



Optimizing User Experience in 5G

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1. Executive Summary

Providing a superior user experience (Ux) for wireless customers has become an important consideration for network operators offering competitive wireless services. ATIS' 5G initiative considers unique approaches to the delivery and optimization of services for wireless customers. This report outlines breakthrough use cases related to optimized user experiences and addresses service and ecosystem models that enable them to be delivered. This report also introduces a solution-based approach to enable implementation and delivery of the capabilities identified here. This approach includes end-user opt-in/opt-out and control functions to insure end-user privacy and awareness of how personal data may be used.

In the context of this document, the term "optimized" user experience relates to meaningful improvements in measured user experience that may be achieved by applying the tools and processes described. The scope of this report is focused on user experience measurement based on ratings provided by the user. It is recognized that there are other measurement and optimization techniques beyond the scope of this document that may be applied to assess and improve the user experience of 5G networks.

2. Introduction and Goals

In support of the 5G initiative, ATIS formed a "Breakthrough" Team with the purpose of creating and defining high-level use cases to enhance the ICT Industry's ability to create value and to accelerate the sector's growth and competitive position in the rapidly growing information and content service segments utilizing wireless delivery. The objective of this work was to identify breakthrough approaches to optimize the end user experience without being constrained by limitations of the current generation carrier network architecture, service offerings, and business models.

User Experience as a Foundation for Breakthrough Use Cases

The ability to accurately measure the user experience and use this to improve services offered by the network and the allocation of network resources is at the heart of the breakthrough use cases described in this report.

The breakthrough use cases leverage user experiences in two broad areas:

- Creating value by delivering optimized, world-class user experiences.
- Developing new service and business models via the creation and enablement of expanded collaboration models and broader ecosystems.