

## Integration to Digital Platforms and Infrastructures

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Evolving digital platforms, or infrastructures, such as the smart grid, Google services, cloud platforms, Amazon, Facebook, e-health, and Internet of Things platforms, are deeply intertwined to the everyday life of businesses and citizens. It is assumed that in the future the success of businesses and public sector organizations is dependent on their ability to harness both new technology and its social capacities, afforded by the platforms. The platforms are often global, remote, and nearly invisible. This means they cannot be controlled by people utilizing them. Digital platforms and infrastructures may also change or evolve, and include unknown security risks and strategic threats. Managing these changes, risks and opportunities is challenging for any local actor; a developer or a user, of different kinds of digital products and services. At the same time readily available global platforms (e.g. Amazon AWS, Google apps, Facebook APIs) offer enormous power for even the smallest developer and user organizations.

Local actors do not own or are not able to establish their own infrastructures or platforms. They are often referred to as non-focal actors [3]. A non-focal actor is at the periphery of a digital platform (ibid.). The platform is not dependent on a single actor and a non-focal actor may choose to which platforms it connects. However, to survive and succeed in their business, non-focal actors need to integrate to platforms owned and managed by others. Often there are no alternatives, as global platforms often form monopolies due to the winner-takes-it-all economics [1].

Most businesses are non-focal from the viewpoint of digital platforms. The platforms constitute of webs of services that are connected together, and are developed by networks of service providers. This enforces changes to conventional practices and perspectives, for example to the principles of IT development and management, and to the role of IT in business. Development processes will become continuous because infrastructures and business requirements are in constant flux. The infrastructures cannot be controlled by non-focal actors as they usually belong to global internet or e-commerce giants. From the non-focal perspective, the process of development and integration is changed into a reactive

mode where most development is done against the changes in the capabilities of the infrastructure, or to provide a match between the infrastructure and the business need [2].

Platforms have been mostly studied from technical, societal, business or other individual viewpoints. There is very little research that bridges these areas, especially from the service, systems or software construction viewpoints. This calls for studies that combine software engineering, information systems, and business management to understand the creation of novel solutions for non-focal actors that must be able to identify the risks and opportunities related to digital infrastructures, and prepare for technology and business changes in the future.

This minitrack presents two papers that contribute to different viewpoints related to the integration to digital platforms and infrastructures: the phases of platformization and the app identity strategies. Both papers shed light on the evolution of platforms.

- Dang, Pekkola, Vartiainen and Pham study the public national health care platform development process. They identify four features impacting platformization: inheritance of the development process, the practitioners significant role, co-creation, and governance mechanism.
- Liu, Henfridsson and Nandhakumar outline and test three strategies for the app identity projection: identity conformity, identity differentiation, and identity refinement. Their results show significantly increased app survival once all identity strategies are actively pursued.

### References

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