Adoption of CRM: Towards a Better Understanding

Abstract
Despite the promising results of CRM, our empirical knowledge of what constitutes its adoption by organisations remains inherently narrow. The growing popularity of CRM has created the need for studies that bring to light a holistic picture of CRM and the impetus of its adoption. Employing a mixed-design methodology on organisations across four differing sectors, a conceptual framework is suggested and then tested on 301 practitioners. Our findings reveal the impact of different factors occurring at different levels in the adoption process. By providing a holistic conceptual framework, we offer insights into CRM adoption and its paradoxes for both academics and practitioners. This framework builds our understanding of CRM adoption and practice, providing deeper insights into CRM as a marketing paradigm which can be translated into multidimensional concepts.

Keywords: CRM, marketing, conceptual model, relationship marketing, strategy implementation, CRM adoption
Introduction
A shift from one marketing trend to another seems inevitable, given changes in emergent technologies and how these impact upon marketing concepts. One of these concepts relates to how businesses should engage with, interact with and adapt to changes in customer needs. This requires adopting a relationship marketing (RM) approach to describe and focus on long-term interactions leading to repeat purchases. To make RM work, many firms started to profit from advances in technology, as it provides enhanced opportunities for organisations to use information to build and sustain relationships with customers (Lin et al., 2010). One important tool which has evolved for effectively managing interactions in long-term relationships is known as the customer relationship management system (CRM). As a result, the focus within marketing has gradually moved from RM to the CRM.

Due to continuous growth in the in the number of organisations integrating CRM into their strategies and systems (Plakoyiannaki, 2005; Sun and Li, 2011), the topic of CRM remains a prominent area of research integrating different research streams in the marketing literature (Alshawi et al., 2011). While literature often cites CRM projects as failing to deliver promised improvement in business performance, our empirical knowledge about what constitutes a successful adoption of CRM remains narrow (Kim et al., 2012). One explanation is that the complex nature of CRM creates differences in the tactical emphasis and a lack of agreement as to the precise definition of CRM (Pedron and Caldeira, 2011). Against this backdrop, we believe it is pertinent to ask the following questions. What are the factors affecting CRM adoption within organisations? Why organisations are challenged by CRM adoption? While there is a substantial body of literature concerning CRM and its adoption, research on this phenomena is widely scattered and fragmented across different disciplines and perspectives. As a result, the subject of CRM is notable for the lack of a holistic conceptualisation of the major factors affecting its adoption within organisations (Frow et al., 2011). Therefore, this study presents an attempt to develop a better understanding of CRM by building on extant research from different disciplines, and developing a holistic perspective of CRM adoption.

CRM and CRM Adoption Process
The seminal work of Rogers (1983) on the innovation diffusion theory (IDT) provides a conceptual framework for investigating innovation adoption, which is particularly valuable for understanding the adoption of a complex information system, such as CRM. According to Damanpour (1991), IDT can be conceptualised as a two-stage model: initiation and implementation. Ko et al. (2008) adapted Rogers’s innovation adoption model and explored the status of CRM adoption among organisations by focusing on two main stages: perception and implementation. The perception stage refers to cognitive beliefs underpinning an attitude towards CRM. Positive perception about CRM benefits leads to decisions as to its adoption and implementation, the stages of which will depend on organisational deployment of specific CRM technologies/strategies. According to Chen et al (2000), IDT is one of the primary theories applied in technology innovation. However, to date, it has received minimal coverage amongst CRM adoption studies. Therefore, this study attempts to bridge this gap in the literature by focusing upon two stages of the adoption process: perception, and implementation, which offer specific adaptation of Rogers’ innovation adoption process framework. These two dimensions might be useful for reflecting CRM adoption from two different angles or perspectives: that of employees and that of organisational level.

Multi-disciplinary review of factors affecting CRM adoption
CRM has been addressed in the literature of both business and IT disciplines, with considerable overlap between the two fields. In spite of this overlap, these fields significantly
differ in their CRM focus. Within the business discipline, CRM is involved with marketing and management and reflects the development of marketing strategies that focus on customers’ retention (eg Gummeson, 2008). Conversely, the IT discipline has focused on knowledge management and software applications (eg Romano and Fjermestad, 2003).

Marketing scholars stress that CRM should be considered as a strategic marketing approach to understand and influence customer behaviour, through meaningful communication to improve customer acquisition, profitability, retention, loyalty (Swift, 2000; Alshawi et al., 2011). They suggest that customer segmentation is significant for CRM implementation, for redefining CRM strategies and tactics, and for effective resource allocation (Meadows & Dibb, 2008). Businesses realise that they do not want relationships with all customers; alternatively they are targeting more profitable customers. Therefore, once businesses have identified their customers’ drivers and profitability, they can better develop attractive offerings to maximise the profitable customer lifetime value and earn their loyalty (Gleaves et al., 2008). Given the relevant importance of customer profitability analysis to businesses, it was suggested as vital for CRM adoption (Venkatesan and Kumar, 2004).

From a management perspective, businesses are concerned with organisational issues related to CRM business strategy development and implementation, and the role of the people and organisation in managing the adoption of the CRM. The adoption of CRM is not an easy process, since it is deeply embedded in other business processes (Harrigan et al., 2011). Consequently, businesses are re-engineering their strategies to meet the evolving needs of customers and incorporate CRM into their business strategy. The leading exponents of CRM adoption have cautioned of the organisational and communication issues which may potentially hinder the effective adoption of CRM (Cascio et al., 2010). This indicates that internal marketing plays a vital role in resolving these issues in RM and CRM implementation (Christopher et al., 2002). It would appear that organisational culture and leadership are critical in actively supporting CRM implementation, and improving customer and shareholder values (King and Burgess, 2007). Hence, it is not surprising that businesses with CRM champions are more enthusiastic in undertaking heavy investment to ensure that CRM initiatives work together efficiently (Finnegan and Currie, 2010). Accordingly, project managers need to implement specific CRM initiatives, in order to achieve CRM goals. These initiatives include creating a multi-functional project team, agreeing specific objectives for value creation, providing detailed implementation plans, appropriate training of users, clear milestones, carrying out monitoring, and motivating employees (Reynolds, 2002).

Researchers from the IT discipline mainly discuss two themes: CRM usage and implementation factors, and CRM alignment with knowledge management capabilities (KM). Researchers focusing on CRM usage and implementation factors (eg Pai and Tu, 2011) indicate that system use has a strong effect on employees’ adoption of CRM in organisations. A number of studies have applied a technology acceptance model (TAM) developed by Davis (1989), to examine the acceptance of new technologies in the CRM domain (eg Vella and Caruana, 2012). TAM explains IS usage-behaviour, which is subsequently influenced by behavioural intention, in turn influenced by attitude and perceived usefulness of the system. Additionally, attitude and perceived usefulness are influenced by the perceived ease of use. We extend these studies by integrating TAM with other streams of literature in CRM adoption context (i.e. internal marketing and project management).

Since acquiring customer information, and subsequently customer knowledge, is a means to attaining CRM objectives, it is concluded that CRM is strongly related to KM (Massey et al., 2001). From the potential synergy between CRM and KM, a theoretical model emerged:
customer knowledge management (Gebert et al., 2003). CRM adoption entails an organisation refining, and realigning KM methods in order to obtain a value-added knowledge from and about customers, to understand not only customer purchasing behaviour and trends but preferences and attitudes. Such realignment involves a change in the organisational vision and thus learning and innovation within an organisation (Moreno and Meléndez, 2011). In particular, knowledge about profitable customers is vital for CRM, as it aids developing a ‘learning relationship’ between the organisations and customers (Sin et al., 2005). KM dynamics are paramount for CRM strategy, in order to equip all staff with knowledge of customer wealth so as to enhance long-term relationship with profitable customers (Garrido-Moreno and Padilla-Melendez, 2011). Figure 1 depicts a conceptual framework implied by previously discussed literature across disciplines, shown in appendix.

Methodology
The services industry, characterised by a competitive environment, lends itself to the study of CRM adoption. More specifically, this study was based on ten companies across four different industries in Jordan: Banking, Telecommunications, Hospitality and Automotive. Since it is often argued that CRM adoption varies between industries (eg Sin et al., 2005), conducting this study with a diverse population of industries was seen as likely to present a diversity of potential challenges to CRM adoption, and to inform conclusions which would be generalisable across industries. There were two phases of data collection for this research. The exploratory study derived from in-depth interviews was aimed to investigate the subjective perceptions and experiences of a variety of stakeholders working with CRM. It was also conducted to contextualise the embedded framework as informed by the literature pertinent to CRM conditions in Jordan. The combination of interview results and reviewed literature led to the design of a survey instrument used in this study. The data were then analysed using exploratory factor analysis (EFA). In the light of the EFA, the number of factors in this study was modified to accommodate the underlying structure of identified factors. In order to test the conceptual model, structured equation modelling (SEM) was performed. The instrument was designed to include a four-part questionnaire. The first part, related to the CRM in the organisation, was used to collect basic information about the CRM system used and its implementation status. The second part related to the organisation’s adoption of CRM. This part of the questionnaire was used to collect information regarding employee perceptions of CRM benefits, and the sub-factors affecting CRM adoption. The third part related to organisational characteristics including industry, number of employees, and etc. The fourth part investigated the respondents’ characteristics including gender, age, and etc. Of the 400 questionnaires distributed, 301 were fully completed and valid for final analysis.

Results
A KMO statistic of .92 indicated that factor analysis was an appropriate technique for reducing and summarising the scale items in this study (Tabachnick and Fiddle, 2001). EFA using varimax rotation was performed as a data summarisation technique to ascertain the underlying structure of the data. Using the 0.5 factor loading criterion, altogether 25 items with smaller or cross loadings were eliminated from an initial pool of 80 items, resulting in 55 scale items to measure only 12 factors affecting CRM adoption. Cumulatively, the 12 factors explained 67% of the variance of the quantitative data, which is deemed sufficient to represent the data. In the light of the EFA, the hypothesised framework was modified to accommodate the underlying structure of identified factors. Such use of EFA to modify and generate hypotheses is justified by Costello and Osborne (2005) who reviewed EFA best practices and recommended that EFA should be employed during initial stages of a research for explicating theory and generating testable hypotheses.
SEM approach was employed using the two-step model-building approach recommended by Anderson and Gerbing (1988): the assessment of the measurement model and assessment of the structural model. Based on the measurement model, a total of 44 items were used to measure all constructs in this study. In investigating reliability, scale items were found to be highly reliable with all the three measures of convergent validity test exceeding the suggested levels of acceptance (i.e., $R^2$, 0.70 for construct reliability, 0.50 for AVE, and 0.70 for construct reliability) (Anderson and Gerbing, 1988). This study adopts the most commonly used goodness-of-fit measures in the marketing area (see Table 1 in appendix). The underlying hypotheses of this study were represented in 13 paths, as outlined in Table 1. As shown in Table 1, the relationship between employee perceptions and CRM implementation is strong and significant. The results suggest that clear direction and objectives, performance management system, customer segmentation, and KM capabilities had positive significant impact on employee perceptions. Although not proposed, the results also showed that clear direction of CRM objectives, rewarding usage, and controlling projects changes were significant predictors of CRM implementation. Also, having clear direction of CRM was found to be only element affecting both stages of CRM adoption. Overall, this study suggested that there were 6 sub-factors out of 12 affecting CRM adoption process.

The results indicate that the following factors do not influence CRM perception amongst employees: customer satisfaction orientation, internal marketing, managing changes in CRM projects, sharing customer knowledge, and perceived ease of use of the system. Such results provide further evidence that suggests that although organisations are using best practices (i.e. emphasising customer satisfaction, managing changes, and incorporating internal communication), they failed effectively to apply these practices to addressing their employees’ perceptions of CRM. This observation may serve as a prompt to scholars for more research in several concept areas (i.e. internal marketing, knowledge management) in order to advance our understanding of business approaches to CRM and its deficiencies.

**Discussion**

The results assert that employees’ perception of CRM benefits serves as reasonable proxy for the actual organisational implementation, the premise being that rather than simply implementing technologies, organisations must consolidate employees’ perceptions of CRM initiatives (Plakoyiannaki 2005; Ko et al., 2008). This can be further supported, since management must plan ahead and prepare for CRM implementation by cultivating a culture that embraces its values (Shum et al., 2008). The results show that effective CRM requires the gathering customer information related to segment markets, and segmenting customers based on their lifetime value. This makes sense as segmentation and CRM concepts have been tied closely in many studies (eg Meadows and Dibb 2012). The results confirm the crucial role of strategic planning, that an organisation should provide clear direction and objectives for CRM (Osarenkhoe and Benni, 2007), and a means for evaluating its performance, in order to set up desired expectations among all stakeholders (Morgan, 2004). Thus, it is vital that organisations embed CRM in their business strategy, and monitor how that strategy affects employee response to CRM. Setting a clear direction and goals of CRM aligned with the overall organisation vision will keep the organisation engaged, focused and effective (Chen and Chen, 2004). Results also suggest that having clear direction and objectives of CRM positively influences CRM implementation in terms of technology. This means that only through setting clear objectives of CRM can the progress of its implementation be given impetus to accelerate. This is linked to Meadows and Dibb’s (2012) findings, suggesting that the progress of CRM and its implementation is determined by the ability to plan strategically. A possible benefit from embedding clear objectives for CRM in
the business strategy may be the opportunity to bridge the gap between CRM plans as proposed by top management, and the progress of its implementation.

This study is the first to demonstrate that rewarding CRM usage fails to influence employee perceptions of CRM. Nevertheless, rewards have a direct influence on CRM strategy/technology implementation in an organisation. This indicates that factors affecting CRM adoption can have a different effect at different points in the adoption process. Although this claim is supported by many IT researchers investigating antecedents of innovation adoption (e.g., Damanpour and Schneider, 2006), prior studies of CRM, from business discipline, does not seem to recognise that factors affecting CRM adoption vary between different points of the adoption. What the results suggest is that rewarding usage encouraged organisations to embrace CRM technologies even when employees are not yet comfortable with these. Such an idea concurs with a recent study which argues that looking at CRM adoption purely from a management perspective is a common mistake, given that employees may behave in a manner different from that expected (Vella and Caruana, 2012).

The results support prior studies to show that organisational ability to manage customer knowledge will lead to better understanding of CRM and subsequently more innovativeness in an organisation (Rigby et al., 2002; Rollins and Halinen, 2005). From a managerial perspective, the importance of understanding the link between KM and CRM adoption is that organisations can provide the infrastructure and resources to support CRM. Hence, organisations need proactively to incorporate customer knowledge into their services, strategies and operations, for employees to value CRM capabilities. The results indicate that managing changes in CRM projects does not influence CRM perception amongst employees but influences its implementation. The combination of these results suggests that project management methodologies are paying attention to management agenda/goals but ignoring employee perceptions. The findings of this study regarding the role of managing changes in CRM projects are consistent with prior studies (Rigby et al., 2002; Papadopoulos et al., 2012) which extended their findings to consider two perspectives (employees and management) when evaluating and managing changes of projects, rather than a single perspective.

Implications and future research
This study offers a number of theoretical implications. First and foremost, it represents a rare attempt to thoroughly integrate extant literature and extend previous research. This is achieved by incorporating different elements of CRM into its adoption process and highlighting reasons that explain the adoption process hierarchy. This study builds a broad yet thorough holistic framework, which attempts to address CRM issues. Undertaking such a view incorporates the fields of marketing, management and information technology into the CRM concept. Accordingly, this study builds on extant research from these three disciplines, making a number of contributions to them. It offers a number of managerial implication as it sheds new light on potential management processes and practices which managers may use to consider the complexity of CRM, providing them with a tool with which to exploit the potential of CRM. Propositions emerging from this study imply a rich agenda for further research. First, there is a need to assess the generalisability of the conceptual model and extend it to other businesses environments, (i.e. Europe and the USA). This is mainly because different cultures can bring different themes and perspectives to the CRM domain. Second, it is important to note that CRM adoption is expected to have overall a positive influence on business performance. Business performance is a multi-dimensional concept that may be related to several aspects including customer satisfaction, employee satisfaction, ROI, and sales growth. Future research needs to investigate what manifests as good CRM performance.
References


Appendix

Figure 1: Proposed conceptual framework

Management

- Strategic Planning
  - Clear direction and objectives
  - Performance management system
  - Developing a strategic set of activities

- Internal Marketing
  - Change management
  - Internal communication
  - Rewarding CRM usage

- Culture and Leadership
  - Resistance to change
  - Supportive culture
  - Leadership

- Project management
  - Project management techniques
  - Controlling changes in CRM projects

CRM Adoption

- Employees' perception

Implementation

Information Technology

- Innovation characteristics
  - Ease of use
  - Usefulness

- Knowledge management
  - Capture
  - Manage
  - Transmit

Marketing

- Customer-Centric Orientation
  - Segmentation
  - Profitability
  - Acquisition
  - Satisfaction
  - Retention

Table 1: Total effects

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Model Fit statistics

- χ²/df: 1.72
- AGFI: .79
- RSMEA: .04
- CFI: .91

Variance Explained (R²)

- Perception: .60
- Implementation: .48