



Bern University  
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# Improving equine management by new technologies – drivers and barriers

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# New technology to improve stable management



## The question is...

- ▶ ...what are the drivers and barriers to invest in new technology?
- ▶ ...who is willing to invest in new technology?



- ▶ ...what is important for producers/inventors of new technologies to ensure the successful establishment of new technology?

## Example: a robot which automatically gathers horse droppings on pastures



- + reducing working hours
- + saving labour costs

- + increasing pasture quality
- + improving parasite control
- + reducing risk of resistances

# Method and sampling

- ▶ Online survey
  - ▶ Random sampling out of the national database: 6.053 stable managers
  - ▶ Return rate 15.5 %
  - ▶ 938 Swiss horse stable managers
  - ▶ Sampling similar to population: language, regions, age, type of business
  - ▶ But: # of horses per stable is over average
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- ▶ Analysis with SPSS 22
  - ▶ Uni- and multivariate analysis

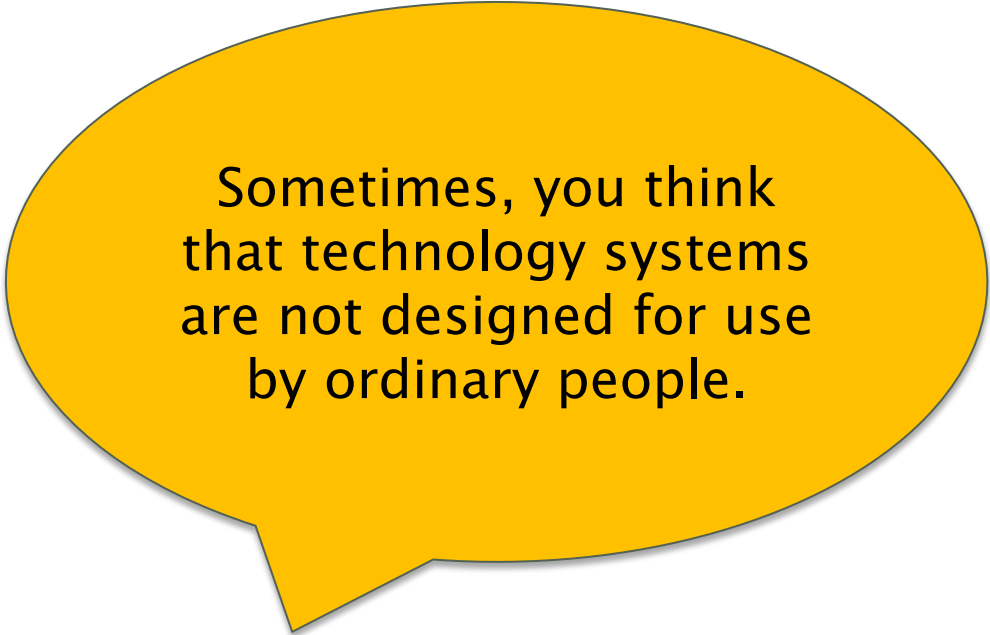


# Technology Readiness Index (Techqual™)

- ▶ Handbook of marketing scales – Parasuraman 2000

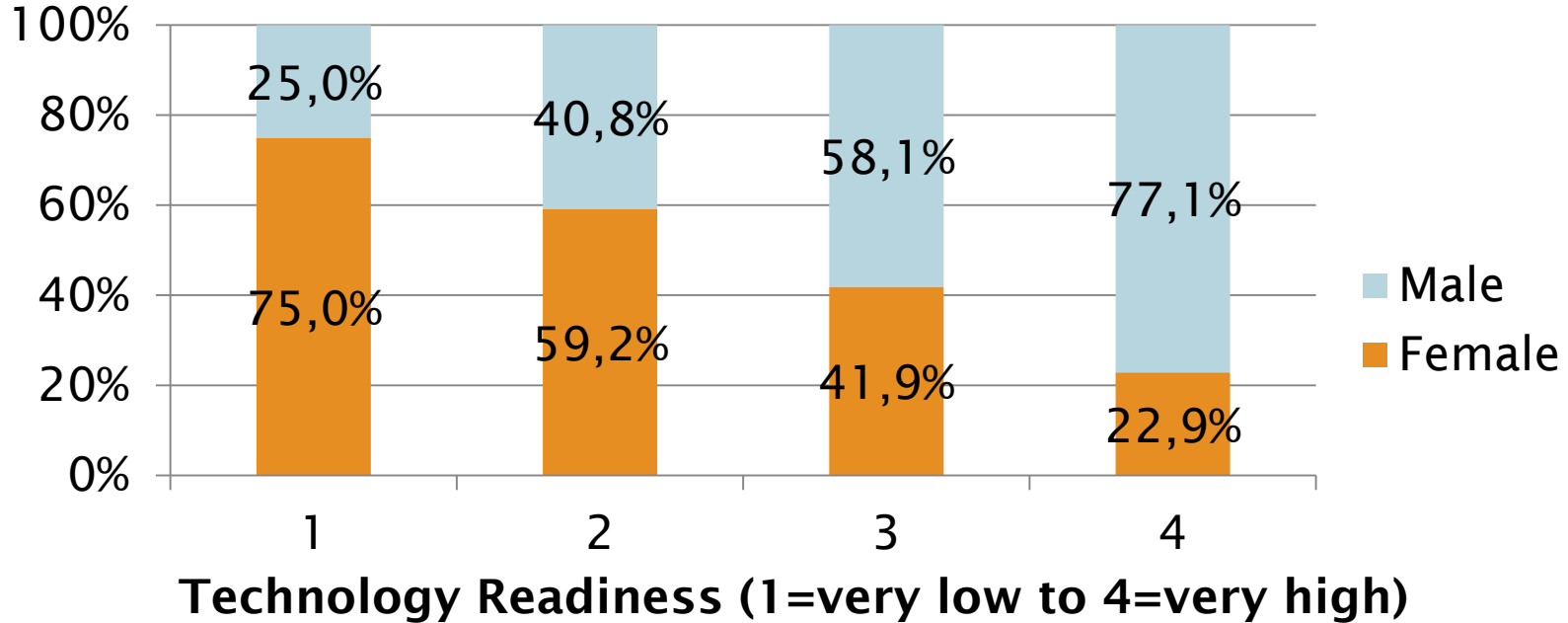
## Techqual™:

- ▶ Optimism
- ▶ Innovativeness
- ▶ Discomfort
- ▶ Creative Reuse
- ▶ Multiple Use Potential
  
- ▶ Measured by several items
- ▶ Likert Scale 1-5

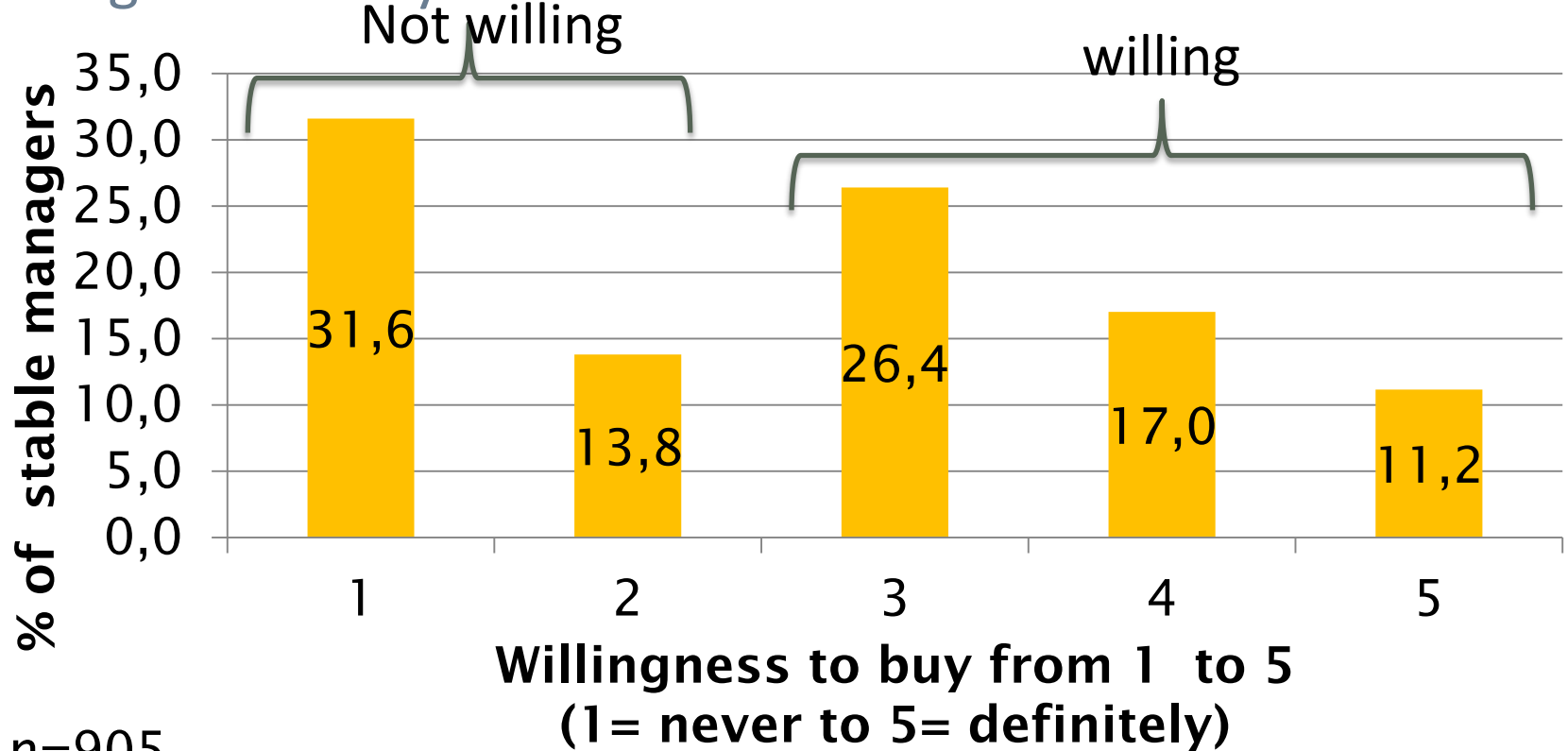


Sometimes, you think that technology systems are not designed for use by ordinary people.

## By the way...



# Willingness to buy

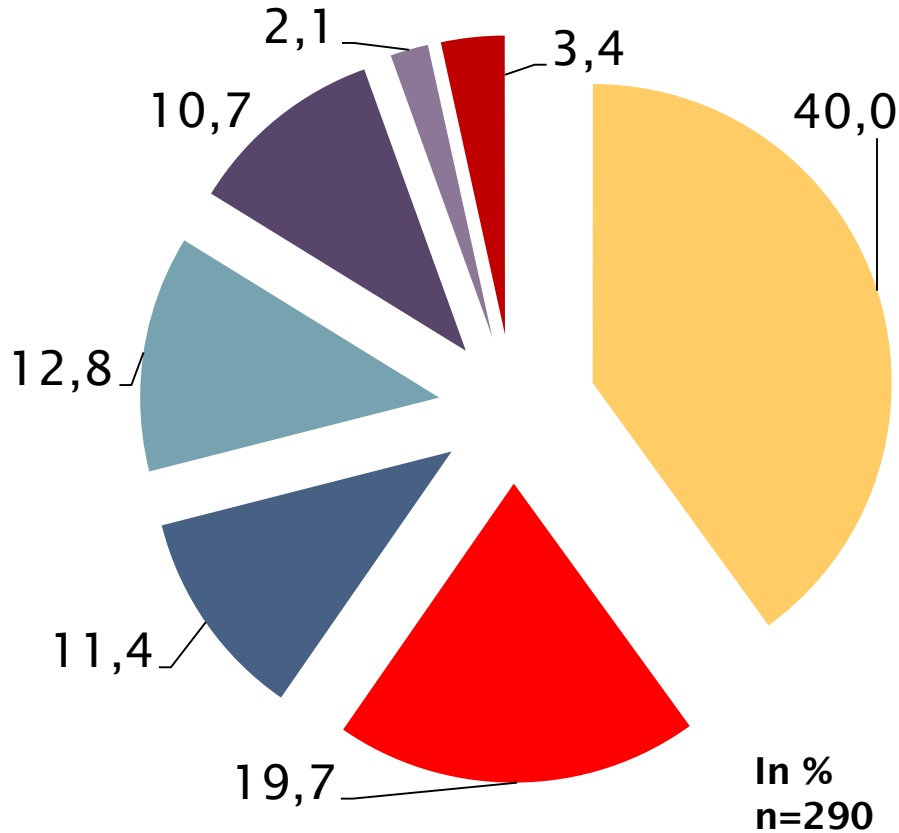


n=905

Willingness to buy from 1 to 5  
(1 = never to 5 = definitely)



# Motives for no "willingness to buy"



- Farm is too small (#horses etc.)
- No parasite infections expected.
- Unsuitable pastures.
- Current pasture management sufficient.
- Ethical concerns about mechanical applications.
- Horse manure is used as fertilizer on pastures.
- Other

## Influencing factors

# of horses

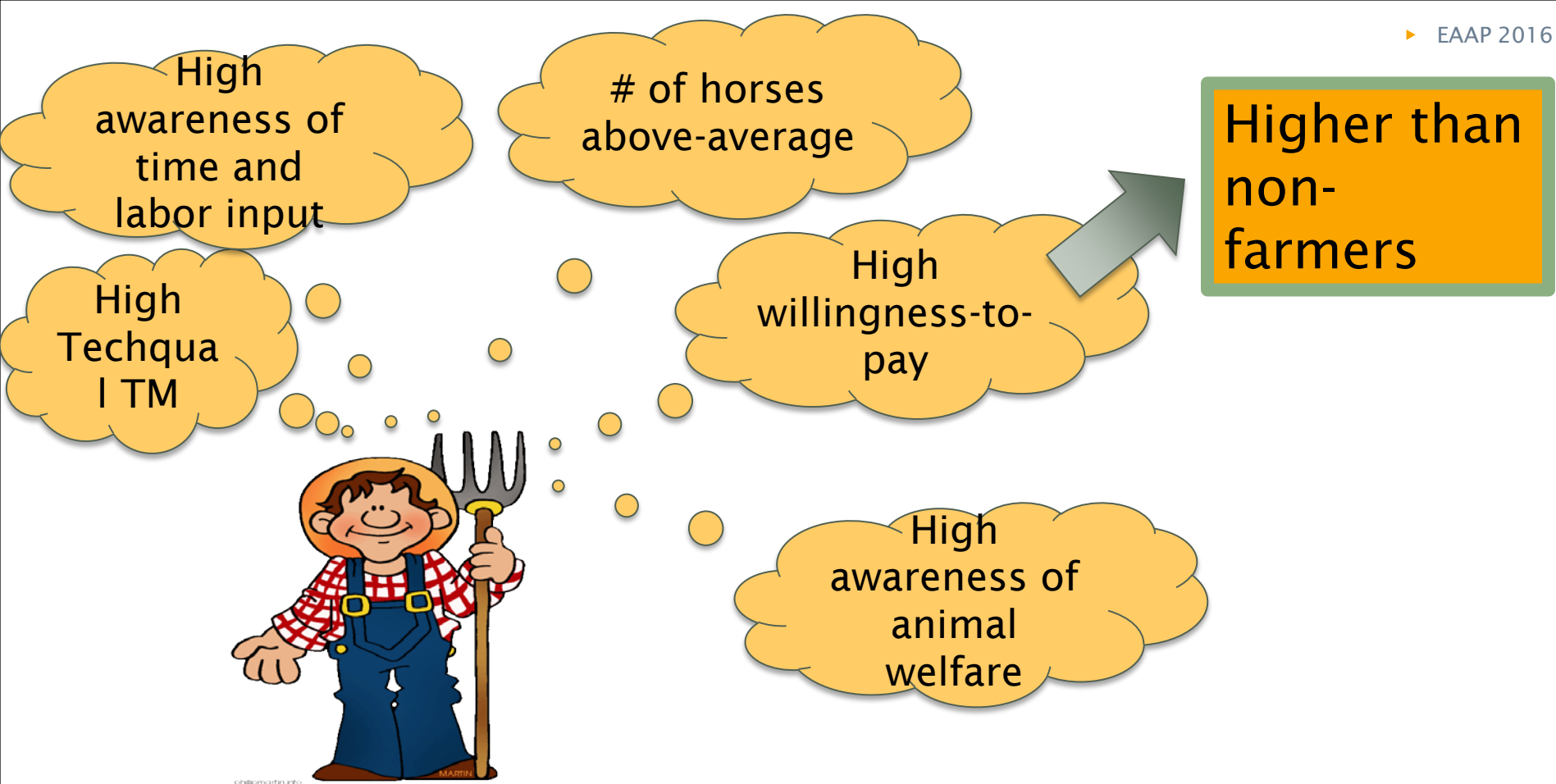
High awareness  
of animal  
welfare

Technology  
Readiness

Awareness  
of time and  
labor  
input\*



\* Only for  
farmers



# What do we learn?

- Attitudes influence the willingness to invest in new technology
- High technology readiness is a driver – also in equine business
- Farmer and non-farmer have different drivers and barriers



Market segmentation and target group orientated marketing are important

# Open doors to innovation...

