Tracing the evolutionary dynamics of digital artefacts: the case of CUP

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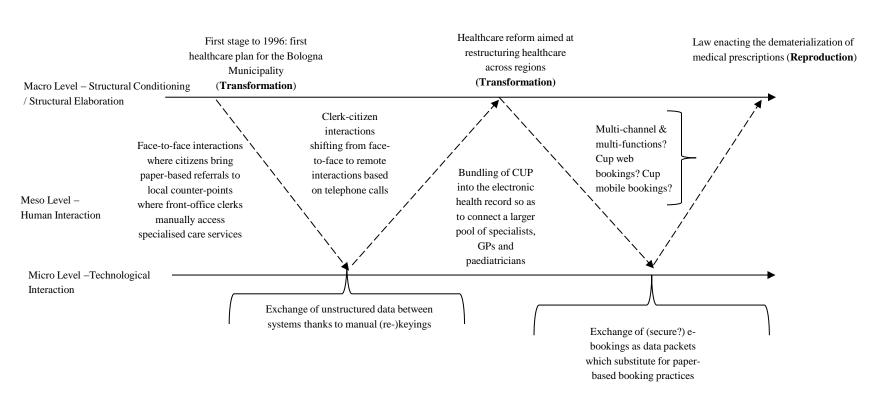


Outline

- Background
- Conceptualization of digitalization
- Framing research questions
- Studying the phenomenon of investigation



Background



Legend

Braces indicate either human activities or technological automation
Dashed arrows indicate a causal sequence of events
Solid arrows indicate the continuous flow of time

Macro Level (Macro actors with large-scale consequences)
Meso Level (Connection between macro and micro levels)
Micro Level (Micro actors with large-scale consequences)



Digitalization

- Encoding of analog information in a digital format and the possible subsequent reconfigurations of the socio-technical context of production and consumption of product and services" (Yoo, 2012: 137)
- Key features: reprogrammability, homogenization and self-referentiality (Yoo et al., 2010)



Digitalization as a tendency

- Macro-micro and micro-macro mechanisms: legislative and technological mechanisms explaining shifting outcomes
- Tendencies refer to causal powers (or mechanisms) which are either exercised or set in motion: they are the effects of causal mechanisms
- Dematerialization of medical prescription is the effect of a set of underlying mechanisms

Research questions & Unit of analysis

- How do digital artefacts emerge? Why do they become bundles of features that are not qualitatively different from their underpinning mediums?
- Embedded units of analysis: the phenomenon under investigation as a complex and embedded one

