

# THE INTERPLAY OF DIGITALIZATION AND ORGANIZATIONAL RESILIENCE IN SMALL-SCALE RETAIL SETTINGS

G-Forum Conference 2022

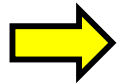
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# INTRODUCTION

- **SME retailers Austria:** 23% of all enterprises, 22% of employees, 41% of revenue (BMDW 2022)
- Majority of Austrian SMEs: low digitalization level (e.g., KMU Forschung Austria 2020)
- Technological retail revolution (e.g., Grewal et al., 2021), high competition, store closures, further consolidation (BMDW 2022)



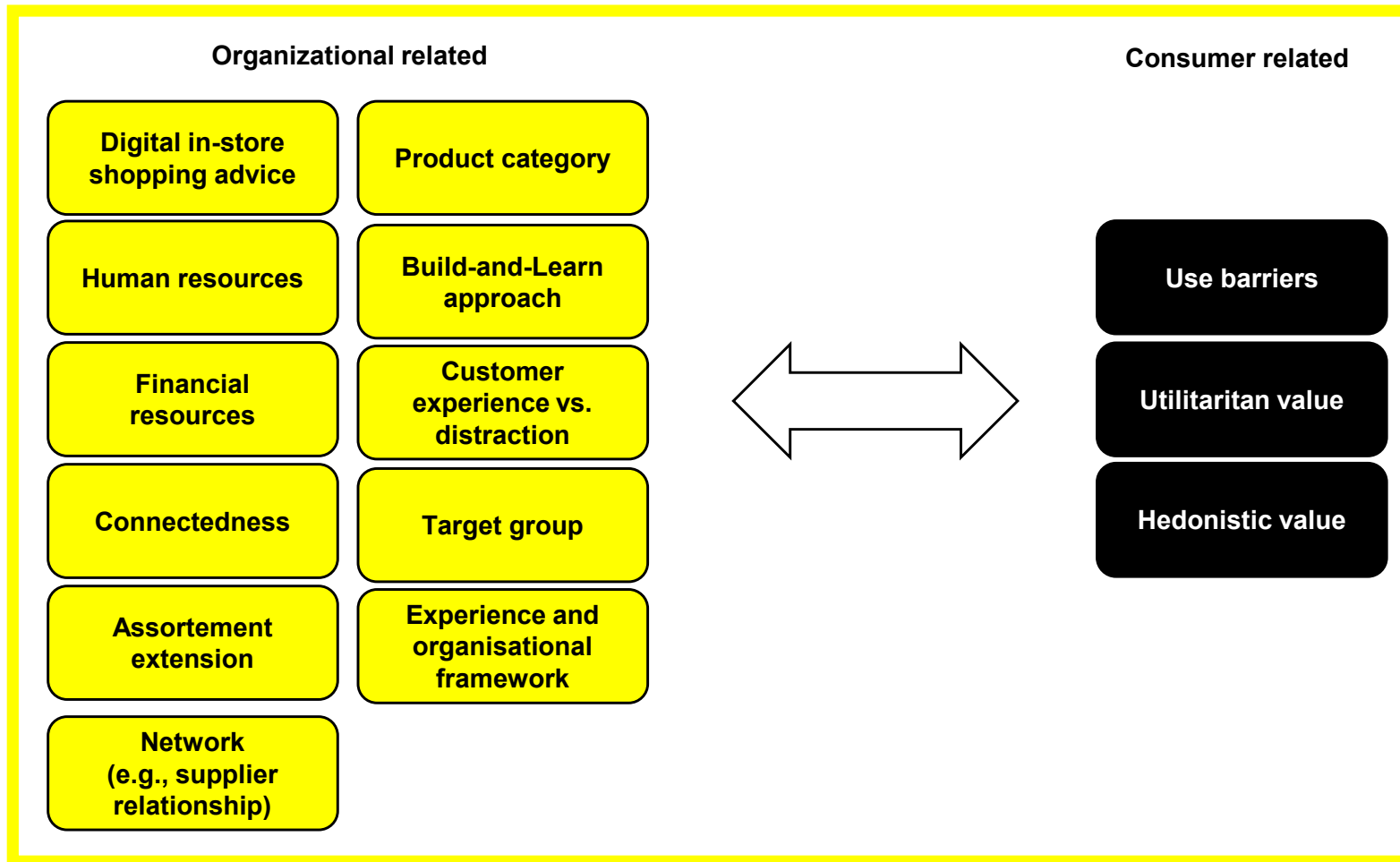
**How do SMEs in brick-and-mortar retail** meet the challenges of the digital transformation?

**STUDY 1: IDENTIFICATION OF THE OVERALL OPPORTUNITIES AND RISKS  
OF ADVANCED DIGITAL TECHNOLOGIES (AR / VR) FOR  
SME STORE BASED RETAILERS**

# Methodology

- Systematic literature review (Tranfield et al. 2003)
- ProQuest: peer reviewed; 2010 – 2020; Virtual Reality, Augmented Reality and/or Immersive Technologies + Retail\*, Brick and Mortar; Showroom; Smart Retail\*; Point of Sale; Store Manager; Sales Personell; Omni Channel
- 171 publications
- Screening of abstracts and references
- In-depth analysis of 27 publications

# Findings



LIENBACHER, E., CESINGER, B. & VALLASTER, C. 2020. Stand der Forschung zum Einsatz von Augmented Reality und Virtual Reality im stationären Einzelhandel und Implikationen für KMU. Zeitschrift für KMU & Entrepreneurship (ZfKE), 68 (3/4), 259-284.

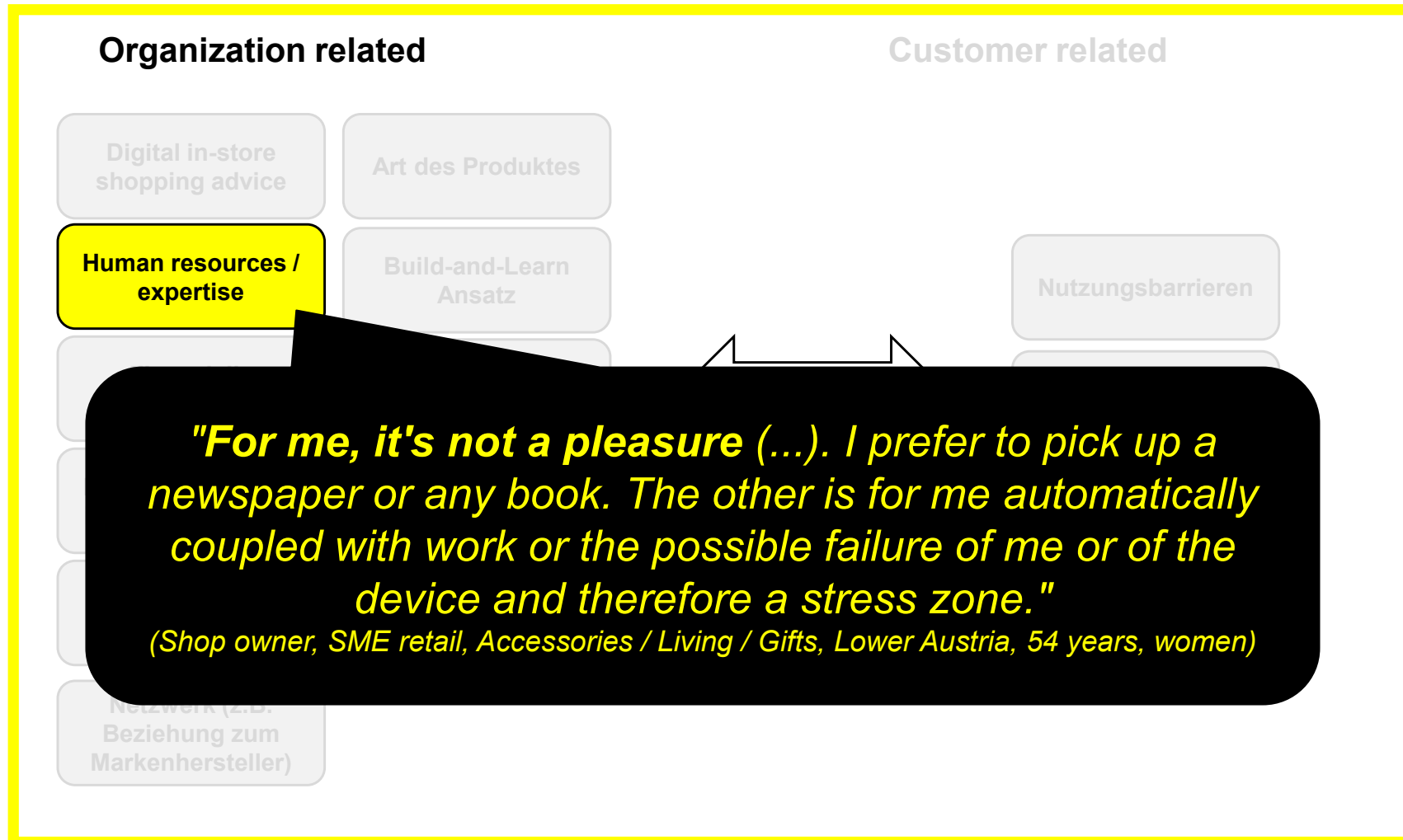
➡ High relevance of digitization for small-scale retail

➡ Lack of research focus on SMEs

# Methodology

- Autumn 2019; Lower Austria & Salzburg
- Five workshops/focus groups with 24 participants
- Owners and/or employees in managerial positions: average age: 43 years; 13 women / 11 men
- Industries: apparel, furniture and accessories, optics, watches / jewelry, books
- Procedure: (1) Impulse lecture on VR / AR in retail; (2) Stations to try VR / AR; (3) Group discussion of experiences
- Content analysis by Mayring (1983); deductive categories based on literature review

# Results (excerpt)



## Findings and Limitations

- **Advanced Technologies (VR / AR) have not (yet) arrived on the sales floor**
- Future potential when technologies are mature (AR / VR) and devices are available on the mass market
- **Current challenges: ‘basic technologies’** (e.g., website, online store, social media presence)
- **Lack of knowledge / competence**
- **Lack of digital strategy**
- Lack of organizational resilience in the current technological retail revolution
  
- Explorative results (qualitative approach); Austria



STUDY 2: IDENTIFICATION OF **STRATEGY PATTERNS** THAT LEAD TO A HIGH  
DEGREE OF DIGITIZATION OF SMALL-SCALE STORE BASED RETAILERS

# Methodology

- August 2020; Salzburg / Linz / Baden (AT)
- Measures: Strategic digital orientation (Kinderman et al., 2020); organizational resilience (Schulte et al., 2016); digital competence (Ferrari & Purie, 2013); digital stress in networks (Steele et al., 2020); degree of digitization / project score; digitization success
- **Sample:** 102 owners or employees of small-structured retail businesses in urban areas; average age: 46 years; 64 women / 38 men; 72.5% family-owned businesses  
Sectors: Clothing, art objects, etc., watches and jewelry, food, furniture, opticians, books and stationery;
- **Empirical design & method:** computer-assisted personal interviews (CAPI methodology); fuzzy-set qualitative comparative analysis (fsQCA)

## Findings: high level of digitization

Variable	(1)	(2)	(3)	(4)	(5)	(6)
<b>Organizational resilience</b>	don't care	don't care	low	high	don't care	low
<b>Digital strategy</b>	high	don't care	don't care	high	high	high
<b>Digital competence</b>	don't care	high	don't care	don't care	high	low
<b>Cooperation</b>	yes	yes	yes	don't care	don't care	don't care
<b>Digital stress in networks</b>	don't care	don't care	low	high	high	low
Sample size	102					
Consistency	0,776	0,746	0,856	0,746	0,800	0,799
Coverage	0,427	0,406	0,200	0,233	0,255	0,126
Unique coverage	0,105	0,044	0,013	0,023	0,005	0,034
Solution consistency	0,732					
Solution coverage	0,672					

## Findings: successful digitization

Variable	...improved competitiveness	... higher market share	... more efficient / effective processes
<b>Level of digitization / project score</b>	High	high	high
<b>Organizational resilience</b>	High	high	high
Sample size	102	102	102
Consistency	0.924	0.857	0.868
Coverage	0.391	0.376	0.378
Unique coverage	-	-	-
Solution consistency	0.924	0.857	0.868
Solution coverage	0.391	0.376	0.378



**Thank you for your attention!**