Participation in Standardisation and Open Source Development: Empirical Evidence from Germany

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Although first comparisons between standardisation and the development of Open Source Software (OSS) [see e.g. EWJ] have been made, comparative analyses based on empirical data do not yet exist. The paper compares for the first time the forces driving companies to participate in standardisation in general, based on data of a study launched by the German Standardisation Institute DIN (Bl 2004) with the results of a survey among software developers (Bl 2003).

We distinguish several factors which may be responsible for the participation in the two types of processes. Besides structural factors like company size, we assume that the R&D activity has an important influence on participation both in standardisation and the development of OSS. From the theoretical perspective, there are two contradicting hypotheses. On the one hand, own R&D activities are a necessary condition, in the sense of absorptive capacity, to engage efficiently in both types of processes. And their commercial value can be increased through standardisation and OSS development, if the company is able to influence the general direction of R&D trends. On the other hand, both the output of standardisation and OSS processes can be used in companies and therefore make own R&D activities – at least partly –superfluous. The empirical analyses will reveal which effect is dominant. Other driving forces for a decision to participate in standardisation are dependent on the market conditions, like the degree of competitiveness or internationalisation. All these factors will be integrated in two multivariate regression models to explain the likelihood of participation in standardisation and OSS development. The comparative analysis of the empirical results will allow us to enrich the theoretical discussions about similarities and differences between standardisation and OSS development, and to derive recommendations for future policies regarding OSS.

Literaturverzeichnis

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