UNDERSTANDING THE DEVELOPMENT OF TRUST OVER TIME:
COMPARING TRUST IN THE IT ARTIFACT AND TRUST IN THE PROVIDER

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The importance of trust has been shown in numerous studies in the IS discipline, including but not limited to IT adoption and diffusion. Although researchers agree that trust is not only relevant for one-time interactions, but that trust develops gradually during an interaction and needs to be maintained over time, most studies rely on research designs that only capture a cross-sectional snapshot of trust development. We aim to address this gap in the trust literature by conducting a five-wave longitudinal field study to investigate how trust in a new IT artifact – a new student information system – and trust in the provider of the system emerges. The results of our latent growth modeling analysis indicate that trust in a new IT artifact develops as follows. First, the users confirm whether their level of initial trust was correct and adapt their level of trust accordingly. Next, the users start to build trust, resembled by a linear growth in trust. Finally, trust stops to increase and remains stable. Furthermore, this development does not vary comparing new and experienced users. For trust in the provider, the results differ between new versus experienced users. New users also confirm whether their level of initial trust was correct and adapt their level of trust in the provider accordingly. Next, new users start building trust, but the trust-building process is characterized by a quadratic growth. In contrast, for experienced users, we observed a constant linear growth throughout the study. Based on our results, a sixth stage called confirmation of initial trust should be added into the trust lifecycle in between the stages of initial trust building and trust building.

Keywords: Trust, Trust in IT Artifacts, Trust in the Provider, Latent Growth Modeling, Trust Lifecycle, Confirmation of Initial Trust, Five-wave Longitudinal Field Study.
weeks to adjust their interpersonal trust – in our case trust in the provider. Afterwards, it takes
the users about another six weeks to build trust in IT artifacts (we observed a linear growth) until
stability is reached. For trust in the provider, even experienced users did not reach the phase of
trust stability within the duration of our study.

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