## IS in Healthcare

Daniel Furstenau (Department of Information Systems) | daniel.furstenau@fu-berlin.de





# Open Digital Platforms in Health Care: Implementation and Scaling Strategies

Platforms leverage software code that other companies can build on and that consumers can use. While *open* digital platforms represent a major opportunity for health care innovation, adoption is relatively slow and we aim to understand the specific challenges in platform-based health settings: How and by which strategies do actors implement and scale open digital platforms in highly-institutionalized settings such as health care? Our qualitative, comparative study (U.S. and Germany) analyzes six emerging digital health care platforms.

#### Research design and empirical cases Infrastructure Content Code **Provider Demand Openness** Scaling side stage Athena<sup>†</sup> (provider-led) St.Mary's<sup>†</sup> (provider-led) Skyaid<sup>†</sup> (vendor-led) **HSPC** (provider-led) ₩ SMAR CIMI **SMART** (provider-led) SMART Carebox<sup>†</sup> FHIR (vendor-led) † Disguised network risk cycle effect cycle

#### Relevance Open digital platforms represent an opportunity for health care innovation **Benefits** Digital platform models **Data sharing and patient Emergence of digital** involvement, integration of platforms across industries, care through interoperability health care as a 'late-comer' **Explosion of available health** Promise of quality and cost 165,000 apps; different providers with improvements, especially for different organizational chronic diseases governance models

### Platform design and scaling strategies **Demand for better** treatment / payment **Health service Payer** provider payment vendor Denactive interest and the state of the stat **Platform** provider Traditional model Scaling strategies Additional pull effects **Patients**

M. Aanestad, T.B. Jensen, *J. Strategic Inf. Syst.* 20:2, 161-176 (2011). | M.W. van Alstyne *et al.*, *Harvard Bus. Rev.* 94:4, 54-63 (2016). | CIMI, www.opencimi.org. | B. Eaton *et al.*, *MIS Quart* 39:1, 217-243 (2015). | T.R. Eisenmann, in *Platforms, Markets and Innovation,* 131-161 (2009). | D. Estrin, I. Sim, *Science* 330:6005, 759-760 (2010). | A. Gawer, *Res.Policy* 43:7, 1239-1249 (2014). | A. Ghazawneh, O. Henfridsson, *Infm. Syst. J.* 23:2, 173-192 (2013). | A. Hagiu, S. Rothman, *Harvard Bus. Rev.* 94:4, 64-71 (2016). | O. Henfridsson, B. Bygstad, *MIS Quart* 37:3, 907-931 (2013). | HSPC, www.hspconsortium.org. | R. Huckman, M. Uppaluru, *Harvard Bus. Rev.* 93:12, 1-7 (2015). | A. Langley *et al.*, *Acad Manag J* 56:1, 1-13 (2013). | L. Lessig, *The Future of Ideas* (Random House, New York, 2001). | J.C. Mandel *et al.*, *J. Am. Med. Inform. Assn* 2016:1, 1-10 (2016). | J.-C. Rochet, J. Tirole, *J. Eur. Econ. Assoc.* 1:4, 990-1029 (2003). | D. Tilson *et al.*, *Inform. Syst. Res.* 21:4, 748-759 (2010). | N.Yaraghi, *Inform. Syst. Res.* 26:1, 1-18 (2015). | R.K. Yin, *Case study research: Design and methods* (Sage, LA, 2013).