



# A Comparison of CRM Implementation Across Internet and Wireless Channels

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## INTRODUCTION

This research-in-progress paper outlines our current research in comparing the deployment of customer relationship management (CRM) features on the wired and mobile Internet. Our study examines the current practice of 15 selected e-commerce sites. From this research, we expect to identify strategies and research questions regarding cross-channel coordination of CRM services, content mapping, and interface design.

## PRIOR RESEARCH

CRM involves the deployment of strategies, process, and technologies for strengthening a firm's relationship with customers throughout their lifecycle — from marketing, sales, to post-sale services. The goal of CRM is to optimize a firm's revenue, profitability, and customer satisfaction. Internet technology has transformed CRM into electronic CRM (eCRM) because it can be used to capture new customers, track their preferences and online behaviors, and customize support and services. Furthermore, the convergence of wireless communication and mobile Internet forms a new, mobile channel for CRM (mCRM).

Many researchers believe that the wireless channel offers the potential to strengthen relationships with customers. Four factors make the mobile Internet an ideal channel to implement customer relationship management (CRM) for its ability to: (1) personalize content and services, (2) track consumers or users across media and over time, (3) provide content and service at the point of need, and (4) provide content of highly engaging characteristics (Kannan et al., 2001). Services that deliver strong mobile values make the wireless channel particularly important (Anckar & D'Incau, 2002). The challenge is the coordination of user interfaces and contents across multiple channels so the experienced users and repeat customers can handle multiple media and platforms with satisfaction.

However, at present, business and consumers are still hesitant in adopting the wireless channel because of many technology and usability barriers (Ernst & Young, 2001; Chan & Fang, 2001, 2003; Zhu, Nah, & Zhao, 2002). Consumer adoption of m-commerce has been slow, even in countries that have broadly adopted wireless technology (Anckar & D'Incau, 2002). Poor usability of mobile Internet sites and wireless applications for commerce activities stands out as a major obstacle for the slow adoption of mobile solutions (Chan, Fang, Brzezinski, Zhou, Xu, & Lam, 2002) or choosing m-commerce as a distribution channel (Shim, Bekkering, & Hall, 2002).

A recent study has found that most mobile sites were designed primarily to support existing users (Chan et al., 2002). Prospective customers may be discouraged from exploring a new mobile site by the inherent difficulty in the current wireless technology, such as limited bandwidth and poor connectivity, and in the wireless handheld devices, such as small screen display and difficult input formats. The study by Anckar and D'Incau (2002) indicates that e-commerce users are more likely to adopt m-commerce services. Furthermore, consumers are most interested in services with high mobile values that meet spontaneous and time critical needs.

The technology's capability for personalization seems to be the strongest argument for establishing a wireless channel. Mobile CRM is likely to be one of the first areas to embrace wireless solutions. A careful mapping of tasks, data, form factors, and the CRM process will become essential for user inter-

face design. Location technology and personalization of services and content are critical for content presentation, navigation, and search. Differences between novice and experienced users will also be important, as well as approaches for development and usability testing.

## OBJECTIVES

Our proposed study intends to: (1) articulate a framework for evaluating CRM deployment over the Internet and the mobile channels, (2) compare the deployment of eCRM and mCRM in terms of CRM components (marketing, sales, and service), (3) determine the relationship between eCRM and mCRM, and (4) propose new ways wireless technology can be used for mCRM.

## RESEARCH METHODS

We will perform site walkthrough of 15 sites on the Web and on the mobile platforms, using two wireless devices — Palm-OS PDAs (Personal Digital Assistants) and WAP (Wireless Application Protocol) phones. These two platforms are the most popular in the North America market. The 15 sites will include travel, financial services, news, shopping, and portal sites. A checklist will be developed for the content analysis. Questions on the checklist will address strategies for marketing (personalization, push email), sales (search, order, and payment), and post-sale support (tracking shipment, customer service, and account management).

## RESEARCH QUESTIONS

Building on our initial observation and prior research, this study seeks answers to the following questions

- How do companies implement components of CRM over the Internet channel?
- To what extent are CRM components implemented in the mobile channel?
- To what extent is consistency in content, functionality, and interface retained over the two channels?
- Do companies use eCRM and mCRM in a complementary or a redundant manner?
- How are CRM components implemented for different wireless handheld devices?
- What roles mobile portals and wireless service providers play in supporting mCRM strategies?
- How should CRM be deployed in the Internet and the wireless environments in order to optimize customer acquisition and retention?
- What unique features of wireless/mobile technology can be explored to enhance mCRM?

## SIGNIFICANCE

This research would provide empirical evidence for understanding how eCRM is extended to the wireless channel and how companies can optimize CRM through leveraging the unique characteristics of Internet and wireless technologies. At this early stage of mobile commerce development, this study will make significant contribution to the understanding of mobile commerce technology and strategies.

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