

THE EVALUATION OF CRM SYSTEMS: A BEHAVIOURS-BASED CONCEPTUAL FRAMEWORK

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Abstract

Research-in-progress on the evaluation of mandatory Customer Relationship Management Information Systems (CRM IS) is presented. The business problem is presented, followed by converging theoretical considerations, which assist in making the case for a wider conceptualisation of CRM evaluation which values a social perspective of CRM IS use at boundary-spanning professional (BSP) and customer levels. An emotions based conceptual framework for use in evaluating CRM IS from this social perspective is then presented, building on a theory of emotional expression. The framework is explained and then discussed in terms of how the framework can be applied and data outputs analysed in a field analysis context. The broader research programme aims to test and validate the model according to the details given and through doing so, further understanding of the impact of CRM IS from this behaviours based, social perspective.

Keywords: CRM evaluation, Emotional expression, Service encounter, Conceptual framework.

1 INTRODUCTION

Research-in-progress is reported on a study which evaluates the use of mandatory Customer Relationship Management (CRM) Information Systems (IS) from a behaviours perspective¹. Initially, an outline of the business issue is presented, followed by a brief overview of three key theoretical considerations which have influenced the development of a conceptual framework. The framework alongside four propositions is then proposed which builds on a theory of emotional expression, and specifically provides a mechanism for considering emotions in the use of mandatory CRM IS. Finally, details are given on how the conceptual model is being applied and integrated into a research programme. It is suggested that such an application of the conceptual framework could assist in the drive for a reconsideration of the future design and implementation of CRM IS. In short, it is argued that an understanding of the impact of CRM IS from a multi-dimensional, social perspective has the potential to assist in delivering an improved evaluation of the use of such systems.

2 THE BUSINESS ISSUE

Investors in CRM IS aim to improve customer analysis, service and retention capabilities (Fjermestad and Romano 2003) and so it is unsurprising that many have been bitterly disappointed when, following the implementation of CRM IS, they have not realised the expected improvements in customer satisfaction index ratings (Karimi, Somers et al. 2001). Therefore, it is perhaps understandable that organisations seem to be placing a concerted emphasis on CRM IS benefits measurement and realisation. CRM IS reside at the periphery of an organisation and often operated by boundary spanning professionals (BSPs) providing service to customers (Horovitz 2000). Popular models such as the service profit chain (Heskett, Sasser Jr et al. 1997) re-emphasise the importance of the link between internal organisational factors such as employee productivity and external returns such as customer satisfaction. This underlines the need for CRM IS to assist the BSP in delivering value to the customer if benefits are to be realised. Whilst the failure of CRM IS to meet expectations can no doubt be attributed to various factors, practitioners are beginning to deduce that the issues surrounding user acceptance and use of CRM IS have a significant role to play (Fisher 2001). Considering that CRM IS often fall into a category of IS that relates to mandatory use, it can be argued that this is even more relevant as users may be required to use the system regardless of their feelings about using the technology (Brown, Massey et al. 2002, Hess and Hightower 2002). Further still, Howcroft and Light (2002) highlight that whilst user involvement is recognised as a critical success factor *ex ante* IS implementation (Markus 1983); in reality senior management concerns appear to take priority over user needs. In the CRM context this is of concern as BSPs may be less productive or disgruntled from their subsequent use of CRM IS the result being negative impacts further along the service profit chain. In summary, investors in CRM IS appear to be battling with a need to evaluate CRM IS from a behaviours perspective and understand the link between internal behavioural factors and external returns.

3 THE CONVERGING THEORETICAL BACKGROUND

A growing number of academic researchers are conducting evaluation research on CRM IS (Peppard 2000; Goodhue, Wixom et al. 2002; Kim, Gil-Hyung et al. 2002; Wilson, Daniel et al. 2002; Ezingard, Nolan et al, 2001). In addition, much can be learned from previously documented challenges with associated technologies such as ERP (Enterprise Resource Planning) (Holland, Light et al. 1999, Light 2003). However, a further contribution to both practice and theory would be to add

¹ This research-in-progress paper is part of a broader research programme on CRM Objectives and Evaluation, sponsored by the Research Development Fund at Henley Management College. The authors wish to express their gratitude to the Development Fund Committee for supporting the research activity. Additionally, this paper was revised whilst based at ESADE on the Marie Curie Research Fellowship Grant and the authors are grateful to ESADE and EUDOKMA for the time available to devote to this revision.

to this body of knowledge and acknowledge the call to consider the wider social considerations associated with IS (Mirani and Lederer 1998), specifically investigating BSPs, their use of CRM IS and the behavioural outcomes. The theories on services marketing, emotional expression and technology acceptance, have a bearing on the business issue at hand. All three theoretical trajectories converge on the need to consider a broader, social conceptualisation of technology use:

- The services marketing literature highlights that service encounters are becoming more complex (Bitner, Brown et al. 2000) and that technology has impacts on all stakeholders within the relationship dynamic (Parasuraman and Grewal 2000, Kasper-Fuehrer and Ashkanasy 2001). Specifically, as CRM IS crosses the organisational boundary, the customer often has an experience or view of the return on investment (ROI) of CRM IS. Therefore a stakeholder approach to technology evaluation is best applied for a holistic view.
- From an emotions theory perspective, it has been argued that “*technological changes can heighten interaction between individuals in terms of time, intensity, and emotions*” (Kasper-Fuehrer and Ashkanasy 2001). Emotions are expressed and through a process termed ‘emotional contagion’ they may be transmitted between BSPs and customers which ultimately may impact their perceptions of service quality (Pugh 2001). The importance of behavioural analysis in CRM is being re-emphasised in the popular CRM literature, with the acknowledgement that the implementation of a CRM strategy often requires behavioural transformation at the BSP level (Shaw and Ivens 2002), and there is certainly a growing recognition that emotions play an important role in service encounter dynamics and there is value in analyzing emotional contagion across the dyad (Price, Arnould et al. 1995).
- Technology use is often discussed in terms of technology acceptance arguments and is positioned at the level of the individual stakeholder concerned. In particular a popular model which has become widely accepted over the last twenty years as being largely synonymous with technology acceptance is the Technology Acceptance Model (TAM) (Davis 1986; Legris, Ingham et al. 2003). Whilst parsimonious, TAM only explains around forty percent of technology use and has some limitations. Firstly, it assumes voluntary acceptance of technology which in an organisational context, specifically concerning the use of CRM IS is unlikely to be the case (Brown, Massey et al. 2002; Hess and Hightower 2002; Venkatesh and Morris 2003). Additionally, TAM does not capture social considerations effectively despite attempts to extend the model by others (Davis, Bagozzi et al. 1989; Moore and Benbasat 1991; Malhotra and Galletta 1999; Venkatesh and Davis 2000). There have been recent calls in the IS literature to take a broader, social conceptualisation of technology use (Lamb and Kling 2003).

It appears that an examination of the relationship between CRM IS use, emotional expression and service quality outcomes is a potential area of contribution to theory. Particularly within an IS context, emotional expression seems to be an unexplored area, specifically emotional contagion extensions which also consider the customers perspective. Considering the multi-dimensional nature of IS success (DeLone and Ephraim 2003), understanding at a local level the impact of CRM IS on stakeholders and their emotions is important for organisations in their efforts to develop a more comprehensive conceptualisation of CRM IS success and evaluation (McCalla, Ezingear et al. 2003; McCalla, Ezingear et al. 2003).

4 PROPOSED CONCEPTUAL FRAMEWORK & PROPOSITIONS

The proposed conceptual framework is presented in *figure 1* overleaf. The framework is a further conceptual expansion of Rafaeli and Sutton’s (1989) general framework of emotional expression within organisations. The adapted, proposed framework seeks to provide a context within which the use of CRM IS can be evaluated from a behaviours and specifically emotions perspective. The dotted lines emphasise the additions made to Rafaeli and Sutton’s (1989) original framework, and the shaded areas represent the appropriate contextual factors.

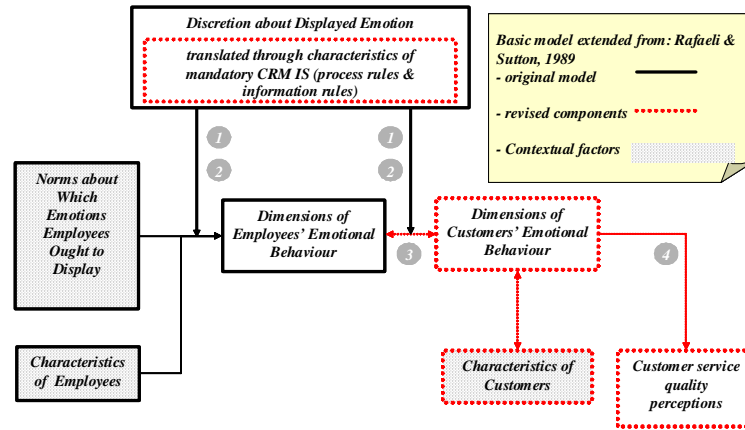


Figure 1: Proposed Evaluation Framework

4.1 Outline of Original Emotional Expression Theory

In the original Rafaeli and Sutton (1989) framework contextual factors are conceptualised in terms of social, occupational and organisational norms, (about which emotions are appropriate for employees to display during their working day) and characteristics of the individual (which also influence expressed emotions). Further, the theory argues that these influences are moderated by the degree to which the organisation seeks to exert control over which emotions are appropriate to display. In theory, where the employee is free to control their emotional expression, then they will act on this freedom. In this framework, emotional expression is defined as either positive or negative emotion (e.g. happiness, sadness, fear, anger) which differs in terms of the strength of emotion and the channel of emotion e.g. tone of voice and body language.

4.2 Conceptual Extensions

An examination of the theory reveals that little research has been conducted into measuring the control over discretion construct (Rafaeli and Sutton 1989). However, in the context of technology, both IS and marketing researchers have written about the manner in which technology can enable or control employees (Bitner, Brown et al. 2000; Orlikowski and Barley 2001). This literature shows that there is evidence to suggest that technology, in this case CRM IS, can directly impact emotional cues and reinforce emotional labour pressures. This has significance when considering the mandatory nature of CRM IS (Brown, Massey et al. 2002) and in the context of the framework; emotional labour pressures impact the level of control the BSP feels they have over which emotions are appropriate to express (Hothschild 2003). It seems likely that the use of mandatory CRM IS will impact the emotional expressions of BSPs. However, considering the position of such technologies at the boundary of the organisation, and the link discussed previously between internal and external returns, there is also merit in extending the model to consider the customer perspective. Furthermore, it has been shown that even when not specifically directed at improving value for the customer, IT can have greater benefits on consumer surplus than profits (Hitt and Brynjolfsson 1996). In short, there is merit in considering not only the emotional consequences of CRM IS on BSPs but also on customers. Through an integrated dyadic perspective, there is an opportunity to improve the position of disgruntled customers whilst adding value to CRM evaluation exercises by providing organisations with a mechanism for linking BSP alignment with CRM benefits realisation. Therefore, the central focus of any evaluation of CRM IS using this framework would be to understand the interplay between **characteristics of the CRM IS, BSP and customer emotional expressions and perceptions of service quality.**

4.3 Research Propositions

In light of the original theory of emotional expression and the proposed extensions outlined in section 4.2, four propositions have been devised which will be evaluated in the field analysis. Each of the propositions relates to an investigation of the linkages in the evaluation framework and these are highlighted 1-4 in the framework in *figure 1*.

- **Proposition 1:** Evidence of mandatory CRM IS being implemented as a means of re-enforcing emotional labour pressures will be found, whether the employee will find this enabling or controlling is yet to be determined, but it is envisaged that they will be largely linked to characteristics of the individual employees.
- **Proposition 2:** Aspects of mandatory CRM IS will give rise to both positive and negative emotions. However, it is envisaged that this will be impacted by the employee and customers own individual characteristics and the organisational norms in place.
- **Proposition 3:** Emotional contagion will be found in the service encounter and this can be linked to aspects of the mandatory CRM IS.
- **Proposition 4:** Customers will attribute good and bad service quality perceptions to either the employee, the CRM IS itself or the organisation. It is envisaged that the attribution process will be dependent upon the employee's skills in obtaining empathy and their allocation of praise and blame for good and bad service quality

4.2 Application of the Framework

A research study has now been initiated to evaluate the usefulness of the framework in a practical interpretive fieldwork setting. *Table 2* provides an overview of how the pilot study plans to examine the framework constructs and in doing so provides some initial guidance on how it is expected the framework will be used during the research study and could be used in a wider research context.

Constructs	Data types/Research Techniques	Key Literature
<i>Norms about which emotions employees should display (e.g. societal, occupational, organisational)</i>		
Organisational Norms - Informal observational cues Societal & Occupational Norms: - Analysis of trends in secondary documentation	- Observation – meetings, training sessions etc. - Qualitative data analysis of organisational artefacts e.g. project documentation/ training manuals	Rafaeli and Sutton 1989; Yin 1998; Denzin and Lincoln 2000
<i>Characteristics of the employee & customer</i>		
A combination of - Demographic information - Propensity for (+) and (-) moods - Technology acceptance level measured using TAM scales - Informal observational cues	- Survey - Observation – during service encounters/ Familiarisation Interviews	Davis 1986; Denzin and Lincoln 2000; Pugh 2001
<i>Discretion about displayed emotion</i>		
Degree of Emotional Labour	- Discourse analysis – of call and navigational data - Analysis interviews with users & mgmt	Rafaeli and Sutton 1989; Orlikowski 2000; Wetherell, Taylor et al. 2001; Hothschild 2003
<i>Dimensions of Employee's emotional behaviour</i>		
- Emotional expression in terms of: - emotional content & intensity - (+) and (-) emotions in the workplace (using the job affect schedule items)	- Discourse analysis – of call and navigational data - Analysis Interview with users– determining perception of call data - Survey	Rafaeli and Sutton 1989; Jehn 1997; Wetherell, Taylor et al. 2001

Constructs	Data types/Research Techniques	Key Literature
<i>Dimensions of Customer's emotional behaviour</i>		
- Emotional expression in terms of: - emotional content & intensity - (+) and (-) emotions (using the positive and negative affect schedule items)	- Discourse analysis – of call and navigational data - Analysis Interview with users– determining perceptions of call data - Survey	Rafaeli and Sutton 1989; Jehn 1997; Wetherell, Taylor et al. 2001
<i>Service quality perceptions</i>		
- Customers perceptions of service quality (using SERVQUAL scale items)	- Survey/ Interview with customers	Parasuraman, Zeithaml et al. 1988; Parasuraman, Berry et al. 1991; Pugh 2001; Mattila and Enz 2002

Table 1: Proposed Examination of the Framework Constructs

The collection of the call and navigational data is a central activity to the analysis. Through the application of a type of discourse analysis (which is a process of comparing evidenced speech acts and emotional cues) critical incidents will be logged and interpretations developed of both BSPs reactions to mandatory CRM IS and evidence of emotional contagion between the BSP and the customer. The resulting interpretations will be informed by the individual survey data collected early on in the research phase, continuous observations and evidence of social, organisational and occupational norms from the qualitative data analysis. Additionally, the interviews with the BSPs and customers will be conducted post analysis of the call and navigational data and will be used to collect the individual's perception of the interaction. Finally focus groups with customers will provide contextual information regarding service level expectations. The data sources are rich and varied and the nature of the analysis outputs will enable a broader social consideration of the interaction. In particular it is envisaged that the combination of the discourse analysis, contextual survey analysis, focus groups, interviews and observations will enable triangulation of the interpretations as well as the data sources. The research approach has also taken into account Klein & Myers principles for conducting rigorous interpretivist research (Klein and Myers 1999). In particular the triangulation of data sources will assist with applying the principle of suspicion and multiple interpretations. Contextualisation is inherent in the design process, and the maintenance of a field journal will provide an outlet for reflexivity and consideration of the theoretical links with the field data.

5 CONCLUSIONS AND NEXT STEPS

Despite calls to use 'social tests' when evaluating systems (Mirani and Lederer 1998), emotions have rarely been studied in the IS evaluation literature. We have shown here that because of their impact on customer service, the use of mandatory CRM IS is likely to have an important impact on service encounters where emotions play a large part. Consequently the arguments in this paper have sought to make a case for widening the perspective of evaluation to include less traditional forms of measurement beyond financial measures. It is proposed that through an understanding of the emotional dynamics at play, management could be better sensitised to the appropriate use of mandatory CRM IS, the social considerations of implementing such systems and a more comprehensive method for evaluating the returns from CRM IS investments. Internal factors can influence external returns and the framework is intended to give a more holistic view of CRM IS implementation, looking beyond the traditional conceptualisation of business benefits to consider the social return on investments (both positive and negative). Such an analysis could assist organisations ex post facto to evaluate CRM IS or, more proactively, ex ante to feed into a more humanistic design and application of CRM IS in the service encounter. A pilot study is presently underway in order to test the framework in a field setting and provide further understanding of CRM IS from this behaviours based, emotions perspective.

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