

The Energy & Strategy Think Tank (ESTT) at the Institute for Strategic Management (ISM) at WU invites applications for a master thesis.

Topic: *Promising Smart Home Business Models from the Perspective of Energy Providers*

Scope, Aims, Methods, and Initial Literature: A smart home is as a residence equipped with computing and information technology which anticipates and responds to the needs of the occupants, working to promote their comfort, convenience, security and entertainment through the management of technology within the home and connections to the world beyond (Ehrenhard et al., 2014; Lasquety-Reyes, 2021; Parag & Butbul, 2018; Peine, 2008; Solaimani et al., 2013) Taking the perspective of energy providers, this thesis aims to:

- map the application domains of smart home (including pros and cons as well as examples)
- systematically develop criteria to assess which applications domains are most promising for energy providers
- develop business models for utilities for most promising domains (Chesbrough & Rosenbloom, 2002; Zott et al., 2011)

Insights from 1) current scientific literature, 2) grey literature (Adams et al., 2017), as well as 3) national and international expert interviews (Cassell, 2009) should be combined.

Thesis Language: English

Expectations and Support: Constant feedback and regular meetings with faculty will facilitate a high-quality thesis that is completed in a timely fashion. You will be provided with a comprehensive guideline with details on the supervision and writing process, expected deliverables, and grading.

Targeted Students: Excellent and ambitious students of all MSc and MBA programs at WU Vienna University of Economics and Business are eligible and encouraged to apply.

Interested? Send CV and grade certificates of all your studies to georg.reischauer@wu.ac.at

Initial References:

- Adams, R. J., Smart, P., and Huff, A. S. (2017). 'Shades of grey: Guidelines for working with the grey literature in systematic reviews for management and organizational studies'. ***International Journal of Management Reviews***, 19(4), 432-454.
- Cassell, C. (2009). Interviews in organizational research. In D. A. Buchanan, & A. Bryman (Eds.), *The sage handbook of organizational research methods*: 500-515. Thousand Oaks: Sage.
- Chesbrough, H., and Rosenbloom, R. S. (2002). 'The role of the business model in capturing value from innovation: Evidence from xerox corporation's technology spin-off companies'. ***Industrial and Corporate Change***, 11(3), 529-555.
- Ehrenhard, M., Kijl, B., and Nieuwenhuis, L. (2014). 'Market adoption barriers of multi-stakeholder technology: Smart homes for the aging population'. ***Technological Forecasting and Social Change***, 89, 306-315.
- Lasquety-Reyes, J. (2021). Smart home report 2021. Link: <https://de.statista.com/statistik/studie/id/41155/dokument/smart-home-report/>.
- Parag, Y., and Butbul, G. (2018). 'Flexiwatts and seamless technology: Public perceptions of demand flexibility through smart home technology'. ***Energy Research & Social Science***, 39, 177-191.
- Peine, A. (2008). 'Technological paradigms and complex technical systems: The case of smart homes'. ***Research Policy***, 37(3), 508-529.
- Solaimani, S., Keijzer-Broers, W., and Bouwman, H. (2013). 'What we do – and don't – know about the smart home: An analysis of the smart home literature'. ***Indoor and Built Environment***, 24(3), 370-383.
- Zott, C., Amit, R., and Massa, L. (2011). 'The business model: Recent developments and future research'. ***Journal of Management***, 37(4), 1019-1042.