Performance Optimization of Interactive, Personal Content Distribution

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The fast evolving market for mobile devices has become more appealing than ever, both for users as for content and application providers. Different types of mobile devices, such as smartphones, tablets or e-readers find their way to the mass consumer market while the continuous purchasing of mobile applications has shown to be a major success. Also the adoption of mobile data connectivity is increasing as mobile data plans become less expensive while network data rates and download volumes are raised. However, due to this fast evolution, the mobile market has become more fragmented and devices are faster outdated, not only on a hardware level, but also on a software level with the existence of many popular mobile software platforms, each composed of different software versions.

A service platform has been designed that aids both application and content providers to more easily target all these mobile devices, irrespective of their hardware capabilities or software platform. Special focus is on the integration of interactive and personal services in the delivery of mobile content and the development of mobile applications. Interactive services specifically encompass all kinds of actions that may be executed by users while consuming mobile content, e.g. participating in a live TV quiz show which is simultaneously streamed to the mobile device. For the personalization aspect, the platform is composed of A.I. building blocks that analyze mobile users' behavior: the content they consume, their measured context information and the interaction with the mobile platform, e.g. their application usage. As such, our platform eases the development of interactive mobile services and enhances the level of personalization integrated in these services. Additionally, with privacy becoming more and more of an issue, the platform aids the user in transparently managing all his personal information, allowing to determine which data may or may not be consulted by which applications.