

Adaptability for personalised and collective media experiences

Thoughts from a Future Internet Socio Economics perspective

Michael Boniface (mjb@it-innovation.soton.ac.uk) IT Innovation Centre

Dynamically Adaptive FI Applications: Beyond Adaptive Services

FIA Budapest 18 May 2011

















Increasing Choice Opportunities

Increasing complexity and individualisation in society

Value change over stability

Value opportunity over loyalty

Capacity to choose among a endless number of products, contents and contacts (van Dijk, 1999/2006)



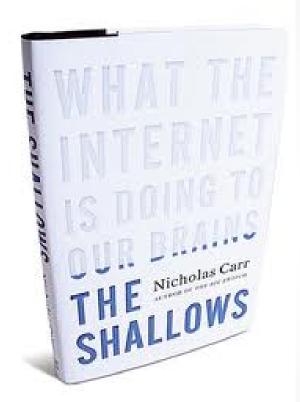
Quality of Experience

- Improved Quality of Experience is a key driver for media scenarios
- International Telecommunication Union defines QoE:
 - "The overall acceptability of an application or service, as perceived subjectively by the end-user."
- Cognitive psychology tells us that experience happens in the human mind
 - technology is just catching up
- Studies show common elements required for enjoyment
 - necessary psychological conditions
 - clear intention, challenge, and attention



Intention and attention in a dynamic and adaptive Internet?

- Every desire anticipated and every fear avoided by my guardian Google (Gandy)
- Critical cognitive processes deemphasised (Carr)
 - attention, contemplation, introspection, conceptual thinking
- Mental work substitution by ICT causes intellectual laziness (Pena-Lopez, Ellis) but "Things That Make Us Smart" (Norman)



Doom mongering or do we just adapt?

Experience and Value

- Quality of Experience is directly related to value
 - better experience, greater likelihood of social and financial commitments
- Personalisation can better target offers but it does not always increase value
 - can reduces value (e.g. digital downloads, tv channels)
 - can reduce attention (e.g. information overload, too much choice)
 - can reduce community (e.g. individualism vs collectivism)
- Adaptability need to consider community together with personalisation
 - goal selection, attention, and shared community values and experiences



OR



Rich Media Collective Experiences

- Create value by linking people to each other and to locations in ways that capture popular imagination
- Emerging applications
 - personalised entertainment supporting interaction non-linear story-telling, and immersive experiences
 - social communities using 3D environments to communicate and interact
 - capture and reproduction of the real world in 3D
 - perceptual congruity between real and virtual worlds
- Services must adapt to this dynamic socially distributed, fixed and mobile content







Live Real-World Events



adaptive scaling for large-scale short-lived communities

adaptation to environment considering physical, social and ethical constraints

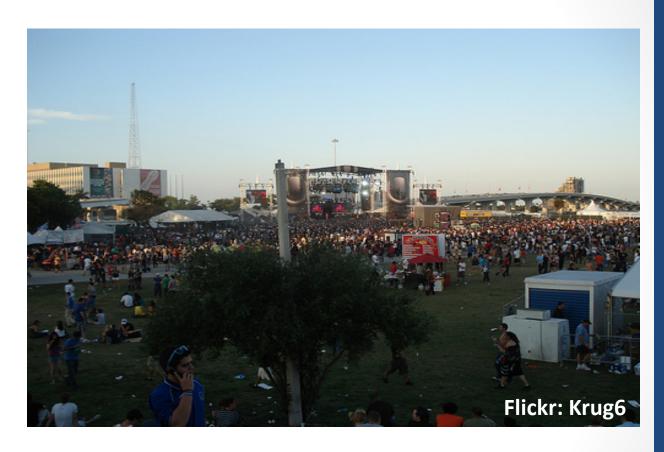
adaptation of content according to individual and/or group preferences

Live Real-World Events

real-time orchestration allowing for adaptive narratives

adaptation to unreliable sensors and devices for detection and tracking of feature points

adaptation to
device capabilities
both remote and
at a venue



adaptation to cooperative or collaborative frameworks including dealing with selfish or malicious users

Summary

- Quality of Experience is at the heart of the Future Media Internet
 - tricky topic requiring multi-disciplinary research
- Personalisation and community needs to be considered together
 - connecting people through content creates more meaningful interaction
- Adaptability needs to focus on the convergence of real and digital world communities
 - real-world live experiences encourage greater social and financial commitments

More Information

- W: http://www.seserv.org
- E: getinvolved@seserv.org
- http://www.linkedin.com/groups?about=&gid=3870856
- http://www.twitter.com/seserv
- Get your socio-economic priorities on the FISE agenda
- http://limesurvey.oii.ox.ac.uk/index.php?sid=68914



Project Coordinator
Prof. Dr. Burkhard Stiller
University of Zurich
stiller@ifi.uzh.ch



Technical Manager

Michael Boniface

IT Innovation Centre

mjb@it-innovation.soton.ac.uk