Coevolution of Platform-based Open Source Ecosystems: Uncovering Socio-Technical Dynamics Using Digital Traces

Short Paper

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Abstract

Open source software is increasingly becoming platform-based, thereby evolving and depending on an ecosystem of third-party developers and their contributions in the form of modules. Thus, platform-based open source software ecosystems (POSSE) are structured based on social networks formed by the relationships between third-party developers as well as technical networks formed by dependencies between the modules extending the platform core. Despite the socio-technical nature, little is known about the interplay of the social and the technical networks, and its influence on the evolution of POSSE. In this short paper, we present our planned study to uncover the socio-technical dynamics of POSSE. By uncovering these dynamics and their effect on the evolution of POSSE, we aim to contribute to research on digital platforms and ecosystems through explaining their success and growth.

**Keywords:** Open source, digital ecosystems, ecosystem dynamics, network analysis, data-driven approach

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Headings of subsections should be in Georgia 11-point bold italics with initial letters capitalized (Heading 2). (Note: for sub-sections and sub-subsections, words like ‘the’, ‘of’, ‘a’, ‘an’ are not capitalized unless it is the first word of the heading.)

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| Figure 1. Modified Research Model |

## Table Style

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| Table 1. A Sample Table | | |
|  | Treatment 1 | Treatment 2 |
| Setting A | 125 | 95 |
| Setting B | 85 | 102 |
| Setting C | 98 | 85 |

Table 1. A Very Nice Table

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