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Conference Paper · January 2005

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CRM SOFTWARE, ACTIVITIES & PROFITABILITY

Abstract

After a period of decline at the turn of the century, demand for CRM software appears to be rebounding in the Australian marketplace. However, a large proportion of companies are still undeveloped in terms of their application of software to support customer management. Our research shows that less than 40% of companies use CRM software to support their customer management strategies. When it is used, software more commonly supports customer retention and development than customer acquisition, especially among service-oriented industries. However, when applied to customer acquisition activities our research indicates that it results in more cost-effective marketing. Companies that do employ software are generally satisfied with its return on investment, with the exception of larger companies. The performance of the software in meeting companies' expectations of customer retention is a statistically significant predictor of profitability. We conclude that the intelligent adoption and deployment of CRM software can yield improvements in profitability.

Keywords

CRM, profitability, software, customer acquisition, customer retention, customer development.

Introduction

Companies have access to an abundance of customer-related information in ways that were unimaginable a couple of decades ago. An ability to extract high quality and useable information in a timely manner is increasingly important, particularly given a marketing environment of fragmented communications media, and of sophisticated technologies such as mobile messaging, web-based supply chains, and e-commerce (Payton and Zahay, 2003). Companies are becoming more dependent on software to convert information into actionable intelligence. Customer management software is an important component of both analytical and operational CRM implementations. But how good are companies at using CRM software to support their marketing activities? And does the software make any difference to company profitability? This is the focus of our paper.

Customer relationship management (CRM) is a business practice that has been defined as follows:

> CRM is the core business strategy that integrates internal process and functions, and external networks, to create and deliver value to targeted customers, at a profit. It is grounded on high quality customer data and enabled by IT (Buttle, 2004)

The application of IT is a distinguishing attribute of CRM, particularly in its operational and analytical forms (Knox et al, 2002). Operational CRM relies on software to automate selling, marketing and service processes. Software applications include sales force automation, campaign management, event-based marketing, opportunity management, product configuration and contact management solutions, *inter alia*. Analytical CRM is enabled by engines such as Enterprise Miner from SAS Institute and 7i Business Intelligence from MicroStrategy. These allow companies to explore their customer-related data intelligently and deliver opportunities to market, sell and service customers more effectively and efficiently.

Literature Review

Very little has been published about the deployment of CRM software, its role in marketing, and its impact on company profitability. The published literature has tended to centre on software reviews (e.g., Doyle, 2002), or case studies about software implementations (e.g., Pleasant, 2002). Much recent research into CRM has focussed on its alleged failure to deliver against expectations, and the conditions that enable CRM to succeed. Sweat (2002), for example, reported failure rates of between 25% and 80%. Independent analysts, The Gartner Group (2001) noted that many businesses had experienced CRM implementations that failed to meet expectations. They also forecast that to 2004, 'businesses will continue to view the discipline of CRM as a critical component of corporate strategy, but their disillusionment over early investments in CRM systems will cause them to retreat from enterprise-wide CRM investments.' Overly expensive investment in technology – both software and hardware - is cited as a significant cause of CRM's failure to deliver value (Paas & Kuijlen 2001).

The Gartner Group (2003a) claimed that companies could increase the likelihood of future CRM success by concentrating on change management, skill sets, streamlined processes and selling strategies, rather than IT. McKinsey consultants report (Farrell et al, 2003) that some companies are better placed than others to make successful IT investments. To be successful, they pointed out that two ingredients are necessary: (i) the ability to leverage an existing company strength, by making key IT investments to further enhance these advantages; (ii) the ability to properly time and sequence the investments so that they form logical building blocks for each other. Such IT investments can deliver strong competitive advantage. They then pointed out that one of the main reasons why U.S. banks have not accrued the advantages they expected from CRM technologies is because they were not able to get the first ingredient correct, and with rapid diffusion of CRM

technologies throughout the banking industry, any differential advantages that come from CRM are quickly eroded away.

The market for CRM software is rebounding. The Gartner Group (2003b) reported that CRM software licence revenues had fallen 15% in 2002. Although they were forecasting a further 8% fall in 2003, they estimated that it would recover to 5% CAGR through to 2007, driven by economic recovery and increased competition. This rebound may also be part of the Technology Hype cycle (The Gartner Group, 2004) which suggest that companies finally come to understand the value of CRM software after earlier periods of over-enthusiasm and disappointment (figure 1). McCoy (2002) reported that International Data Corporation, the technology researcher, was estimating the total Asia-Pacific CRM software market, outside of Japan, to be worth US$1.8 trillion in 2002. The same research estimated the Australian CRM market at US$719 billion. The Australian market is 40 percent of the entire Asia-Pacific marketplace, exclusive of Japan, but inclusive of China.

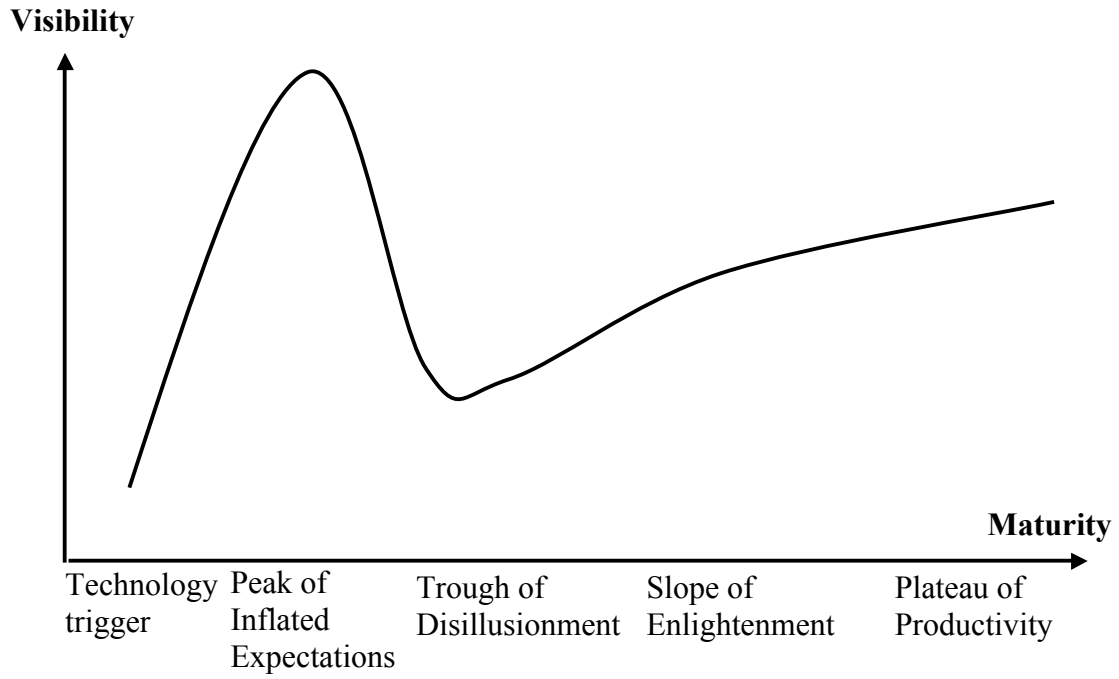

Figure 1: Hype Cycle; source: Gartner Ultradata User Conference, August 2002

We recognise that CRM is about more than technology alone (Yu, 2001; Wilson et al, 2002), but we are also aware of no academic study that has been undertaken into the deployment of CRM software by Australian industry, or its impact on company profitability. Evidence from other geographies suggests that CRM can contribute to business performance. One investigation of sales force automation (SFA) software in

Europe (Germany and U.K.) and the U.S. found that SFA helps companies lift their revenues by an average of $22 million, although the payback period is about 6-7 years (Engle and Barnes, 2000). Starkey and Woodcock's research (2002) shows that the returns on a typical CRM investment can be 4 fold over the life of a CRM project. Woodcock's (2000) benchmarking study found a strong positive correlation of .80 between customer management expertise and business performance. These researchers note that success is dependent on overcoming a host of barriers (e.g., lack of ownership among senior executives, lack of education, functional and departmental silos, and so on). Their research suggests that larger companies tend to find managing their customers more difficult than smaller companies (Starkey and Woodcock, 2002).

In summary, we are not aware of any academic study that looks into how CRM software is used to support different marketing activities, the level of satisfaction with the ROI, and to what extent it influences company profitability. Our aim is to fill this knowledge gap.

Research questions and goals

Our primary goal is to investigate the deployment of, and contribution of, CRM software in Australian companies. The following are our specific research questions:

1. How extensive is the use of CRM software in Australian companies?

2. How satisfied are companies with the returns generated by their investment in this software (ROI)?

3. What customer management activities – acquisition, retention, development - does the CRM software support?

4. To what extent does the software contribute to the fulfilment of expectations of customer acquisition, retention and development?

5. When acquisition, retention and development activities are supported by CRM software, do they result in fulfilling some objectives better than others?

6. Does the deployment of CRM software to support customer acquisition, retention and development activities vary across size and type of company?

7. Finally, are improvements in company profitability predicted by the use of CRM software?

Methodology

Sampling

Our population of interest is Australian industry and commerce. A stratified random sample of 732 companies was contacted from the Dun and Bradstreet database of the top 1000 companies in Australia. The population was stratified into 3 annual turnover groups: $50 to $99 million, $100 to $500 million, and above $500 million. The invitation to participate was addressed to the person in charge of customer relations. The incentive was a summary report of the study, which has now been fulfilled.

Data collection

A mail questionnaire was developed. Following an initial telephone solicitation to participate, the instrument was mailed to the sample. Follow-up calls and reminders were issued to lift response rates.

Instrument development and data analysis

Items in the instrument were developed from a literature review, and piloted and refined over several iterations. Some of the questions measuring independent variables were nominal in nature. These focussed on the use of CRM software to support three customer management activities - acquisition, retention and development. Overall satisfaction with the ROI of the software was measured using a 7-point Likert scale, as was the extent to which the software met respondent expectations in supporting the three CRM activities in the last 12 months. We also asked respondents to rate, on a 7-point scale, the extent CRM have achieved the following objectives: improved sales revenue, customer satisfaction, customer retention, sales per customer, and cost effective selling.

The ultimate dependent variable was whether the CRM software had made a contribution to company profitability, again measured on 7-point scale with 7 anchored as ‘a critical contribution’ and 1 as ‘no contribution’. Data were analysed using procedures within SPSS_PC version 10. Analysis employs uni-variate, bi-variate and multi-variate procedures as appropriate to the research questions.

Results

Response rate

One hundred and seventy responses were obtained (23% response rate). Forty-three reported annual turnover between $50-$99 million, forty-six were between $100-$500 million, and forty-two were above $500 million. Thirty-nine companies declined to divulge their annual turnover. Participants represented all major standard industrial classification (ANZSIC) codes. Dominant sectors were manufacturing (43 companies); wholesale and retail (24); and health, community services, accommodation, cultural/recreation, personal and other services (23).

Research questions

Q1. How extensive is the use of CRM software in Australian companies?

A1. Only 39% of companies use CRM software.

Q2. How satisfied are companies with the returns generated by their investment in this software (ROI)?

A2. 40% reported they were satisfied (above the midpoint 4) with the ROI the software generated, 24% were lukewarm (midpoint), and 20% were dissatisfied (below midpoint 4). The mean across the sample (n = 67) was 4.5 (s.d. = 1.54). A two-tailed, one-sample t-test reveals the mean to be significantly above 4, the midpoint ($t = 2.4, p < .05$), indicating a generally positive reporting of ROI.

Q3. What customer management activities – acquisition, retention, development - does the CRM software support?

A3. 35% used CRM software to support their customer retention strategy; 31% to support their customer development strategy; 29% to support their customer acquisition strategy.

Q4. To what extent does the software contribute to the fulfilment of expectations of customer acquisition, retention and development?

A4. As shown in table 1, 48% of companies (n = 60) using CRM software to support customer retention reported that it had exceeded their expectations (points 5-7 on the 7-point scale); 42% of companies (n = 52) using CRM software to support customer development reported that the software exceeded their expectations; 33% of companies (n = 49) using CRM software to support customer acquisition reported that the software exceeded their expectations. Overall, the sample reports that CRM software is more effective for supporting customer retention (mean = 4.5, s.d. =1.26) and customer development activities (mean = 4.6, s.d. =1.29) than customer acquisition (mean = 4.1, sd = 1.27). A two-tailed, one-sample t-test for the three means (4.1, 4.6 and 4.5) against the midpoint, '4', reveals significant differences for customer retention ($t = 2.8, p < .05$) and development ($t = 4.6, p < .05$) only. There is no significant difference between retention and development ($t = .72, p > .05$). Correlating overall satisfaction with the ROI from CRM software against expectations shows a stronger association between ROI satisfaction and customer retention expectations ($r = .65$) and customer development ($r = .69$) than with customer acquisition ($r = .55$), although they are all statistically significant ($p < .05$).

Q5. When acquisition, retention and development activities are supported by CRM software, do they result in fulfilling some objectives better than others?

A5: We found that different objectives were indeed more fully achieved than others:

When acquisition activities are supported by the CRM software, it is likely to make:

1. significant contributions to the cost-effectiveness of marketing ($\chi^2 = 3.7, p < 0.05$)[1], but only

[1] Due to small sample size in the sub samples, and the violation of normality assumption, non-parametric analysis like chi-square is used instead. The fulfillment of various objectives rated on the 7-point scale were dichotomized to those above the mid-point '4' (i.e., 5-7), and those below and including '4' for this analysis.

2. marginal contributions to improving sales per customer ($\chi^2 = 3.2$, $p<0.08$).

For retention activities, the software has a marginal impact on:

1. improving customer satisfaction ($\chi^2 = 3.1$, $p<0.08$) and ,
2. cost effective selling ($\chi^2 = 3.2$, $p<0.08$),

Finally, when customer development activities are supported by CRM software marginal contributions are made in:

1. improving sales per customer ($\chi^2 = 3.2$, $p<0.08$)

Q6. Does the deployment of CRM software to support customer acquisition, retention and development activities vary across size and type of company?

A6. To analyse this question, we first divided the sample into two groups: (1) those companies that are traditionally service oriented (n=70) (i.e. ANZSIC codes for accommodation and café, communication services, construction, culture and recreational services, finance and insurance, health and community services, personal and other services, property and business services, retail and wholesale trade, and transport and storage) versus (2) those that are not (n =100) (i.e., ANZSIC codes for manufacturing, mining, agriculture, forestry and fishing, electricity, gas and water, government and education). Lawrence, why is elec. gas, water, gov't and educ'n not in the service group? In terms of size, we categorised companies into small (turnover of $50-99 mil; n = 43), medium ($100-$500mil; n = 46) and large (more than $500 mil; n = 42). We then ran chi-square and non-parametric correlations (Kendal's tau) on the frequencies with which these groups use CRM software to support acquisition, retention and development activities, as well as the extent to which their expectations of these activities are exceeded.

We found that service-oriented companies are significantly more likely to use the CRM software to assist in retention activities ($r = .17$, $p<.05$; $\chi^2 = 4.8$, $p<0.05$) and development activities ($r = .17$, $p<.05$; $\chi^2 = 4.7$, $p<0.05$), than for acquisition activities. Furthermore, the bigger the company the more dissatisfied they are with the overall ROI of the CRM software ($r = -.33$, $p<.05$; $\chi^2 = 13.1$, $p<0.01$). This is especially true with the retention outcomes. Generally, the bigger the company, the more they report that the software has not exceeded their retention expectations ($r = -.36$, $p<.05$; $\chi^2 = 7.7$, $p<0.05$).

Q7. Are improvements in company profitability predicted by the use of CRM software?

A7. To answer this question, we analysed the associations between improvements in company profitability, satisfaction with the software's ROI, and the performance of the software in meeting the various expectations identified in question 4. First, we converted all 4 independent variables (ROI satisfaction ratings, and expectations ratings for customer acquisition, retention and development) and the dependent variable (company profitability improvement) into z-scores. We then employed step-wise regression, thereby reducing multi-collinearity. The results show that that the only significant predictor of company profitability is the performance of CRM software in meeting companies' expectations of customer retention ($t = 3.62$, $p<.001$). All the other independent variables were

insignificantly correlated with improvements in profitability. This single-factor model is significant ($F = 13.1$, $p<.05$) and accounts for about 30% of the variance of the dependent variable (adjusted R-square = .295).

Table 1: Percentage reporting that the software met, exceeded or fell short of expectations

	Acquisition % (n=49)	**Retention % (n=60)**	**Development % (n=52)**
Exceeded Expectations (5-7)	33	48	42
Met Expectations (4)	25	17	21
Below Expectations (1-3)	28	17	15
Don't know	14	18	22
Total	100	100	100
Mean	*4.1*	*4.5*	*4.6*

Discussion

Only 40% of Australian companies use any form of CRM software to support their customer management activities. CRM technologies first rolled out into the large corporate market, with telecommunications and financial services companies, particularly banks, as early adopters. Most Australian companies are SME's and do not met the standard definition of a large company (ABS, 2004). CRM vendors such as PeopleSoft (now acquired by Oracle) and Siebel have traditionally targeted the larger corporations, but are beginning to develop offerings for the SME sector, motivated, in part, by Microsoft's recent market entry. Pivotal and Salesforce.com have long been present in the mid-market.

We found that CRM software is not equally applied across all 3 customer management activities – acquisition, retention and development. Australian companies use CRM software more extensively to support their customer retention and development, rather than customer acquisition activities. Furthermore, they are also more satisfied when the software is used for these purposes. Software applications normally associated with customer acquisition are lead generation, lead qualification, market segmentation and customer profiling applications. It appears that these have limited adoption. However, applications which enable companies to focus on the retention and development of their customer base are more widely adopted. Companies that come from service industries more likely to adopt such retention focus than non-service companies.

Although Australian companies use CRM software less for customer acquisition, those that do find that it makes their marketing more cost-effective. Improvements experienced from CRM's application to customer retention and development on the other hand tend to be less emphatic. Furthermore, it seems that the larger the company the more dissatisfied they are with the return from CRM's application to customer retention.

Finally, the most significant finding is that of all the variables investigated in this study, satisfaction with the contribution of CRM software to companies' customer retention expectations is the sole predictor of improvement in company profitability.

Direction for future research

This study, though exploratory and largely descriptive, has raised a number of interesting research questions for future investigation. Among them are the following:

1. Why are only 40% of companies implementing CRM software satisfied with its return on investment? We hypothesise that satisfaction with ROI is a function of the implementation model. On-premise implementations are much more costly and disruptive than hosted CRM implementations. We believe that ROI satisfaction will be greater in the future as more SME organisations adopt hosted, in preference to on-premise, solutions. We also hypothesise that non-technology factors such as leadership, specificity of CRM objectives, change management processes, and project management skills contribute significantly to CRM outcomes.

2. Why are so few companies using CRM software to support their customer acquisition activities? We hypothesise that companies are less aware of CRM software's potential role in customer acquisition, than in customer retention or development. Our data indicates that a larger number of companies have adopted CRM technologies with the goal of improving their customer retention performance.

Conclusion

The deployment of CRM software in Australian industry is far from mature, whether employed for customer acquisition, retention or development purposes. Companies seem more satisfied with the ROI from their software's contribution to retention and development-related activities than customer acquisition. What is not clear from this research is whether companies have investigated the potential contribution of CRM software to business performance and concluded that it is of little value, or simply not got around to considering its potential. We suspect that the bad news stories of CRM's performance have inhibited careful consideration of the potential that CRM software has to offer. The upturn in licence revenues from CRM applications seems to indicate that this lack of confidence is in retreat.

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