

# Institute for Digital Marketing & Behavioral Insights



Head of institute: Univ.-Prof. Dr. Christina Schamp



# Agenda



**1**

Quick introduction of supervisors

**2**

Master thesis at the Institute for Digital Marketing & Behavioral Insights

**3**

Deep dives in master thesis topics with Q&A

**4**

Expectations, requirements and assignments of master theses

# Agenda



Digital Marketing &  
Behavioral Insights

**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

**1** Quick introduction of supervisors

**2** Master thesis at the Institute for Digital Marketing & Behavioral Insights

**3** Deep dives in master thesis topics with Q&A

**4** Expectations, requirements and assignments of master theses

# Welcome



Digital Marketing &  
Behavioral Insights



## **Prof. Dr. Christina Patricia Schamp**

Professor for Digital Marketing & Behavioral Insights  
University of Economics and Business Vienna

[christina.schamp@wu.ac.at](mailto:christina.schamp@wu.ac.at)

- Research in moral consumer behavior and consumer decision making in the digital sphere
- Studied Psychology at the London School of Economics and Business Administration at the University of St. Gallen
- Former Assistant Professor in Empirical Research Methods at the University of Mannheim
- 5 years consulting experience with McKinsey and Company, Inc.



# Welcome



Digital Marketing &  
Behavioral Insights



## Dr. Melanie Clegg

Assistant Professor at the Institute for Digital Marketing & Behavioral Insights, University of Economics and Business Vienna

[melanie.clegg@wu.ac.at](mailto:melanie.clegg@wu.ac.at)

- Research in consumer behavior, digital marketing and the psychology behind technologies and artificial intelligence
- M.Sc. Psychology (Universities Düsseldorf and Cologne)
- Ph.D. in Digital Marketing (University of Lucerne and Columbia Business School)



# Our research



Digital Marketing & Behavioral Insights




Journal of Marketing Research  
Volume 60, Issue 1, February 2023, Pages 189-215  
© The Author(s) 2022, Article Reuse Guidelines  
<https://doi.org/10.1177/00222437221109782>

**SAGE journals**

Article

**The Effectiveness of Cause-Related Marketing: A Meta-Analysis on Consumer Responses**




Journal of Marketing Research  
Volume 58, Issue 6, December 2021, Pages 1159-1177  
© The Author(s) 2021, Article Reuse Guidelines  
<https://doi.org/10.1177/00222437211037258>

**SAGE journals**

Article


**The Power of Brand Selfies**



Journal of the Academy of Marketing Science (2019) 47:328-348  
<https://doi.org/10.1007/s11747-019-00629-x>

ORIGINAL EMPIRICAL RESEARCH

**Consideration of ethical attributes along the consumer decision-making journey**



Contents lists available at ScienceDirect

**IJRM**  
International Journal of Research in Marketing  
journal homepage: [www.elsevier.com/locate/ijresmar](http://www.elsevier.com/locate/ijresmar)

ELSEVIER

Full Length Article

**Comparing automated text classification methods**



Contents lists available at ScienceDirect

**International Journal of Research in Marketing**  
journal homepage: [www.elsevier.com/locate/ijresmar](http://www.elsevier.com/locate/ijresmar)

ELSEVIER

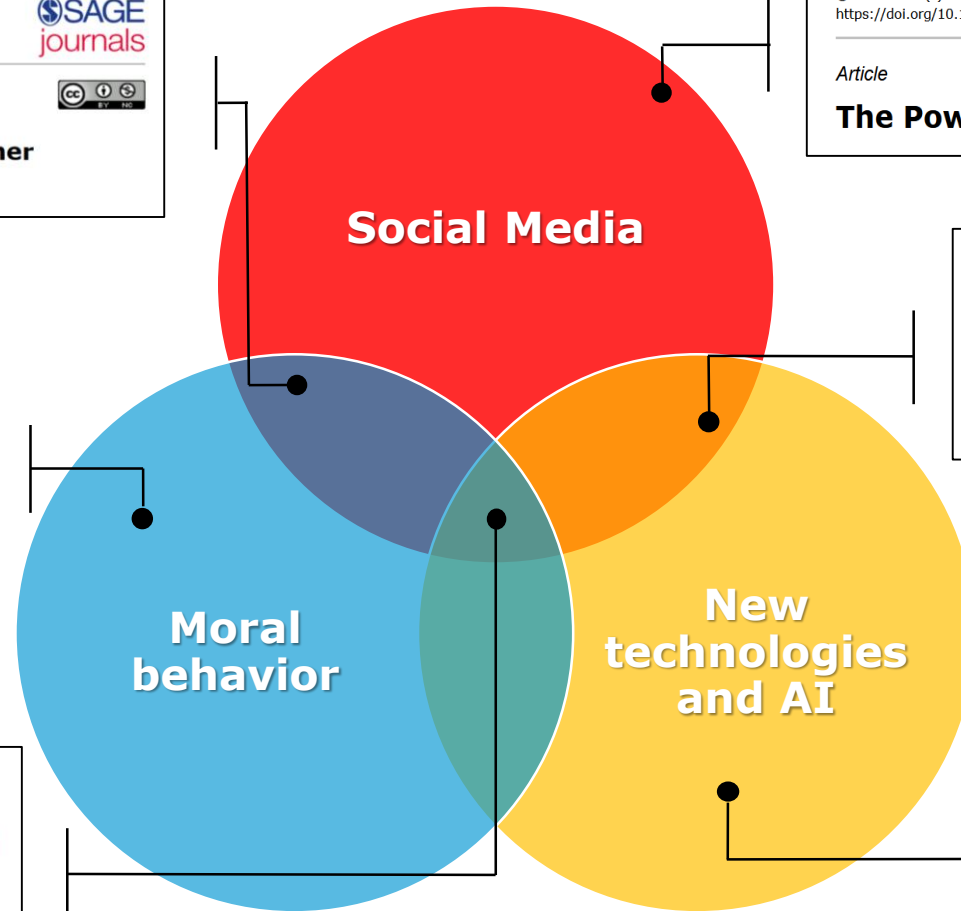
**More than a Feeling: Accuracy and Application of Sentiment Analysis**



Marketing Letters (2022) 33:705-711  
<https://doi.org/10.1007/s11002-022-09639-2>

IDEA CORNER

**Crypto-marketing: how non-fungible tokens (NFTs) challenge traditional marketing**

**Human-Machine Creativity: How AI Can Influence Human Creativity in Open Innovation**

# Agenda



- 1 Quick introduction of supervisors
- 2 Master thesis at the Institute for Digital Marketing & Behavioral Insights**
- 3 Deep dives in master thesis topics with Q&A
- 4 Expectations, requirements and assignments of master theses

# How we do master theses



Digital Marketing &  
Behavioral Insights

**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS



Close link to ongoing research projects



Cooperations with DAX companies and start-ups



Multi-method approach based on Machine learning  
/secondary data as well as lab/field experiments



Experience with statistical software and can-do attitude beneficial



# Agenda



Digital Marketing &  
Behavioral Insights

**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

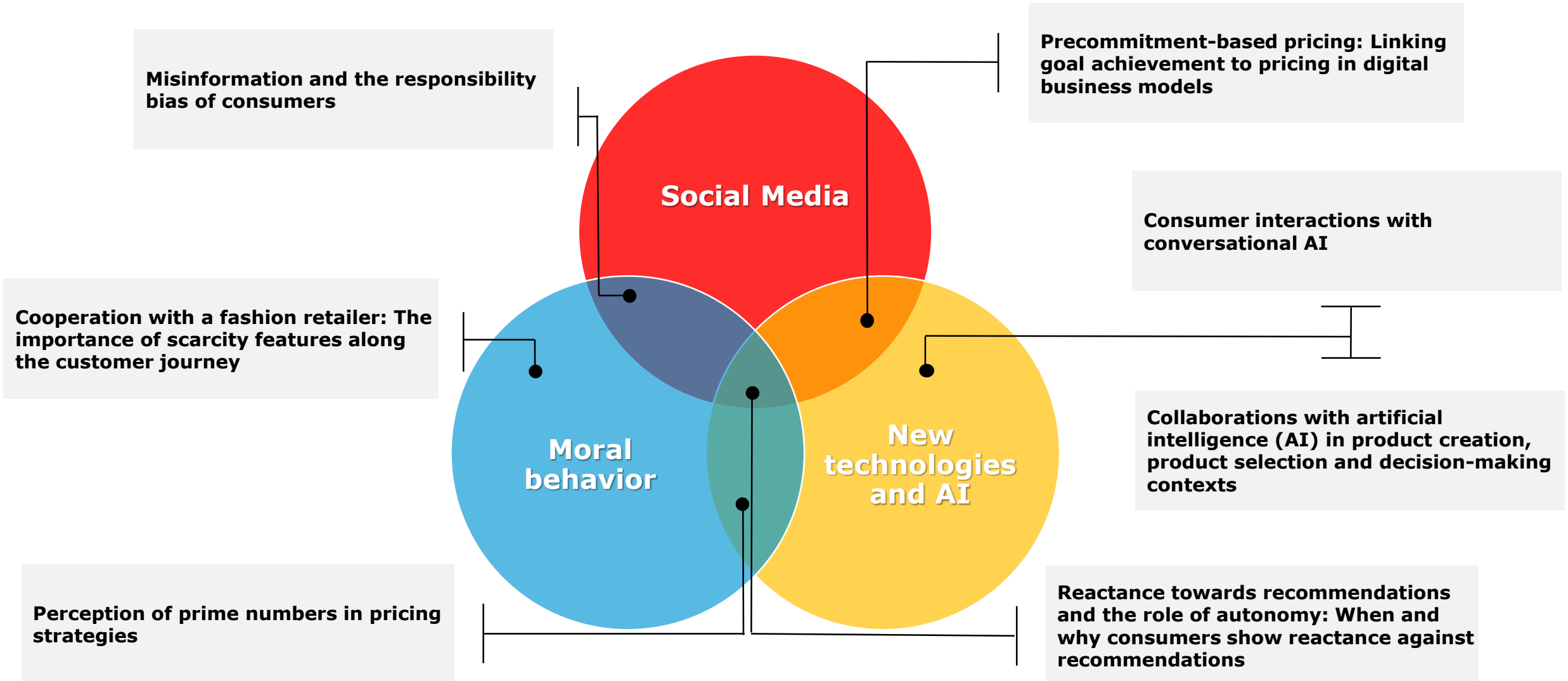
1 Quick introduction of supervisors

2 Master thesis at the Institute for Digital Marketing & Behavioral Insights

**3 Deep dives in master thesis topics with Q&A**

4 Expectations, requirements and assignments of master theses

# Master thesis topics



# Cooperation with a fashion retailer: The importance of scarcity features along the customer journey

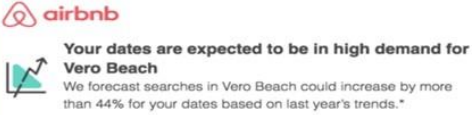





## Technique

## Mechanism

## Details

## Examples

	Scarcity	Social proof	Framing Effects
Mechanism	Time related      Quantity related	Peer group comparison	Communication and/or presentation
Details	Fear of <b>missing on opportunities</b> <b>Fear of regretting</b> not having made the decision (or having it made fast enough)	Follow the <b>behavior of the crowd</b> Treat <b>status quo</b> as a <b>reference point</b>	Affect <b>feeling of loss</b> <b>Certainty that the offer will bring either gain or loss</b> (e.g., emphasize savings or outline potential losses)
Examples	 		

- **The problem:** Shopping clubs are using a variety of scarcity and exclusivity features at various stages of the customer journey (campaign level, product level, checkout), but prior research has tested them only singularly and with respect to the final (hypothetical) choice decision
- **Possible research questions and directions:**
  - Are scarcity features evenly important across different stages of the funnel?
  - Can some scarcity features backfire when introduced too early in the customer journey?
- **Methodological approach:** Experimental, mediation, moderation
- **Literature as starting point:**
  - Hmurovic, J., Lamberton, C., & Goldsmith, K. (2023). Examining the Efficacy of Time Scarcity Marketing Promotions in Online Retail. *Journal of Marketing Research*, 60(2), 299-328.
  - Barton, B., Zlatevska, N., & Oppewal, H. (2022). Scarcity tactics in marketing: A meta-analysis of product scarcity effects on consumer purchase intentions. *Journal of Retailing*, 98(4), 741-758.

# Precommitment-based pricing: Linking goal achievement to pricing in digital business models

The **fitness sector** generated annual global revenues of **\$96.7 billion** in 2019 (IHRSA 2020; Statista 2021)



© Lucas Varela

## Prepayment



### Lingoda: Language learning

If you attend 15/30 classes per month, receive 50%/100% of the price paid back



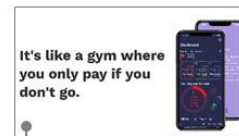
### Hicycle: Fitness

If you attend 11 times in three weeks, you receive 50€ from 150€ back



### Park: Financial savings

If you want to receive your savings earlier, you pay at least 20 pounds extra



### Lazy Jar: Healthy lifestyle

You pay a self-set penalty if you don't achieve your goal

Better for acquisition

Better for goal achievement and retention













- **The problem:** Some business models link the goal achievement of their customers to their pricing. These contracts can be either framed as prepayment or postpayment. Whereas customers prefer prepayment when selecting contracts, they perform better and have higher attention for postpayment.
- **Possible research questions and directions:**
  - Why is there an asymmetry between acquisition and retention?
  - How can we optimize the net effect of contracts?
  - Are specific customers selecting specific contracts (naives, sophisticates, rationalists)?
- **Methodological approach:** Experimental, field experimentation
- **Literature as starting point:**
  - Rafieian, H., & Sharif, M. A. (2022). It's the Effort That Counts: The Effect of Self-Control on Goal Progress Perceptions. *Journal of Marketing Research*, 00222437221123969.
  - Wertenbroch, K. (2011). Self-Rationing: Self-Control in Consumer Choice. INSEAD Working Paper No. 2001/63/MKT, available at SSRN: <https://ssrn.com/abstract=296954> or <http://dx.doi.org/10.2139/ssrn.296954>
  - DellaVigna, S., & Malmendier, U. (2004). Contract design and self-control: Theory and evidence. *The Quarterly Journal of Economics*, 119(2), 353-402.

# Perception of prime numbers in pricing strategies

Stellen Sie sich vor, Sie möchten eine Flasche Wasser kaufen.

Für welche Marke entscheiden Sie sich?

Bitte wählen Sie spontan eine Marke durch Anklicken des Bildes!

<input type="radio"/> <b>Adelholzener</b> <ul style="list-style-type: none"> <li>Die reine Kraft der Alpen.</li> <li>Natürlich und rein, durch das alpine Gestein mit wertvollen Mineralien angereichert.</li> </ul>  <p><b>0.79</b></p>	<input type="radio"/> <b>Rheinfelsquelle</b> <ul style="list-style-type: none"> <li>Vom Ursprung her vollkommen!</li> <li>Einzigartige Reinheit und ausgewogene Mineralisierung. Abfüllung direkt im Naturschutzgebiet</li> </ul>  <p><b>0.79</b></p>	<input type="radio"/> <b>Apollinaris</b> <ul style="list-style-type: none"> <li>The queen of table waters.</li> <li>Faszinierende Feinperligkeit, queileigene Kohlensäure für angenehme, belebende Frische</li> </ul>  <p><b>0.79</b></p>	<input type="radio"/> <b>Amphora</b> <ul style="list-style-type: none"> <li>Entdecke Deine Quelle!</li> <li>Ursprüngliche Reinheit aus den Bergen, hoch-mineralisiert für frischen Geschmack und natürliche Gesundheit</li> </ul>  <p><b>0.69</b></p>
<input type="radio"/> <b>Bonaqua</b> <ul style="list-style-type: none"> <li>Erlebe den Tag!</li> <li>Herrlich erfrischend, mit einem ausgewogenen Mineralgehalt und spritzigem Geschmack</li> </ul>  <p><b>0.89</b></p>	<input type="radio"/> <b>Evian</b> <ul style="list-style-type: none"> <li>Evian belebt.</li> <li>Unverfälschte Reinheit, natürlich durch Alpenglätscher mineralisiert und direkt an der Quelle abgefüllt</li> </ul>  <p><b>0.79</b></p>	<input type="radio"/> <b>Vittel</b> <ul style="list-style-type: none"> <li>Vittel weckt Vitalität.</li> <li>Natürliche Filterung durch Vulkangestein, belebend und frisch durch die Mineralien Calcium und Magnesium</li> </ul>  <p><del>0.99</del> <b>0.83</b> -17%</p>	<input type="radio"/> <b>Selters</b> <ul style="list-style-type: none"> <li>Der Ursprung des guten Geschmacks.</li> <li>Ursprünglich und rein, reich an wertvollen Mineralien und Salzen</li> </ul>  <p><b>0.69</b></p>
<input type="radio"/> <b>Gerolsteiner</b> <ul style="list-style-type: none"> <li>Leben macht durstig.</li> <li>Von Natur aus ausgewogen mineralisiert, sprudelnd und einzigartig frisch im Geschmack</li> </ul>  <p><b>0.89</b></p>	<input type="radio"/> <b>Vilsa</b> <ul style="list-style-type: none"> <li>Das reine Wunder der Natur.</li> <li>Natürlich rein, quellfrisch, ausgewogen mineralisiert und mild im Geschmack</li> </ul>  <p><b>0.89</b></p>	<input type="radio"/> <b>Waldquelle</b> <ul style="list-style-type: none"> <li>Einfach Ihre Natur.</li> <li>Natürlicher Geschmack, angenehme, belebende Frische durch Mineralisierung der Pauliberg Waldquelle</li> </ul>  <p><b>0.69</b></p>	<input type="radio"/> <b>Volvic</b> <ul style="list-style-type: none"> <li>Fühle die vulkanische Natur.</li> <li>Durch Vulkangestein gefiltert und mineralisiert, natürlich aktiv, so gesund wie sein Ursprung</li> </ul>  <p><b>0.69</b></p>

Stellen Sie sich vor, Sie möchten eine Flasche Wasser kaufen.

Für welche Marke entscheiden Sie sich?

Bitte wählen Sie spontan eine Marke durch Anklicken des Bildes!

<input type="radio"/> <b>Evian</b> <ul style="list-style-type: none"> <li>Evian belebt.</li> <li>Unverfälschte Reinheit, natürlich durch Alpenglätscher mineralisiert und direkt an der Quelle abgefüllt</li> </ul>  <p><b>0.80</b></p>	<input type="radio"/> <b>Volvic</b> <ul style="list-style-type: none"> <li>Fühle die vulkanische Natur.</li> <li>Durch Vulkangestein gefiltert und mineralisiert, natürlich aktiv, so gesund wie sein Ursprung</li> </ul>  <p><b>0.70</b></p>	<input type="radio"/> <b>Vittel</b> <ul style="list-style-type: none"> <li>Vittel weckt Vitalität.</li> <li>Natürliche Filterung durch Vulkangestein, belebend und frisch durch die Mineralien Calcium und Magnesium</li> </ul>  <p><del>0.90</del> <b>0.75</b> -17%</p>
---	---	--

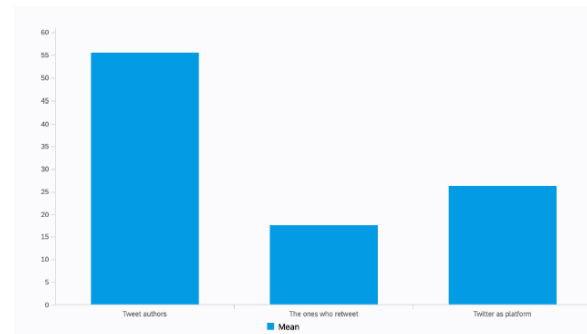
- **The problem:** There are many different ways on how prices and discounts are displayed, e.g., round versus just-below numbers. However, how does an unusual pricing with prime numbers affect price perceptions and consumer choice?
- **Possible research questions and directions:**
  - Do consumers respond differently for prime versus non-prime numbers when selecting discounts?
  - Do lower prime numbers even work better than higher non-prime numbers in certain settings (e.g., small vs. big assortments)?
- **Methodological approach:** Experimental, moderation, mediation, or: meta-analysis
- **Literature as starting point:**
  - Krishna, A., Briesch, R., Lehmann, D. R., & Yuan, H. (2002). A meta-analysis of the impact of price presentation on perceived savings. *Journal of Retailing*, 78(2), 101-118.
  - Gedenk, K., & Sattler, H. (1999). The impact of price thresholds on profit contribution—should retailers set 9-ending prices?. *Journal of Retailing*, 75(1), 33-57.
  - Welling, H. (1994). Prime number identification in idiots savants: Can they calculate them?. *Journal of autism and developmental disorders*, 24(2), 199-207.

# Misinformation and the responsibility bias of consumers

## Perceived Responsibility

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance
1	Tweet authors	0.00	100.00	55.53	26.80	718.46
2	The ones who retweet	0.00	100.00	17.55	15.61	243.58
3	Twitter as platform	0.00	100.00	26.25	26.18	685.41

The participants find that the **authors of the tweets** have the **most responsibility** for stopping the sharing of fake news, while the ones who retweet carry the least responsibility.



- **The problem:** Misinformation is on the rise; however, most users do not feel responsible for the content when passing on information. However, the number of retweets likely serves as significant indicator when evaluating the trustworthiness of an information.
- **Possible research questions and directions:**
  - Responsibility bias: Do sender and observer of retweets have different perceptions of responsibility?
  - Which interventions could be done to increase perceived responsibility?
- **Methodological approach:** Experimental, moderation
- **Literature as starting point:**
  - Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science*, 359(6380), 1146-1151.
  - Moravec, P. L., Kim, A., & Dennis, A. R. (2020). Appealing to sense and sensibility: System 1 and system 2 interventions for fake news on social media. *Information Systems Research*, 31(3), 987-1006.
  - Pennycook, G., & Rand, D. G. (2021). The Psychology of Fake News. *Trends in cognitive sciences*, 25(5), 388-402.

# Collaborations with artificial intelligence (AI) in product creation, product selection and decision-making contexts



Digital Marketing & Behavioral Insights

## Heinz Asks DALL-E To Draw Ketchup With Surprising Results

by Rudy Sanchez on 07/28/2022 | 3 Minute Read



### Computer-generated inclusivity: fashion turns to 'diverse' AI models

Fashion brands including Levi's are having custom AI models created to 'supplement' representation in size, skin tone and age



LYNX'S LATEST REVOLUTION IS A NEXT-GEN FRAGRANCE POWERED BY ARTIFICIAL INTELLIGENCE



- **The problem:** Artificial intelligence is part of multiple creation processes, including for advertisements or novel products
- **Possible research questions and directions:**
  - How do consumers perceive AI-created products?
  - How much are consumers willing to accept AI in creative contexts and in decision-making processes? Who should have the „final say“ in decision-making: AI or human?
- **Methodological approach:** Experimental, mediation, moderation
- **Literature as starting point:**
  - Zhang, H., Bai, X., & Ma, Z. (2022). Consumer reactions to AI design: Exploring consumer willingness to pay for AI-designed products. *Psychology & Marketing*, 39(11), 2171-2183.
  - Xu, L., & Mehta, R. (2022). Technology devalues luxury? Exploring consumer responses to AI-designed luxury products. *Journal of the Academy of Marketing Science*, 1-18.

# Consumer interactions with conversational AI



Digital Marketing &  
Behavioral Insights



ME

how should we best interact with conversational artificial intelligence?



When interacting with conversational artificial intelligence, here are some best practices to keep in mind:



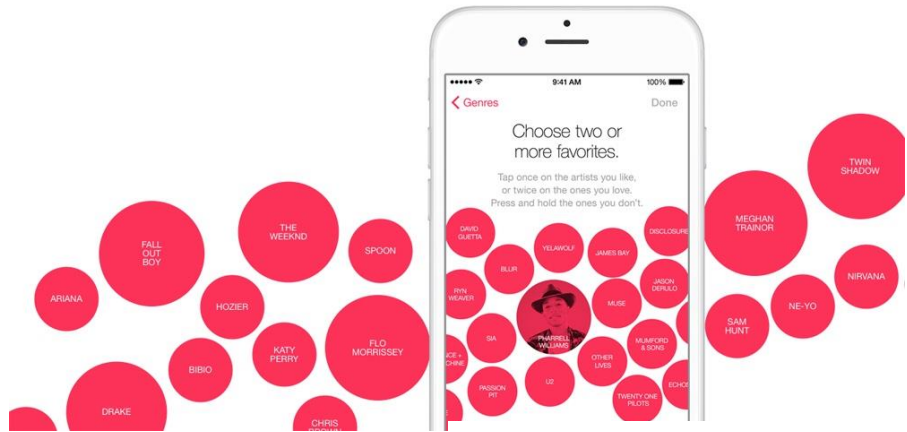
1. Be clear and concise: Keep your questions and responses clear and to the point, as AI models often work best with straightforward language.
2. Use proper language: Use proper grammar and punctuation as much as possible, as this will help the AI understand what you're saying more accurately.
3. Be patient: AI models may take some time to respond, especially if they're processing complex requests or queries. Be patient and give the AI enough time to generate a response.
4. Provide feedback: If the AI model is not understanding your request or is giving you irrelevant responses, try rephrasing your question or providing feedback on its response. This can help improve the AI model's performance over time.
5. Understand limitations: Keep in mind that AI models have limitations and may not be able to answer all questions or provide accurate responses all the time. Be aware of these limitations and use AI models accordingly.
6. Respect privacy: Be mindful of the information you share with AI models and ensure that they are from reputable sources that prioritize user privacy.

By following these best practices, you can have a more effective and productive interaction with conversational artificial intelligence.

- **The problem:** Consumers increasingly interact and with artificial intelligence (AI) tools, yet there may be multiple traps in doing so and it is unclear how to calibrate and design these tools to maximize user engagement
- **Possible research questions and directions:**
  - How should consumers interact with AI? I.e., how can they use AI most efficiently to improve creative considerations or efficiently solve problems?
  - How do these interactions shape consumers' willingness to use an AI tool?
- **Methodological approach:** Experimental, mediation, moderation
- **Literature as starting point:**
  - Puntoni, S., Reczek, R. W., Giesler, M., & Botti, S. (2021). Consumers and artificial intelligence: An experiential perspective. *Journal of Marketing*, 85(1), 131-151.
  - Yalcin, G., Lim, S., Puntoni, S., & van Osselaer, S. M. (2022). Thumbs up or down: Consumer reactions to decisions by algorithms versus humans. *Journal of Marketing Research*, 59(4), 696-717.



# Reactance towards recommendations and the role of autonomy: When and why consumers show reactance against recommendations



Creepy marketing: My dad is in assisted living. Today, he received a Christmas basket from the local mortuary.

– Kim Possible™ (@kimlockhartga) December 23, 2016

## Why are recommendations so terrible



grandterr / Roadie / 2019-06-18 07:47 AM

The recommendations s\*ck:

- Listened to a few anime covers, now all my "Discover Weekly" is filled with disgusting covers. I'm trying to "not like" all of them, but it doesn't work.

- In-playlist recommendations: the algorithm is as dumb as it can be: songs from the same artists, songs from the same country/related.

How about actually recommending interesting songs based on the playlist?

- You can't clean history. \*\*bleep\*\*, I've stopped listening to rock years ago and still get rock recommendations.

- **The problem:** Consumers rely on recommendations, while trying to maintain their autonomy in consumption decisions

- **Possible research questions and directions:**

- What is the tradeoff between recommendation accuracy and consumer autonomy? In other words: How well do we want our taste to be „predicted“?
- Do we prefer similar or varied recommendations? Which role does reactance against persuasion play in this context and are there differences between consumers?

**Methodological approach:** Experimental, mediation, moderation

**Literature as starting point:**

- Gai, P. J., & Klesse, A. K. (2019). Making recommendations more effective through framings: Impacts of user-versus item-based framings on recommendation click-throughs. *Journal of Marketing*, 83(6), 61-75.
- Wertenbroch, K., Schrift, R. Y., Alba, J. W., Barasch, A., Bhattacharjee, A., Giesler, M., ... & Zwebner, Y. (2020). Autonomy in consumer choice. *Marketing letters*, 31, 429-439.
- Bhattacharjee, A., Berger, J., & Menon, G. (2014). When identity marketing backfires: Consumer agency in identity expression. *Journal of Consumer Research*, 41(2), 294-309.

# Agenda



Digital Marketing &  
Behavioral Insights

**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

**1** Quick introduction of supervisors

**2** Master thesis at the Institute for Digital Marketing & Behavioral Insights

**3** Deep dives in master thesis topics with Q&A

**4** **Expectations, requirements and assignments of master theses**

# Expectations, requirements and assignments of master theses



Digital Marketing & Behavioral Insights



What are the requirements of a Master Thesis at DMBI?	What skills and abilities do we expect?	How does the application process work?
<p>Extensive literature table summarizing and synthesizing the relevant literature</p> <p>Empirical thesis with at least 1 self-designed and self-conducted experiment (including mediation moderation) or an equivalent empirical design</p> <p><b>End product:</b></p> <ul style="list-style-type: none"> <li>▪ approx. 60 pages written text without appendix</li> <li>▪ Submission of final datasets and code of statistical analyses</li> </ul>	<p>Fundamental knowledge about inference statistics and experiments</p> <p>Knowledge regarding experimental setups and experience in survey composition</p> <p>Basics of statistic programs (preferably R or Stata, SPSS acceptable)</p> <p>Natural curiosity, self-determined work and organizational skills</p>	<ol style="list-style-type: none"> <li><b>1. From today – May, 22:</b> Consider topics that are of interest for you (slides will be available on the Institute's website)</li> <li><b>2. From May, 22:</b> Interested students should send an E-Mail to <a href="mailto:katarina.ilic@wu.ac.at">katarina.ilic@wu.ac.at</a> including:             <ul style="list-style-type: none"> <li>(1) your desired topic(s) &amp; a paragraph outlining motivation for the topic</li> <li>(3) a brief paragraph outlining your expertise regarding experiments and statistics</li> <li>(4) your CV</li> </ul>             → all information should be in the E-Mail text, no pdf attachment necessary (except for CV)           </li> <li><b>3. Between May 22 – June 1:</b> Confirmations will be sent out to successful applicants</li> <li><b>4. June 1 – June 4:</b> Take-or-leave notification from applicants; <i>supervision offers expire after June 4</i></li> <li><b>5. From June 4:</b> Waiting list applicants will receive supervision offers (if places are left)</li> </ol>