

The Energy & Strategy Think Tank (ESTT) at WU's Institute for Strategic Management (ISM) (<https://www.wu.ac.at/en/ism/energy-strategy-think-tank/>) invites applications for a master thesis.

**Working Title:** *Towards a Digital Balanced Scorecard for Industrial Corporations*

**Scope, Aims, Methods, and Initial Literature:** The balanced scorecard is a key means to implement strategies (Banker, Chang, & Pizzini, 2004; Hepworth, 1998; Kaplan & Norton, 1992). More recently, it was suggested that the digital transformation alters the workings and dimensions of the BSC (Siedler, Langlotz, & Aurich, 2020; Zumstein & Gächter, 2016). Against this background, this thesis aims to identify which dimensions and KPIs (Parmenter, 2010; Saura, Palos-Sánchez, & Cerdá Suárez, 2017); also Net promoter score (NPS) as a measure for customer value) are currently used as part of a digital balanced scorecard by industrial firms in capital-intensive industries (e.g. energy, automotive, aerospace, manufacturing).

Insights from 1) a systematic review of the scientific literature (Denyer & Tranfield, 2009), 2) selected grey literature (Adams, Smart, & Huff, 2017), as well as 3) expert interviews (Cassell, 2009) should be combined.

**Thesis Language:** English or German (only if you are enrolled in a program with German as main language)

**Corporate Partner:** None

**Expectations and Support:** Constant feedback and regular meetings with faculty will facilitate a high-quality thesis with impact on management practice that is completed in a timely fashion. You will be provided with a guideline that details the supervision and writing process, expected deliverables beyond the final thesis, and grading as well as a package to kick off your thesis.

**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. In principle, it is possible to write the thesis together with another student.

**Interested?** Send CV and grade certificates of all your studies to [georg.reischauer@wu.ac.at](mailto:georg.reischauer@wu.ac.at)

### Initial References:

- Adams, R. J., Smart, P., & 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.
- Banker, R. D., Chang, H., & Pizzini, M. J. 2004. The Balanced Scorecard: Judgmental Effects of Performance Measures Linked to Strategy. *The Accounting Review*, 79(1): 1-23.
- 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.
- Denyer, D., & Tranfield, D. 2009. Producing a systematic review. In D. A. Buchanan, & A. Bryman (Eds.), *The Sage handbook of organizational research methods*: 671-689. Thousand Oaks, CA: Sage.
- Hepworth, P. 1998. Weighing it up - a literature review for the balanced scorecard. *Journal of Management Development*, 17(8): 559-563.
- Kaplan, R. S., & Norton, D. P. 1992. The Balanced Scorecard: Measures that drive performance. *Harvard Business Review*, 70(1): 71-79.
- Parmenter, D. 2010. *Key Performance Indicators: Developing, Implementing, and Using Winning KPIs*.
- Saura, J. R., Palos-Sánchez, P., & Cerdá Suárez, L. M. 2017. Understanding the Digital Marketing Environment with KPIs and Web Analytics. *Future Internet*, 9(4).
- Siedler, C., Langlotz, P., & Aurich, J. C. 2020. Modeling and assessing the effects of digital technologies on KPIs in manufacturing systems. *Procedia CIRP*, 93: 682-687.
- Zumstein, D., & Gächter, I. 2016. Digital Analytics – Strategien im digitalen Geschäft umsetzen und mit KPIs überprüfen. *HMD Praxis der Wirtschaftsinformatik*, 53(3): 371-388.