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Introduction

During the 2006 FIFA World Cup Germany, several millions of spectators visited the 64 games in 12 different stadiums, watched the games on large screens at public places or took part in fan events. In order to offer the visitors an »efficient, effective and innovative execution of the World Cup tournaments in a relaxed and friendly atmosphere«, the servingo project supplies an IT-supported service platform, enabling integrated information and individual logistic support across diverse target groups. Content and services to support the visitor in his mobility and to provide him with entertaining applications will be made available over different transmission channels using a mix of Internet, GSM, UMTS and DVB-H.

servingo is focused on four main research topics covering various innovative services for the mobile support of personal logistics, the generation of personalized information, interactive 3D reconstruction of game scenes and the provision of data via a Multichannel platform.

The final servingo-platform was available for free since the CeBIT 2006 fair and was very successful during the 2006 FIFA World Cup. The aim was to provide the crowd of visitors with the services developed in servingo. Some parts of the project were only implemented prototypically due to their highly innovative research approach.

Mobile Logistics Support

To support the visitor in navigation and organization, servingo offers various services like pedestrian routing, information about public »Points of Interests« and mobility-related locations, like train stations or helpful information about public transport. As the major part of the visitors use public transport to travel to the different venues, servingo provides them with information allowing them to find their way in an unfamiliar area. Foreign visitors benefit from servingo as a system offering, for example, timetables and connections to their required destination.

The integration of personal Points of Interest into the personal logistics sup-

German Abstract

Im Sommer 2006 fand die FIFA FUSSBALL-WELTMEISTERSCHAFT 2006 als wichtigstes flächendeckendes Großereignis Deutschlands statt. Das vom BMWI geförderte Forschungsprojekt servingo entwickelte in diesem Kontext eine IT-gestützte Serviceplattform, die es erlaubt, eine integrierte Informations- und Logistikunterstützung über verschiedenste Zielgruppen hinweg anbieten zu können. Die Dienste der servingo-Plattform können über unterschiedliche mobile Endgeräte abgefragt und genutzt werden. Für die Öffentlichkeit wurde servingo bereits im Frühjahr auf der CeBIT 2006 frei geschaltet und konnte seitdem kostenlos von jedem getestet und verwendet werden. Während der FIFA WM 2006 lief die servingo-Plattform mit seinem vollständigen Funktionalitätsumfang sehr erfolgreich und wurde vom Publikum gerne angenommen.



Figure 1: Provided Services in servingo.



Figure 2: Homepage of the servingo platform.

port make mobility beneficial. A user who has defined a certain position – like the parking place of his car, his hotel or his favorite restaurant – as a personal Point of Interest can be supported to find his way to this place.

Personalized Portals

A core service of servingo is the provision of personalized portals to accompany the sports enthusiast and to give him an integrated event experience. A registered user can be optimally and appealingly informed with custom-made event-related topics. By submitting pictures or personal experiences to the system, the user has the possibility to create personal Points of Interest or his own »diary«. By combining public information tailored to a particular user with his personal experiences, a personalized event »story« will be written. This personalization will mainly be supported by the usage of personal Points of Interest which represent the most outstanding locations and, by that, build the foundation of the personal experience log.

Interactive 3D Match Editing

This entertainment component of servingo allows the access to reconstructed key scenes of a match, allowing the user to watch these scenes and to interact with them. The user will become the »cameraman« with possibilities to vary the execution

speed and the position of the camera. So, he might watch a goal in slow-motion from the point of view of the field player and in real time from the position of the goal keeper. The integration of additional information, like player descriptions and statistics, distances, trajectory of the ball, motion radii and paths, is conceivable.



Figure 3: Layout of servingo at a mobile device.

Multichannel Distribution

A main aspect of servingo is the realization of a suitable distribution platform providing two essential distribution channels. To provide individual information to a single user, mobile network infrastructures (GSM, GPRS, UMTS) are already used. The usage of these point-to-point channels allows the transmission of personal data like servingo's personalized portals or personal Points of Interest.

The concurrent transmission of the same data for multiple users was realized over a point-to-multipoint broadcasting channel. servingo uses IP-data-cast over the DVB-H standard to provide a broadband downstream for mobile devices.

By combining both approaches with the point-to-point channel as an interaction channel, a hybrid platform is implemented.

The presented servingo core services provide general services for information and entertainment combined with personal data, thus making every user a part of the event.

Conclusion

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Further Information

Project: <http://www.servingo.org>
 Servingo-platform: <http://www.servingo.de>

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