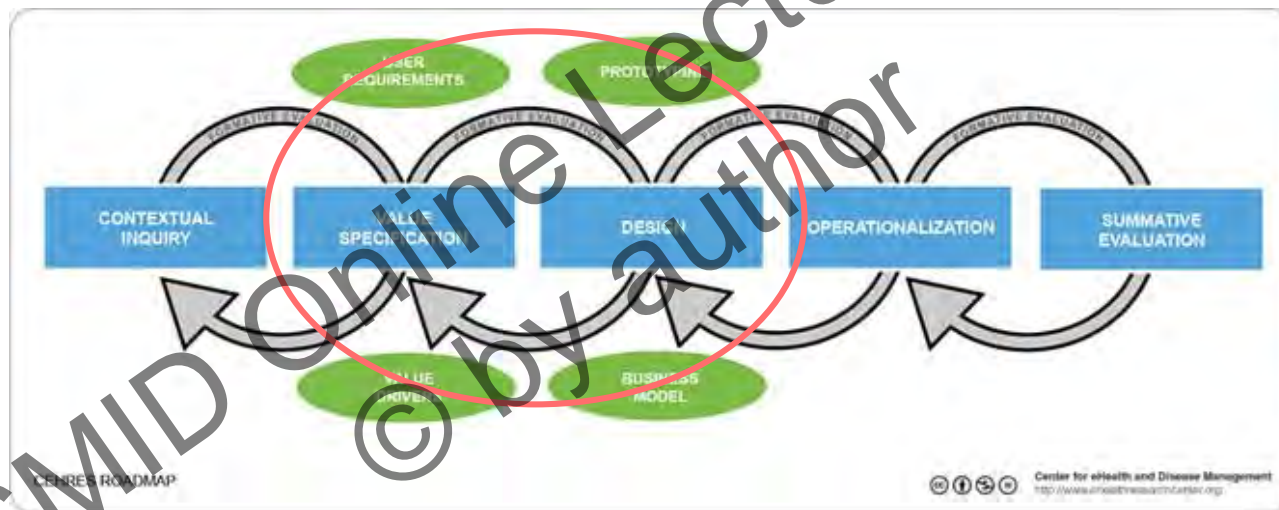
## CURRENT PROBLEMS WITH RISK COMMUNICATION ZOONOSES

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- Lack of cooperation between veterinary, human and public health officials.
- Poorly articulated tasks and responsibilities for risk communication.
- Uncertainties about the risks and impact of n-a zoonoses on individuals.



# APPROACH eZOOON



- Stakeholder & end-user involvement
- Co-creation
- Agile iterative development
- Game-based learning models

# ACTIVITIES

## CONTEXT & VALUES



- ✓ Identification of Stakeholders and value specification of their needs
- ✓ Stakeholder meetings
- ✓ *Scoped Review literature* (Risk communication & eHealth & BRMO, zoonosis)
- Creation and validation of expert models
- ✓ Publications (study 1, 2 pub; oral One Health congress)
- ✓ Elicitation of mental models
- ✓ Needs assessment
- ✓ *Value specification target groups (Yopi)*
  - *Guideline stakeholder identification and ranking values wicked problems*
  - *Scenarios Risk Communication, input design*

# ACTIVITIES DESIGN



- Development of smart Q&A system
- Design eZoon game-based learning environment
- SoMe kit (CDC)



# DILLEMA GAMES TO MANAGE OUTBREAKS

## EDUCATION ENVIRONMENT PROFESSIONALS

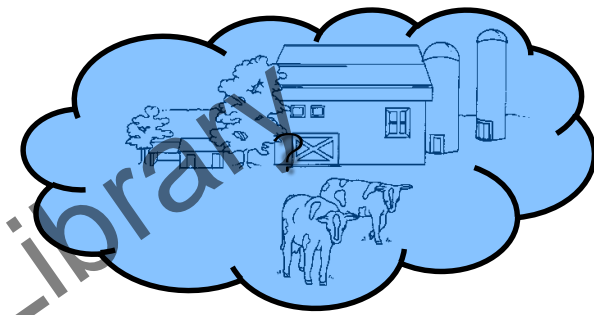
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- Shared Decision making support during outbreaks
- Dealing with dilemmas (infections impact society)
- Dealing with pressure, emotions, unclear regulations () etc.
- eGames are developed for crisis management training: high risk situations such as terrorism attack/ fire etc.)

# WHAT-IF, SCENARIOS

## TAILORING TO HIGH RISK, WICKED PROBLEMS

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- Er wordt binnenkort een groot evenement georganiseerd in de regio door de (nationale) vogelliefhebbers vereniging. Er worden die dag zo'n 4000 bezoekers verwacht. Aangezien er gevaar is voor besmetting van het publiek met vogelgriep door meegenomen vogels, bent u uitgenodigd om deskundige infectiepreventie / *veterinair arts* / (Rol 3) besluiten te nemen over de veiligheid van publiek (*Y, Z situations*) gedurende het evenement.

# WHAT-IF, SCENARIOS

## TAILORING TO HIGH RISK, WICKED PROBLEMS



- Er is een MRSA uitbraak in het verpleeghuis waar u werkt. U als verpleegkundige (deskundige infectiepreventie/ microbioloog) bent druk bezig met het testen van een patiënt op MRSA-dragerschap. U heeft gevraagd naar huisdierbezit bij een patiënt met MRSA-dragerschap en u heeft te horen gekregen dat één van de patiënten een hond heeft.
  - Acties: protocol doornemen, kweken
  - Met wie contact opnemen: laboratorium, arts-microbioloog, buurtzorg, dierenarts
  - Belemmeringen: niemand volgt patiënt uit ziekenhuis
  - Oplossingen: contacten tussen verpleeghuizen en ziekenhuis



# GAME BASED LEARNING DESIGNS

## COOPERATION WITH T-XCHANGE & VIRTUAL REALITY LAB, UT

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- R1: How to design serious games systems, such that both aspects of fun/enjoyment and educational impact are embedded? Research on game mechanic models, game story models, game aesthetic models and game technology models tailored for Zoonotics Risks
  - ✓ Systematic review: learning models for risk communication

# GAME BASED LEARNING DESIGNS

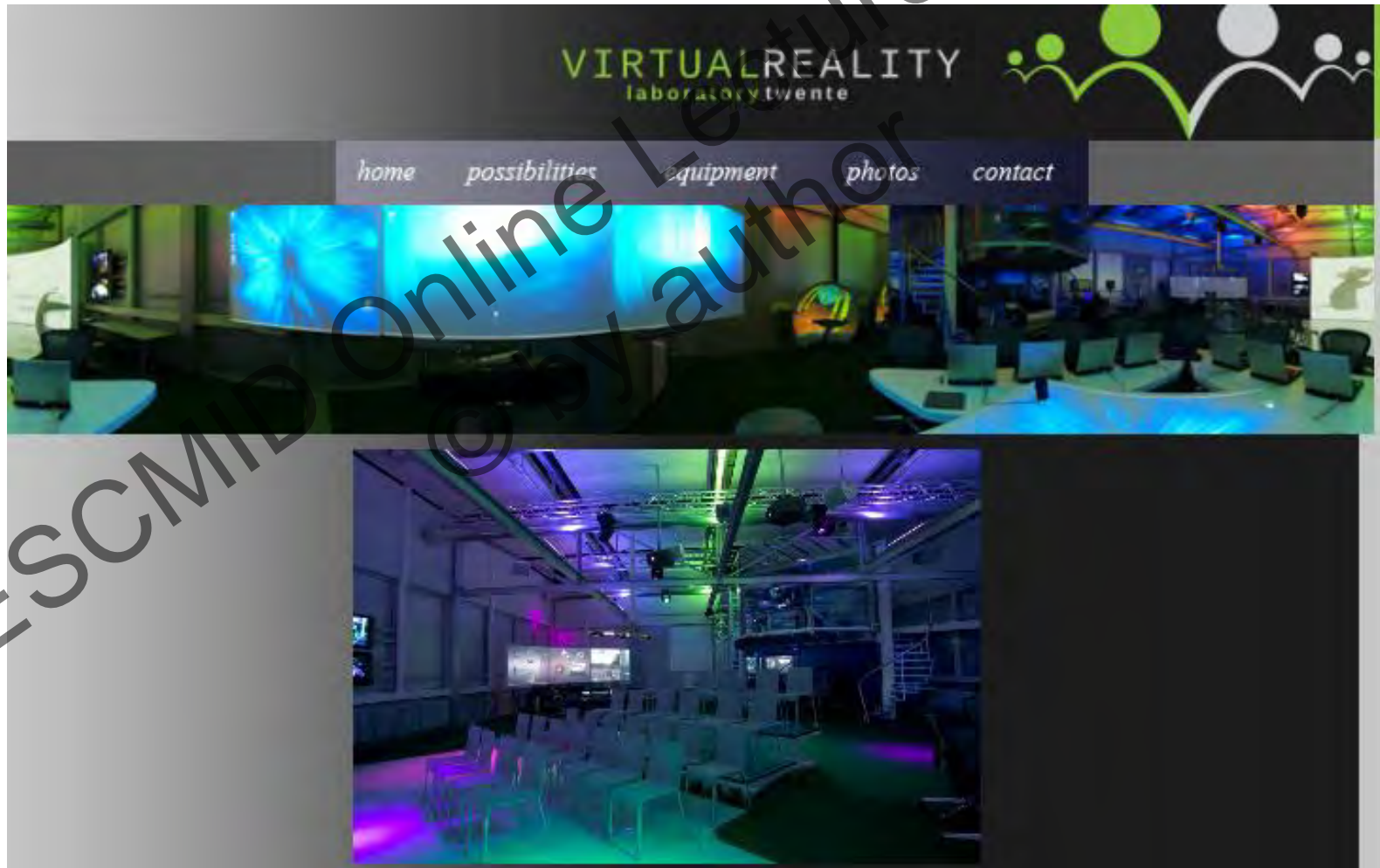
## COOPERATION WITH T-XCHANGE & VIRTUAL REALITY LAB, UT

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- R2: How to design and develop performance assessment methods and techniques, such that the player is unaware of it? Including feedback and dynamics regarding game models
  - ✓ Iterative prototyping, participatory scenario-based design
- R3: How to evaluate the serious games artefact itself, and its effectiveness in the virtual and real world?
  - ✓ Virtual reality and emotions (cyber psychology, Riva et al.)

# VIRTUAL REALITY LAB

CO-CREATION GAME BASED TRAINING ENVIRONMENT



# DELIVERABLES

## USER CENTRED & VALUE DRIVEN

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- Game based eLearning and training environment
- Guideline stakeholder identification & values wicked problems
- Smart Q&A system: Knowledge, beliefs, needs of public and professionals
- Connection with platforms infection management (eursafety; one health)
- Training model (guideline, education professionals)
- Continuation (EURhelath-1Health; Healthicare) project

