

# Design and Implementation of Mobile P2P Digital Right Management System

## Abstract

Mobile communications develop rapidly in recent years, not only the promoting in computing ability and being diversification of function, but also the construction of mobile phone networks infrastructure, all of them making all the things in life can be completed through mobile devices.

With the increasing of population of the users who surfing the Internet by mobile phones, the research of P2P networks which was based on personal computer and gradually developed to mobile phone networks. P2P network is different from the client / server model that there is only a single or a few servers, so that it can overcome the failure of single point, avoid excessive burdens on a single server. But P2P networks also suffered several issues; the most criticized of them is the free-rider problem and copyright infringement.

In this research, we intend to construct a mobile phone peer-to-peer network. In order to solve the free-rider problem and to promote the spread of digital contents, we will propose an incentive mechanism to encourage users to share with others. For solving Copyright infringement, we will implement a digital rights management system to prevent digital content from illegal infringement.

**Keywords:** Mobile telecommunication, Digital rights management, Cloud computing, Peer-to-peer networks, Business model