

# Architectural dynamics: Investigating the emergence and dominance of technology components in complex technology systems



## Idea:

Novel technology systems often arise through technology convergence, that is the integration of technology components and knowledge from hitherto distant technology systems, resulting in novel system architectures. This thesis aims to understand the emergence of novel technology components and how these become dominant in complex technology systems.

## Study design:

Descriptive patent analysis with patent indicators

## Relevant Literature:

Henderson, R. M., & Clark, K. B. (1990). Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms. *Administrative Science Quarterly*, 35(1), 9–30.

Wambsganss, A., Bröring, S., Salomo, S., & Sick, N. (2023). Technology strategies in converging technology systems: Evidence from printed electronics. *Journal of Product Innovation Management*, 40(5), 705–732.