Purpose – The purpose of this paper is to develop an adoption model to identify the critical factors that affect firms' intention to adopt mobile enabled supply chain systems (mSCM) in retail industry. This study focuses on inter-organizational dimension since mSCM is an inter-organizational system that provides both inter- and intra-organizational linkages for firms across the supply chain.

Design/methodology/approach – A survey method was used to test the proposed model. Data from this study were obtained from South Korean firms.

Findings – Supply chain awareness was shown to be a strong predictor of both interorganizational dependence and inter-organizational trust which positively affects firms' longterm relationship with their trading partners. Institutional pressures, long-term relationship, and top management support also had a significant influence firms' mSCM adoption intention.

Research limitations/implications – First, only executives and managers in retail industry of South Korea were surveyed, thus, the results may not be generalized to retail industry in other countries. Second, the current study focuses on a firm's mSCM adoption intention rather than actual adoption

Practical implications – This study provides useful insights for practitioners to better manage institutional pressures and nurture long-term relationship in order to promote co-adoption of mSCM.

Originality/value – This study provides useful insights for supply chain members on how to overcome barriers to adopting an innovation and to increase the chance of successfully adopting mSCM in the retail supply chain

Keywords Supply chain management, Mobile communications, Mobile enabled supply chain systems, Inter-organizational dependence, Supply chain awareness, Institutional pressures, Perceived operational benefits, Retail service industries, South Korea