

Employment Implications of Electronic Customer Relationship Management

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Abstract: Introducing and extending electronic Customer Relationship Management (e-CRM) practices in selected European enterprises had a considerable impact on work content and skill requirements but not on employment levels. While most companies stated that they created new jobs in the course of implementing e-CRM, the number of new jobs was not large in most cases. The changing content of jobs was examined using six characteristics of work and employment. The majority of the companies reported changes in functions or tasks, skills required, job enrichment or standardisation, and share of staff with particular functions. Personnel management and allocation of staff across the company's departments remained untouched in most cases. Two particular types of work were also examined: It turned out that telework in CRM was rare, while mobile CRM workers were quite prevalent.

1. Introduction

Customer acquisition and retention has become an increasing challenge because, compared to former times, customers tend to be better informed about firms offering the products that they want, they tend not to stick to familiar firms or trademarks, and customer demand for special product and service characteristics is becoming stronger. In this situation, new electronic applications are expected to allow companies to reduce overall costs associated with customer interactions, to personalise customer interactions at minimum cost, and to track and analyse customer data in order to focus marketing and service activities on target customers who promise particularly high returns. [1]

An increasing number of companies seeks to exploit these benefits of e-CRM. This fact raises questions about the effects on work, employment and skills: e-CRM practices may imply changes in work content and skills requirements that need to be managed and they may lead to an increased or reduced number of jobs which is relevant for policy makers. Evaluating such employment impacts of e-CRM is the key objective of this report. The findings may be relevant for business managers – particularly when considering reported frequent failures of e-CRM projects – as well as for decision makers in industry associations and political organisations.

This paper is part of a workshop organised by the European IST project Socio-economic Trends Assessment for the Digital Revolution (STAR) on “experiences at the frontier of virtual marketing”. The workshop includes three presentations on e-CRM (assessing e-CRM developments, e-CRM in the financial industry, and this one) and contrasts them with US experiences (e-commerce in the home mortgage sector) and the customers' point of view (analysis of original data on European e-buyers' web-surfing activities).

2. Methodology

This article is a short version of a report produced as a part of a series of in-depth studies about e-CRM in a consolidated research effort by the STAR consortium between April and

June 2002. [2] E-CRM in this study is defined as the management of customer-related activities with the goal of attracting and retaining customers, using information and communication technologies (ICTs) for customer data processing, marketing, sales and services. Thus, a broad understanding of e-CRM was used in the study that was not restricted to e-CRM practices supported by comprehensive software solutions.

Sixty nine companies that were expected to display exemplary e-CRM practices were examined. "Exemplary" refers to the fact that the companies included in the sample are either frontrunners or they have characteristics that provide valuable insights into the trends in e-CRM and the difficulties associated with emerging practices. The number of case studies included by country was 17 in the UK, 16 in France and Italy, respectively, 11 in Germany and 9 in Greece. The sectors covered were retail (18 firms), tourism (18) and financial intermediation (17) as well as customer service specialists (13). The focus was mainly on large companies with more than 100 employees.

Information was collected mainly by face to face or telephone interviews with marketing and sales representatives of the companies included in the sample. Company websites, annual reports, image brochures and newspaper articles provided additional sources of information. The questionnaire consisted of standardised open and closed-ended questions.

With respect to interpretation of the findings, it is important to acknowledge that a deliberate sampling strategy was employed and the results are not representative of the "average" firm's experience. Furthermore, since employment issues may be very sensitive for companies, the respondents may have been concerned to portray their companies' experiences in the most positive light.

3. Results

3.1 Employment turnover

With respect to job turnover, most companies, 51 of 69, stated that they created new jobs in the course of implementing e-CRM practices. Eight companies reported that they reduced jobs, 15 referred to job replacements and 15 reported that e-CRM had no impact on job turnover (see figure 1). A tendency towards job increase, replacement or reduction in certain industries was not observed.

At first sight the high number of firms creating new jobs may lead to assuming that e-CRM is a "job machine". However, the number of new jobs created was not large in most cases. Examples of answers include: "the number of jobs that were created due to electronic media is small"; "the number of new jobs was negligibly low"; "around ten new jobs since 1996"; "the total of jobs created is about 250 to 300 which is few compared to the size of the group".

The dominant reason given for creating new jobs was the need for e-business specialists, but jobs with lower-level skills were created, too. The new jobs comprised both technical and business tasks. Corresponding to the specialist type of most new positions, their contractual conditions were reported to be on quite a high level: Most interviewees (18) said new jobs were remunerated on the average scale within the company's payment scheme, 12 interviewees said jobs were highly paid, and only three said that the new jobs were paid below the average. Some 21 companies reported that the new jobs were of unlimited duration, 10 that the jobs were temporary; 27 companies reported that the new jobs were full time, and nine that they were part-time.

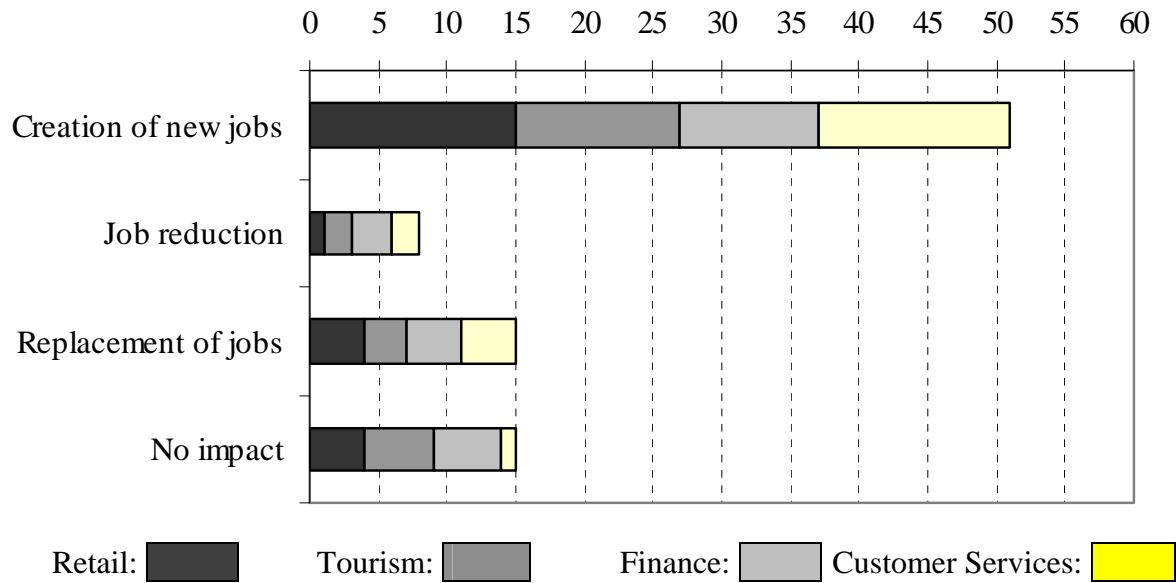


Figure 1: Job turnover in the course of implementing e-CRM

Source: STAR research consortium. Multiple answers possible

n = 69 deliberately selected companies in France, Germany, Greece, Italy and the UK

Three of the eight companies that reported that e-CRM led to the elimination of jobs said this was due to the impact of information technology applications. Jobs eliminated tended to be rather simple and not highly qualified. As one bank representative said: “In the branches, the tendency is to reduce jobs. Mainly in customer contact. Not in consulting, but in service.”

Call centres appear to be of increasing importance for e-business applications that require customer relationship management but the employment trend is not straightforward. While many of the companies in this study sample reported increased jobs in call centres, two companies reported reducing jobs in call centres. One of them even predicted that hundreds of centre jobs might be replaced by e-commerce applications in the future. More generally, ICTs are likely to reduce the number of low-qualified jobs in areas where they can be substituted by electronic applications.

“Replacements” may entail job changes within a company (e.g., secretaries becoming call centre workers); employees who leave a company voluntarily being replaced by new workers; and departments forming a separate division within the company group.

In some cases, the business model was built on e-business right from the start, so there was no employment change due to e-CRM at all. As one interviewee said: “No impact, really, as Internet use was brought in so early in the company’s operations.” An interviewee from another company stated that e-business knowledge was brought in from a related company.

3.2 Job content modification

The changing content of job was examined using six characteristics of work and employment. In the following, these are ranked by the importance of the reported changes.

New functions or tasks: The majority of 30 companies answering this question reported job function or task changes. Ten companies reported no change (see figure 2). Examples of new functions were website content management, management of sales channel integration as well as of back and front office operations (“contactors” and “integrators”), e-mail agent functions and website administration. Several interviewees used their reports on job content

to point out that the e-channel cannot be conducted in isolation from other sales channels. As one interviewee from the retail industry said: “Use of the web means that marketing departments have to supply more data to both shop staff and the site content staffs. Data show that customers buy more when more on-line data is supplied per product.” Three interviewees commented on the professional roles in call centres in particular, two stating that call centre jobs have become increasingly demanding.

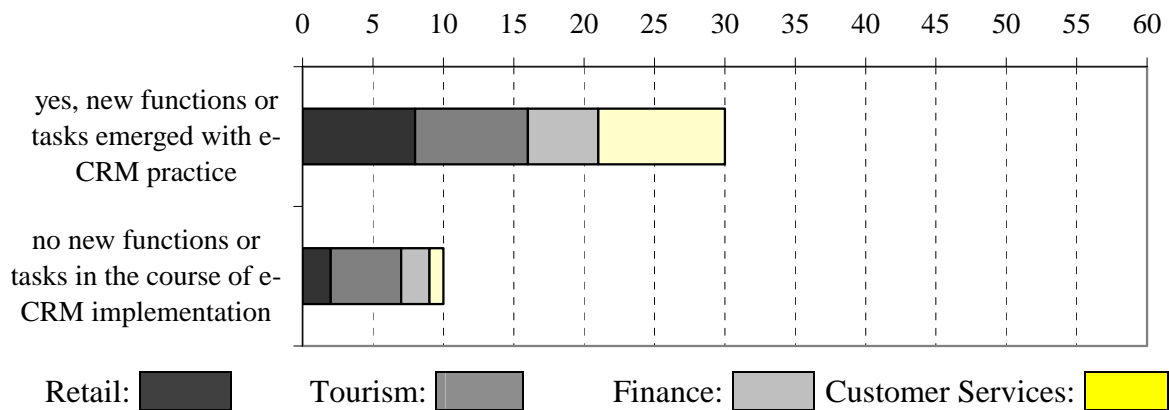


Figure 2: New functions or tasks because of e-CRM practices

Source: STAR research consortium. Multiple answers possible

n = 69 deliberately selected companies in France, Germany, Greece, Italy and the UK

New skills required: The companies in the sample reported intense changes in skill requirements. New skills reported covered a wide range requiring numerous formal and informal qualifications as well as the need for training in general. Many responses indicated an increased need for flexibility in fulfilling tasks and for acquiring knowledge. As one interviewee from the finance sector stated: “More self-sustained information collection. About product alternatives and companies’ markets, because the customers’ inquiries have become more diversified. Customers are to some extent much better informed than our employees are and can be. The customers surf the Internet and then ask about a certain share. The employee then first needs to inform himself about that share.”

Job enrichment or standardisation: A majority of the 16 interviewees answering this question said that jobs had become richer, six said jobs had become more standardised, and nine indicated no change. The interviewees remarked that both job enrichment and standardisation can be to the employees’ benefit. One interviewee remarked that jobs in her company had become both richer and more standardised. Richer: “We provide services in niches, for example telematics, but we also have a broad range of subjects. Customers demand an individual solution” of their problems. More standardised: “Partner companies expect deepened service. We used to do hotline service and ‘general service’. Everyone used to do everything. That does not work any more. We have departments with foci. For example foreign country health partners.”

Share of staff with particular functions: Half of the 30 companies answering this question reported changes, the other half no changes. “Change” does not necessarily mean that more personnel are dealing with customers: three interviewees stated that the share of employees dealing with customers had declined due to automation.

Personnel management changes: A minority (11 interviewees) of the total of 27 companies answering this question reported changes in personnel management, while 16 reported no change. Changes were mainly identified with respect to increasing employee autonomy and responsibility. As one interviewee said: “The staff is more autonomous because one shares more information and the contact with customers is closer.”

Staff allocation across company units: The interviewees were asked whether the distribution of staff across company departments had changed as a result of e-CRM practices, for example, whether there were more personnel in marketing and less in production. Only a minority of 9 companies answering this question reported an impact on departmental staff allocations and 17 interviewees reported no impact.

3.3 Particular work forms

Telework and mobile work were included as particular work forms that require or potentially require information technologies and which may be associated with e-CRM practices. Only a minority of the companies in the sample was using these kinds of work in connection with customer relations.

Telework: Six of the companies reported that they employ teleworkers in the CRM area, while 62 did not. In the companies employing CRM teleworkers, the number of workers was very small. The functions of these workers were not elaborated very precisely. Some interviewees stated that they were employing teleworkers but not in customer relations. Several interviewees indicated why their companies were not employing (or no longer were employing) teleworkers. The reasons included: legal and technical barriers, communication difficulties, lack of control over work results as well as trade union unwillingness. As one interviewee from the retail industry stated: "There were tests to employ teleworkers but the company stopped them because of technical architecture problems and because of staff management reasons: not enough control, impossibility of knowing if a person working at home will privilege the fast answer to the question of the customer or her personal tasks."

Telework can be an important means to increase employees' flexibility in work organisation and thereby augment efficiency as well as job satisfaction. [3] Against this background the eEurope goal of raising productivity and growth through investing in ICT and human resources does not appear to be fully met in e-CRM applications.

Mobile work appears to play not a dominant but a notable role in CRM. Mobile workers were defined as employees working more than a quarter of their working time away from the employer's premises. A minority of 23 companies reported employing mobile workers in the CRM area, while 44 did not. The jobs mentioned most often were sales agents (8), aeroplane personnel (6) and financial advisors (4). In several cases, information technologies were reported to have facilitated mobile work. Several interviewees remarked that mobile CRM workers use information technologies such as mobile phones or laptops or that ICT enables mobile work in the customer relations field. These persons can be considered mobile CRM workers in a more narrow sense.

4. Conclusions

Considering that e-CRM practices in the sample companies have not yet produced a significant number of new jobs, e-CRM can not be considered as a "job machine" so far. Some statements even suggest that virtualisation of simple customer relation functions may lead to high job losses among low-qualified employees in the future. Prospective job losses and resistance within enterprises against such losses would imply a further burden on the success of e-CRM solutions. Public policy makers and trade unions may be particularly interested in the development of job creation and losses in the field of e-CRM.

Qualitative employment changes due to e-CRM have already been quite intense. The findings suggest that electronic customer management requires an increased degree of flexibility in fulfilling tasks and acquiring knowledge, greater job enrichment and autonomy in employees' work, and the willingness to continuously learn on the job. Public and private education and training could meet this demand by applying adequate ways of teaching. Training methods should seek to improve the ability for self-sustained information

collection, evaluation and discussion with electronic media. Traditional education of the kind “teacher in the front, students in the rear” may be inadequate. Enterprises introducing and extending e-CRM practices can be recommended to consider these implications. [5]

Furthermore, there still seems to be a need to provide information about the use of telework to companies but also to other stakeholders such as trade unions and industry associations. The findings suggest that the opportunities of telework are not fully exploited in e-CRM.

As regards the four industries under consideration, no striking differences were detected. Although the STAR sector studies revealed that e-CRM practices are applied in different ways in different industries, an analysis of employment implications did not reveal particular industry features.

The STAR case studies suggest that the introduction and extension of e-CRM practices has yet to reach its peak. Many companies reported that they are about to introduce more comprehensive e-CRM solutions. With respect to changing employment practices and job content, this means that future impacts may be larger than those revealed in this study. Table 1 gives an overview of the employment implications of e-CRM detected. If the business cycle turns upwards and companies increase their ICT investments in general and their e-CRM investments in particular, as predicted by EITO [4], the employment impacts of e-CRM are likely to increase in the future.

Table 1: Overview of employment implications of e-CRM practices

<i>Employment turnover</i>	
Job turnover	Job creation: 51 firms Job reduction: 8 firms Job replacements: 15 firms No impact: 15 firms
Number of new jobs	Small in most cases
Reasons for creating new jobs	Predominantly need for e-business specialists
Characteristics of new jobs	Remuneration predominantly average (18 of 33) Job duration predominantly unlimited (21 of 31) Predominantly full-time jobs (27 of 36)
<i>Job content modification</i>	
New functions or tasks	New functions or tasks in most cases (30 of 40)
New skills	Intense changes in skills requirements
Job enrichment or standardisation	Job enrichment in half of the cases (16 of 31)
Share of staff with particular functions	Change in half of the cases (15 of 30)
Personnel management changes	Minority of firms (11 of 27) reported changes
Staff allocation across company units	Minority of firms (9 of 26) reported changes
<i>Particular work forms</i>	
Telework in CRM functions	In a small minority of firms (6 of 68)
Mobile work in CRM functions	In a considerable minority of firms (23 of 67)

Source: STAR research consortium. Multiple answers possible

n = 69 deliberately selected companies in France, Germany, Greece, Italy and the UK

Since e-CRM application is a dynamic business field, further studies on this subject can be of high interest to business managers and public policy makers. Supplementing the approach of the STAR study that was based on a broad definition of e-CRM and qualitative interviews in large firms from four selected industries, varying methods could be applied: The impacts of certain e-CRM modules relating to customer data processing, marketing,

sales and service could be verified more detailed. Quantitative research on employment implications of e-CRM with a representative sample of firms, including hypotheses testing with correlations, could reveal interesting findings. In particular, quantitative studies may reveal differences between employment impacts in various industries. Small and medium-sized firms could be examined, too, and more industries could be included in the sample of future studies.

References

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