

# Adaptive Multimedia Content in Mobile Cloud Computing Environment

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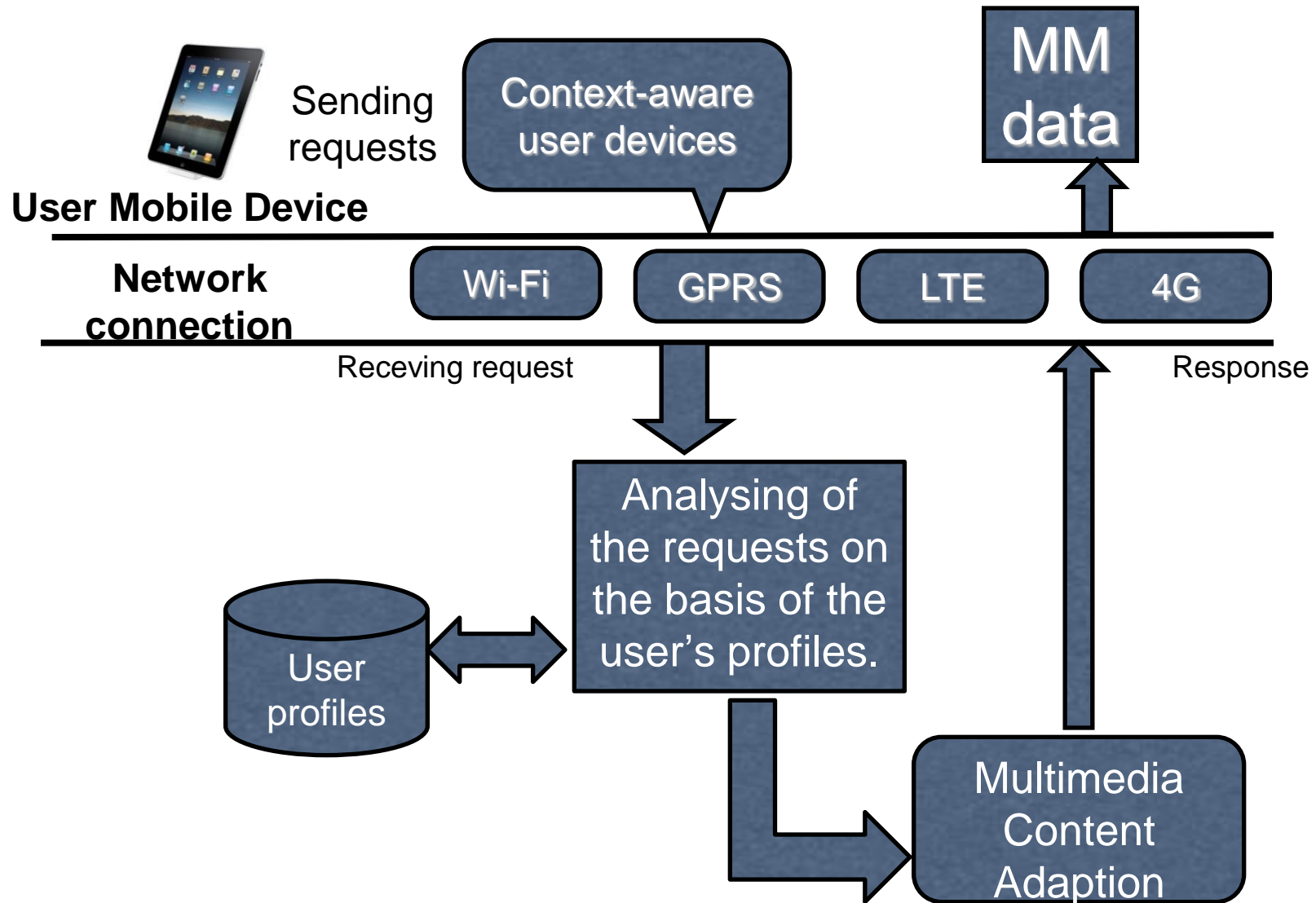
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# INTRODUCTION

- Usage of the processing power of the Mobile Cloud Computing (MCC) environment for adapting the multimedia content to the context – aware network conditions of the mobile user.
- Improvement the QoE metrics as a multi-dimensional construct of user perceptions and behaviors
- Case study for multimedia mobile learning

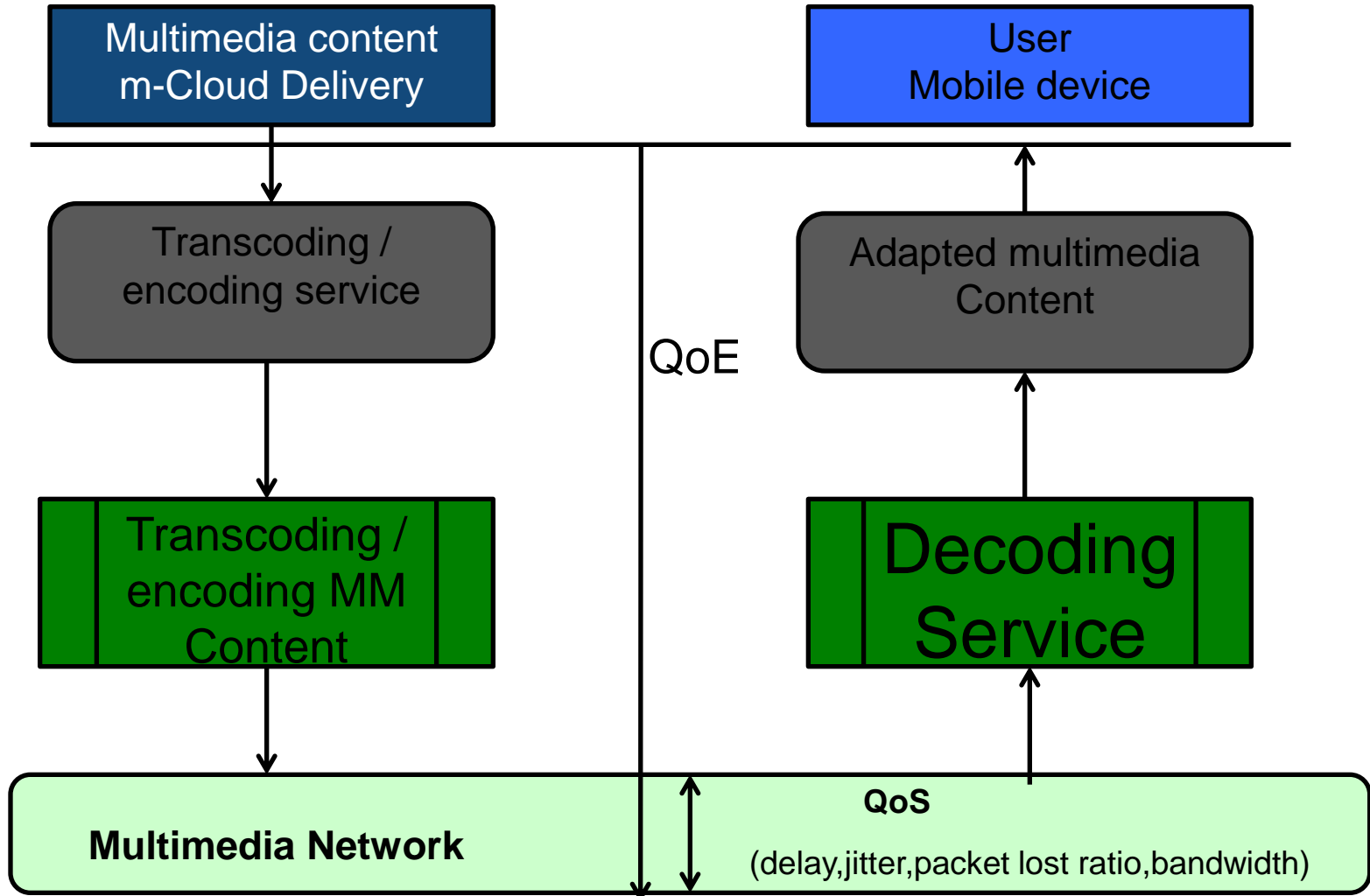
# Architecture of the MCC for multimedia content adaptation



# ADAPTIVE PROVISIONING OF MULTIMEDIA CONTENT

- The proposed adaptive provisioning of multimedia content workflow are the media files, that are highly depend initially from the context-aware network conditions and the type of mobile device
- Using the network protocols, users of mobile devices easily send their requests to be processed within the MCC environment.
- The received requests than can be managed and scheduled for processing in the mobile cloud.

# QoE model



# QoE model

- In order to apply the appropriate mapping settings, we use mapping functions between the QoS and QoE.
- The context – aware network conditions are estimated by QoS
- The user cognitive perception is measured according to the QoE model.

# Case study for multimedia mobile learning

- We have investigated some of the prospects of using the mobile cloud computing for delivery of augmented distance learning systems (as a case study).
- The QoE survey questions were answered by a group of 25 students that participated in research.
- From this study we observed an increased overall satisfaction and educational advantage of the used methodology of m-learning.

# CONCLUSION

- We presented a MCC environment for delivery of adapted multimedia content
- According to our QoE model, we found a significantly increased students attention in the process of m-learning
- For the future work, we plan to investigate the MCC environment together with improved QoE models for different applications such as m-health, m-business, m-social services etc.