#### Presentation



# Fattening Pig Farmers' Intention to Participate in Animal Welfare Programs

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## Structure

1	Introduction
2	Material & Methods
3	Results
4	Discussion



- Animal Welfare and ethics criticism (Clark et al., 2016)
- Consumers and politicians demand higher animal welfare standards (BMEL, 2015)
- Initiative Animal Welfare was founded in 2015
- Farmers are compensated by the food retail sector
- About 4,000 pig fattening barns participate in the program (Initiative Animal Welfare, 2018)



Establishing a higher level of farm animal welfare depends on the farmers' acceptance for implementing farm animal criteria



Which determinants ascertain participation in animal welfare programs?



## Introduction

Basic and mandatory criteria	Remuneration per pig
Basic criteria Quality and Safety (QS)	
Antibiotics monitoring by QS	
Slaughter animal evaluation by QS	€ 500 basic
Stable climate check	contribution per farm and year for all
Drinking water check	expenses
Daylight	
Organic manipulable material	
Additional 10 % space	Mandatory criteria
Mandatory critera in total	€ 3.30
Additional 20 % space	€ 1.20
Constant access to roughage	€ 1.80
Possibility to scrub	€ 0.60
Air cooling device	€ 0.20
Drinking from an open water source	€ 0.70
Eligible criteria in total	€ 4.50
Maximum remuneration per pig	€ 5.10



#### Material & Methods



Which determinants ascertain participation in animal welfare programs?

- UTAUT 2: Unified Theory of Acceptance and Use of Technology 2 (Venkatesh et. al 2013)
  - Well suited model to investigate the adaption of new technologies or systems
- Contains seven key constructs that determine behavioral intention to use a technology
- Further constructs were added to adapt the model to the research question of this study
- Some moderating influences were identified by age, gender and experience



## Materials & Methods

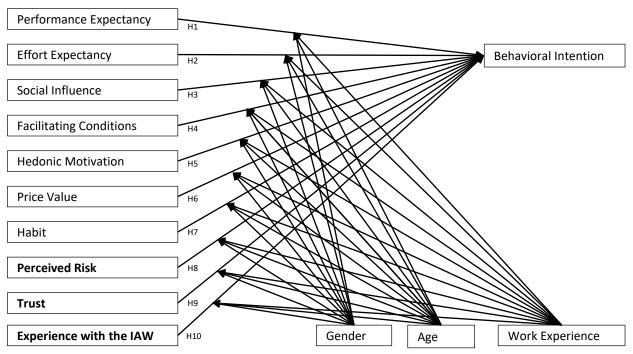


Figure. Model used in the partial least squares (PLS) analysis according to UTAUT 2.



## Materials & Methods



Which determinants ascertain participation in animal welfare programs?

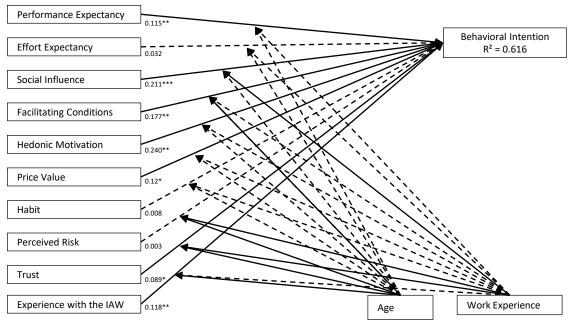
Indicator reliability	Loadings > 0.7 (Chin, 1998)  Cronbach's alpha > 0.7 (Schmitt, 1996)
Convergence criteria	Average Variance Extracted > 0.5 (Chin, 1998)
	Construct reliability > 0.6 (Bagozzi & Yi, 1988)
Discriminatory valitidy	Fornell-Larcker criterion > Average Variance Extracted (Fornell & Larcker, 1981)
	Cross loadings < loadings on the associated construct (Chin, 1998)
	HTMT of the correlations < 0.85 (Henseler et al., 2015)



All quality criteria have been achieved!



#### Results



#### Results of the PLS analysis:

- Paths with a significantly positive influence on behavioral intention:
  - Performance expectancy
  - Social influence
  - Facilitating conditions
  - Hedonic motivation
  - Price Value
  - > Trust
  - Experience with the Initiative Animal Welfare
- Strongest influence:
  - Hedonic motivation
  - Social influence
- The influence of trust is very small
- Moderating effect of gender could not be verified due to a too small sample size of female respondents

**Figure.** Results of the PLS analysis: Determinants of the participation in IAW. Significance level: \*p<0.1, \*\*p<0.05, \*\*\*p<0.01; Broken line: not significant.



## Results

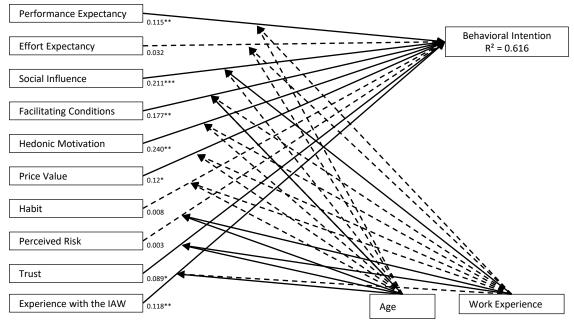


Figure. Results of the PLS analysis: Determinants of the participation in IAW. Significance level:

\*p<0.1, \*\*p<0.05, \*\*\*p<0.01; Broken line: not significant.

#### Results of the PLS analysis:

- Moderating effect of gender could not be verified due to a too small sample size of female respondents
- Age has a moderating effect on the relationship between experience with the IAW and behavioral intention
  - Effect is stronger for respondents older than
     43
- Work experience has a moderating effect on relationship between social influence and behavioral intention and relationship between trust and behavioral intention
  - Effect of trust is stronger for respondents with more than 20 years of work experience
  - Effect of social influence on behavioral intention is stronger for respondents with less work experience



#### Could the Initiative Animal Welfare be a suiting system for other European countries?

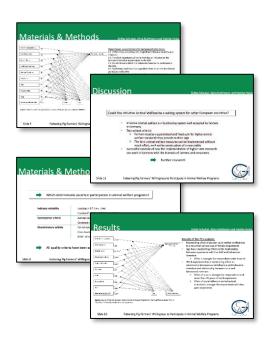
- Initiative Animal welfare is a functioning system well accepted by farmers in Germany
- Two unique criteria:
  - Farmers receive a guaranteed and fixed sum for higher animal welfare standards they provide to their pigs
  - The farm animal welfare measures can be implemented without much effort, such as the construction of a new stable
- Successful example of how the implementation of higher FAW standards can work in harmony with the interests of farmers and consumers



Further research!



#### Outline



- Increasing demand for higher animal welfare standards on an international level
- In Germany the "Initiative Animal Welfare" was founded: farmers are compensated by the food retail sector for implementing animal welfare measures
- Animal welfare depends on the farmers' acceptance to implement higher animal welfare standards
- UTAUT 2 was used to investigate the determinants of the farmers' intention to participate in animal welfare programs
- The indicator reliability, convergence criteria and discriminantatory validity have successfully been achieved
- The strongest influences on the farmers' intention to participate are hedonic motivation and social influence
- Could the Initiative Animal Welfare be a suiting system for other European countries?





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