A User-Centric Service Creation Approach for Next Generation Networks

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Geneva, 12-13 May 2008
Motivation

Next Generation Networks

- Bring IP to Telecommunications domain
- Merging Internet and Telecom worlds
- Simpler, more flexible, cost effective, multi-service

Where are the new sources of revenue?
Where are the **killer applications**?
Which service provision model to apply?
Service Creation over NGN nowadays

- **IMS** opens the service creation process to specialized third parties through AS (SIP, CAMEL, OSA)
- Take advantage of IT tools and technologies (JSLEE and Java APIs)
- **SOA** allows to offer the network resources (telecom enablers): ParlayX & OMA

But
- (Just) Third parties collaboration limits the ecosystem
- The long tail of users cannot be addressed
Service Creation in Internet

“Self/Fast service creation”
- service creation portals

“Personal view of the web”, “Person of the Year: You” (2006, source: TIME)
- Web2.0 paradigms, user-centric/social communities, peer-to-peer
- user-generated content sharing

User-Centric Service Creation over NGN

Let users create their own services!!!
Where is OPUCE?
User-Centric Service Creation

- Allow non-expert individuals to **create and share** their own services (mashups) and contents

**Benefits**

- Users have access to the **precise** service they need without needing someone else implementing it
- Operator **reduces development expenses**
- Operator **fulfills customers’ expectations**
- Operator obtains profit for the use of **ancillary services** (location, presence, messaging) and intermediation (billing)
- **Third parties** can enter the telecommunications market without deploying their own infrastructure

**Adding social networks**

- Share within a community (**Viral marketing**)
- Promote high value services -> **Killer services** in the long tail
The OPUCE project

Producers control some aspects of the service lifecycle

Producers share their services

Consumers subscribe to services

Consumers promote and recommend services

Producers compose their services

Catalyst of a dynamic service ecosystem over the NGN
OPUCE all-in-1

Creation
- Portal
  - Portal to create services: social network, edition, test, monitoring etc.
- Service Lifecycle Manager
  - Manages the automatic deployment and withdrawal of services

Execution
- User Interface Manager
  - Services, subscriptions, AAA and user personal information
- Service Execution Environment
  - A BPEL engine orchestrates base services. Base services need to be wrapped in a WSDL style
- Advertiser
  - Promotes the social community, by managing the notification and sharing of services

Network
- IT
- Telco
- IMS
OPUCE Web Editor
Worldwide Results

Stuttgart, Germany

Aveiro, Portugal

Torino, Italy

Valladolid, Spain

São Paulo, Brazil

Shenzhen, China

OPUCE Test-Beds & Pilots

Geneva, 12-13 May 2008
First ITU-T Kaleidoscope Conference – Innovations in NGN
OPUCE and Standards

- Based on international standards...

- ...and world-wide specifications

- And trying to contribute back to them
Summary & Conclusions

- User centricity of Telecom-oriented services as a catalyst for promoting future service ecosystems over NGN
- **Benefits** for all actors involved: users, operators, third parties
- 2nd iteration of the project improves business models definition, usability aspects, security, privacy and billing (AAA), and third parties involvement
OPUCE
Open Platform for User-centric service
Creation and Execution
http://www.opuce.eu

GRACIAS
THANK YOU
DANKE
ありがとう
GRAZIE
Ελληνικά

MERCI
谢谢你。
OBRIGADO
 شكرا
спасибо
당신을 감사하십시오
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