# Customer over employee?

*The implications of Customer Relationship Management (CRM) for organisational structures and labour quality*

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## Abstract

This paper explores the effects of the increasingly popular ICT application suite Customer Relationship Management (CRM), on organisational structures, corporate culture, work and employment. Many different organisations, in the United States and also increasingly in Europe, have in recent years adopted a distinctive customer oriented strategy, focussing no longer on functionality's and internal processes, but on interaction with the environment and the creation of added value for different customer groups. Advanced information technology plays a major role in facilitating and even shaping this new strategy. In this paper we present the results of exploratory research in the influence of CRM on work and employment in three front running Dutch corporations: a bank, a recreation company and a telecom company. A panel of 305 companies has been used to validate a number of results. This research shows the implementation of a 'CRM-strategy' to trigger a vast reshaping of organisational structures. Although unambiguous employment consequences could not be observed, effects on corporate culture and labour quality were conspicuous.

## 1. Introduction

In many organisations, customer retention and total alignment to customer demands are increasingly dominant items on the strategy agenda. This is unsurprising, for the key to competitiveness and market share in modern business lies in knowing and servicing your customer better than your competitors. Furthermore, Information Technology can nowadays provide the means to analyse customer behaviour, and support sales and service staff in making efficient and profitable decisions in their daily contact with clients. The technology to facilitate these processes is described with the IT-industry term Customer Relationship Management (CRM). Since the end of the 20th Century, CRM has turned out to be much more than the latest buzzword in IT. In the case organisations we studied, CRM was part of a broad business strategy, the implementation of which showed far reaching effects on organisational structure, corporate culture and labour quality.[1]

Although a wealth of research exists on the overall influence of information technology on organisational structures and labour quality, the specific impact of the relatively new CRM software hasn't been explored before. A likely reason for this is that it is impossible to fully evaluate the results of an process when it is still in progress or even, like in most cases, when it has only just started. Nevertheless, exploratory research into the phenomenon is important, since CRM is steadily developing into a major force of transformation in

contemporary business. Most major market research agencies predict growth rates of CRM vendors to go through the roof in the next few years. Defying the effects of current economic decline in the technology sector, CRM seems to be going strong. Erin Kinikin, vice president of the Giga Information Group, even claims that 'CRM is one of the most dramatic, fundamental changes in the history of business.'[2]

## 1.1 The impact of ICT on organisation and labour

As a first step to describing the theoretical context for this research, it is useful to start off with a concise overview of the general discussion about the impact of ICT on organisations and labour quality. Most critics agree about two things: the use of ICT in organisations is constantly increasing, and the role of ICT in organisations has drastically changed in recent times. In the sixties and seventies, information technology was specifically used to facilitate existing corporate processes. Nowadays, ICT is broadly accepted as an instrument of strategic value to organisations. ICT is a so-called 'breakthrough technology' (CPB, 2000), which means it's scale and impact on social and economic change is more significant than most other technologies.

Although there is a wide agreement on the magnitude of the impact of ICT, there is much less agreement on the nature of this impact on organisational structures, work and employment. As far as organisational structures are concerned, some critics claim that ICT coerces organisations into taking a certain configuration, while others content that regardless of the contemporary technologies, organisations have the choice as to how they prefer to structure their internal format (Coombs, Knights & Willmott, 1992).

The position academics take in this debate also determines their judgement of the impact of ICT on employment and labour conditions. According to technological determinists, the specific features of labour conditions are to a large extent the outcome of the inherent characteristics of technology. Social determinists on the other hand, claim that social forces such as politics, culture and strategic choice are predominantly shaping labour conditions (Majchrzak & Borys, 1998).

Above all, this discussion shows how difficult it is to adequately assess the impact of ICT on processes of change in organisations. Research has shown that the answer to the question whether ICT has a positive or negative influence on organisations depends to a large extent on the reasons and approach ICT is introduced in organisations. For example, depending on the type of ICT and the type of organisation where the systems are implemented, ICT can be used to enforce control and discipline of employees or to create new possibilities for co-operation and empowerment on the work floor. The way in which ICT is implemented in organisations affects both quality and quantity of labour. If ICT is introduced to improve process innovation (efficiency) this may very well result in lower demand for labour. Labour is likely to be substituted by capital. If however ICT is primarily introduced to improve product innovation and the quality of products and services, loss of employment is not very probable. In this situation, the implementation of ICT is likely to have an impact on the structure of both the organisation and the demand for labour. In short, organisations will tend to structure themselves more horizontally, and will primarily create employment for the higher educated.

The Dutch economic research organisation NEI has calculated that ICT in the years 1998-2003 will only increase demand for employment in 2 out of 11 sectors. These two

sectors are wholesale trade (+0,5%) and the IT-industry itself (+10%). In 4 sectors the implementation of ICT will result in lower demand for employment. The banking sector faces the most significant decline (1,5%), but also in the travel industry and the telecommunications ICT causes a loss of employment (NEI, 2000). These figures are interesting to keep in mind throughout the rest of this paper, since the featuring case-organisations in this research were a bank, a travel- and a telecommunications company.

As for the interpretation of the impact of ICT on labour quality, caution is necessary. As De Beer concludes after analysing 1974-1998 data of Statistics Netherlands (CBS), despite considerable overall changes in the working situation Dutch labour population, there are no indications of an overall and unambiguous improvement or decline of the quality of work. Furthermore, the popular contention that ICT has resulted in polarisation of the quality of labour, where quality in top segments of the labour market rises, and sinks in bottom segments, could also not be unmistakably proven. The strong development of ICT on the work floor apparently didn't, at least on a macro level, drastically change this relative stability (De Beer, 2001). On the level of sectors and individual organisations however, it is very likely that the introduction of different ICT-applications have a major impact on the quality of labour.

In this exploratory research we focus on Customer Relationship Management, like Enterprise Resource Planning (ERP) an IT-industry term for a collection of mutually corresponding software-applications, also referred to as 'suites'. As opposed to ERP and other suites, CRM, in definition and implications consists of much more than just the latest trend in company software, introduced to realise operational or tactical aims. The widespread implementation of CRM marks the introduction of the strategic role of technology in organisations. No longer is ICT exclusively used to improve the efficiency of existing business processes. The aim of this particular technology is to create lasting competitive advantage by supplying lasting added value for customers. In the words of business guru Michael Porter: 'creating sustainable advantage through the use of information technology' (Porter, 1998). An important feature of the strategic use of ICT is that applications have to be flexible, and not – like ERP – focussed on increasing the predictability of the production process.

Considering the strategic role of ICT, it is likely that ICT claims, more so than before, an important role in structuring the organisation. Indications of this are found on the work floor of very different sectors and companies. ICT can facilitate or even actively determine the process of decentralisation of responsibilities and empowerment that we witness in many organisations. But ICT is not only responsible for a different way of working. ICT also has its impact on corporate culture, market position and, external relations and internal structure. ICT can even determine the whole business concept, as is often the case in many 'dotcom'-companies. ICT facilitates organisations to innovate the way companies relate to their customers, business partners and other relevant parties in their environment. The most notable examples of the powerful, strategic ICT-applications that are used for this are e-commerce and Customer Relationship Management.

## 1.2   CRM and the rise of customer orientation

In the narrow sense of the acronym, CRM is an application suite usually consisting of three types of interrelated 'tools': customer interaction channels, front-office applications

and back-office technology. Sales Force Automation (SFA), electronic data support for sales staff, was one of the first CRM-tools in the market. The average CRM-project currently involves 4,5 modules.[3] A CRM suite includes applications for Computer Telephony Integration (CTI), campaign management, e-commerce, data mining and predictive modelling. All these applications are linked to the core of CRM technology, a central client database or corporate level data warehouse, that delivers the same reliable and instant information about clients to any employee in the company. CRM software vendors promise more profits through higher service levels, more customer satisfaction and retention, and more cross-selling opportunities.

In the broad sense of the acronym, CRM is a ICT-facilitated corporate strategy that puts the primary focus of the company not on the corporate process, and not even on the production of products and services, but on the customer. CRM-technology and the strategy to align the organisation with the customer are related to the extent that it is almost impossible to consider one without the other. Therefore, to asses the influence of CRM on organisation and labour issues, we must first turn to the backgrounds and consequences of the new customer orientation in the corporate world.

Confronted with blurring organisational boundaries and intensifying competition, companies are required to reconsider their pattern of interaction with the environment: with suppliers, outsourcing partners, customers, even with society as a whole.[4] The renewal of inter-organisational relationships is evident in the rising popularity of outsourcing, take-overs, joint-ventures, electronic marketplaces and other forms of co-operation. Companies nowadays don't just compete on their own, but as a network or 'family' of organisations (Pralahad & Ramaswamy, 2000). The competence of companies is a result of the collective knowledge of the entire network or 'open system'. In recent years numerous critics have described this phenomenon. The party however that holds the most powerful position in transforming the industrial system, the client, is often overlooked. This is unfortunate, because the current service-oriented economy justifies that we regard the relationship between customers and organisations to be the one of the main features of modern organisational theory. As Davis puts it: 'The organisation-customer interface deserves to be an important focus of analysis within organisational theory, particularly given the shift from a manufacturing-orientated economy to one that is more service dominated.' (Larsson & Bowen, 1989).

The competence of the client as part of the above mentioned open-system constellation is a relatively new resource, especially valuable to service-oriented organisations. The existence of this resource differentiates the traditional emphasis on value creation by employees and capital only. In service-oriented companies it seems more accurate to study the division of labour between three distinctive groups: back office employees with little or no contact with clients, front office employees in frequent contact with clients, and the clients themselves (Larsson & Bowen, 1989). The growing popularity of self-service concepts, in which (administrative) organisational tasks are performed by the customer, emphasises the importance of studying these developments. The development of self-service concepts is increasingly common, especially with banks and technology companies. 'Some of the technology companies, particularly the PC companies, essentially are turning their customers into unpaid support staff" comments Christopher Paul of KPMG.[5] For the organisations, benefits are twofold: client participation in general generates more client loyalty, and the company has outsourced activities with no personal costs attached.

Companies are increasingly moving towards the customer oriented organisation.[6] Critical success factors from the 20th century, including speed, price, quality, flexibility and innovation nowadays have decreased in meaning as market differentiators. A company that can combine all these factors could still perform poorly, if it doesn't manage to hold on to their customers for a prolonged period of time. If a company succeeds in customer retention however, results can be impressive. Harvard Business Review reports that some American companies doubled their profits by just achieving to hold on to 5% extra of their customers (Reicheld & Sasser, 1993).

Although Dutch companies don't seem to be very far and successful in implementing their customer oriented strategy (Ardon, 1999), the strong rise in popularity and implementation of customer orientation and CRM justifies a more thorough research of the theoretical and practical consequences. One of the most interesting implications of customer orientation is the place that is assigned to the customer in the economic process. In recent decades customers where considered passive buyers of products. It seems likely that the forthcoming years customers will increasingly be considered as co creators of value (Pralahad & Ramaswamy, 2000). Especially in service organisations, but also in the car-industry, the relationship can be increasingly characterised as co-makership, where the input of the customer determines the features of the product sold.

In redesigning the relationships with customers, companies are forced to take the initiative, but by no means are they the decisive player. Strong competition and new channels of communication have shifted the power balance between companies and their customers. This 'empowerment' of the customer is predominately the result of internet. Using internet, the exact same information is available to both consumers and producers. Armed with information, consumers are much better equipped to negotiate prices and terms. They enter into dialogue voluntarily with suppliers, individually or with a group, thereby ensuring the terms of transaction are no longer dominated by companies, but to which all participants make their contribution. Adding these developments to research results that indicate a sharp decline of customer satisfaction and customer loyalty, it should come as no surprise that many companies are investigating or actively pursuing the possibilities to improve their relationship management.[7]

In order to redesign a product- or process oriented company to a customer oriented company, changes in corporate policies are inevitable. These policies can result in a complete or limited overhaul of the organisational structure. A complete overhaul, by which the work floor develops from the bottom to the front of the organisation, implies the creation of multidisciplinary and semi-autonomous customer oriented teams at the core of the organisation. These teams maintain customer contacts, but are also to a large extent independent to draw up and execute strategies to create added value for their customers. Such a drastic organisational change is not realised in the case of a limited overhaul. Instead, the change is limited to a shift of roles in the existing front-office of the organisation, typically consisting of the departments marketing, sales and customer service.

The company-broad focus on the improvement of the relationship with customers has in many companies created a situation in which the marketing department has acquired an increasingly dominant position. More than any other department, it claims a critical role in the design of a customer oriented strategy. At the same time, given a complete overhaul of the organisation, chances are the marketing department falls victim to its own success. If the whole organisation is required to focus on the customer, what specific role does that leave for the department whose primary activity is alignment to the customer?

To the lesser extent, the same question arises with a limited overhaul. In this case the consequences of CRM and customer orientation on the marketing department are also likely to be strong, although it is hard to predict whether the quality of work will rise or fall. One possible outcome is the decline of the need for creativity needed for marketers to target successful campaigns, because advanced automated systems are increasingly better equipped to handle these activities. Another outcome might see the marketer use its dominant position to create for itself a multifunctional role at the centre of the network of interactions with other players in the company's environment.

As a result of customer orientation and CRM, the sales- and service departments are predicted to grow closer together and possibly fuse altogether. CRM-applications enable customer agents to target customers with cross- and upselling activities every instance they interact. This means an important part of the sales activities are concentrated within the service-department of the call centre. This has important consequences for the labour situation in a department where some labour issues are already very problematic. The demand for call centre agents is much higher the market can supply, and the required qualifications are rising steadily. This is likely to be compensated by more self-determination and empowerment on the work floor, especially for those employees who are willing to grow into a more commercial function.

## 2.  Research issues, hypothesis and method

The main question we have set out to answer with this exploratory research is:

*In type and magnitude, how can the technology (i.c. CRM) facilitated influence be described of the innovation of interaction between client and organisation, on the structure of the organisation and thereby on employment and the quality of labour.*

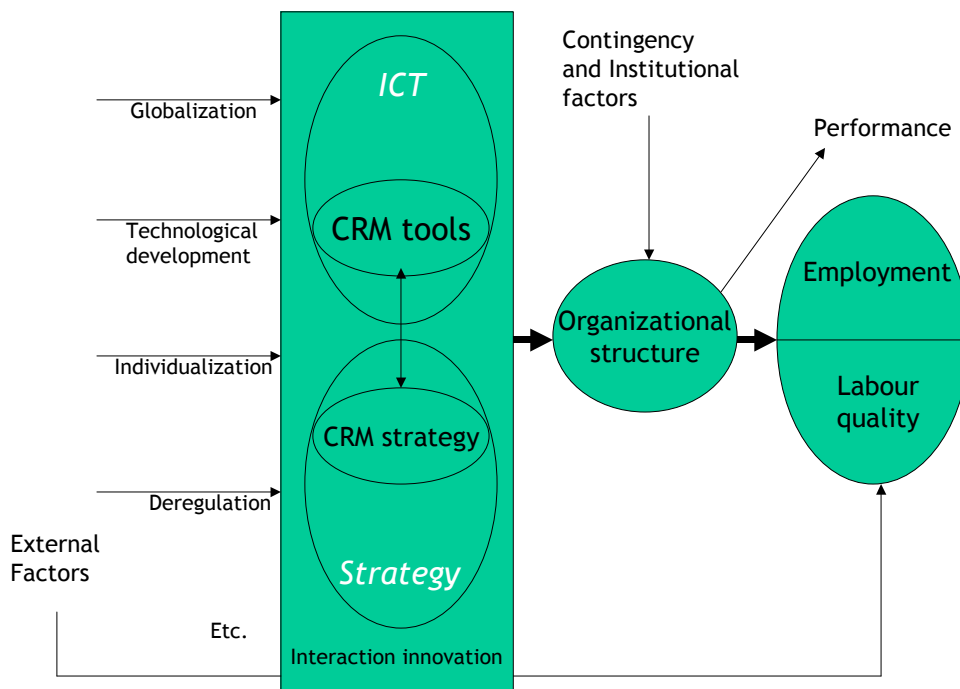The dependencies of the most important variables are shown in figure 1.

**Figure 1.**    Theoretical framework

As can be deducted from the graphical representation of the theoretical framework, we don't expect ICT to effect the organisational structure and labour unilaterally. The shape of the organisation and the features of the labour factor are determined by a wide array of influences, some of which are included in the framework. For example, in the discussion about the nature of organisational structures contingency and institutional factors are dominant, whilst the trade cycle, market characteristics and labour relations also have a shaping influence on labour quality. These external factors, though important, have only indirectly featured in this research. The same can be said for the reasons for the innovation of interaction between organisations and customers, and for the results of customer orientation in terms of revenue or efficiency. In-depth involvement of these variables would have complicated our research design considerably, while obscuring the dependencies that are most relevant for this research.

The bold arrows represent the central dependencies featured in this research. The central proposition therefore was that we expected the innovation of interaction between organisations and customers, exercised by a CRM strategy and facilitating CRM tools, to affect the design of organisational structures and thereby employment and labour quality.

In order to fully appreciate the theoretical framework, it helps to shortly clarify how the dependent variables were defined. Organisational structure is interpreted as the division into organisational subunits, the design of processes and interfaces between subunits and with the environment. Furthermore, the balance of power between organisational subunits and corporate culture are part of this broad definition. The variable labour has a quantitative and a qualitative part: employment and labour quality. We focus on the employment effects on a meso level. This is the only level on which our research method can claim to be relevant and suitable. The research issues on a meso level include the question

whether certain functions or even departments have disappeared as a result of CRM, and to what extent this has been compensated by new employment in other departments. Another question is if the competencies necessary for this new employment are higher or lower than for the 'obsolete' jobs. To answer these questions is to create a relatively accurate view on the development of the quantity and type of the labour demand.

As for labour quality, we chose a combined structural (socio-technics) and psychosocial interpretation. This interpretation includes judging the quality of labour on the basis of an objective registration of the total set of tasks performed by individual employees. Important aspects are the balance between job demands on the one hand, and job control and decision making latitude on the other. If this balance is not established, mental strain and work stress are likely outcomes (Karasek, 1979).

The central proposition was, on the basis of preliminary literature research, further specified in three hypotheses:

*Hypothesis 1*
1. The new orientation on the client, enacted with CRM, has an impact on the functioning of the whole organisation.
   All sections of the organisation are affected by the new emphasis on creating added value for customers. This means flexible, multifunctional and relatively autonomous teams, focussed on client groups, emerge, marking the complete overhaul of the hierarchical, product oriented organisation.
2. CRM has a strong impact on the departments most closely related to customer contact, notably marketing, sales and customer service departments.
   The substitution of the vertical, product oriented structure of organisations by horizontal, client oriented structure is marked by the dissolving of the functional divide between service, marketing and sales employees.

*Hypothesis 2*
On balance, the level of employment in organisations will fall as a result of the use of Customer Relationship Management.

In spite of the creation of a limited number of new, highly qualified functions, especially for (technical) analysis of customer data, the number of functions (and employees) that CRM renders obsolete is larger. On balance, CRM results in a substitution of labour for capital (technology), especially in the marketing and customer service departments.

*Hypothesis 3*
On balance, the effect of CRM on labour quality is positive.
We expect the following practical consequences of the introduction of CRM.
▪ Highly qualified labour (analysis, data-mining, solution centres) replaces lower qualified labour (the voice operated computer processes the 'easy' service calls).
▪ The nature of the function of marketer will be increasingly technical. Less creativity is required because of increasingly intelligent computer simulators.
▪ CRM causes service agents to become more autonomous and receive more information about company processes, strategy and customer characteristics. Because they need this information to make the right decision in customer contact, they need to be able to op-

erate without too many restraints. Furthermore, CRM offers service agents more possibilities to grow, notably towards a more varied and commercial function.

The hypotheses have been tested using three complementary research methods, a preliminary literature study, case studies and secondary analysis on survey data acquired at 305 Dutch companies. The main element however is case study research, the most obvious choice for investigating a contemporary phenomenon within its real-life context, where the boundaries between phenomenon and context are not clearly evident (Yin, 1994). A number of In-depth interviews have been conducted with 'key informants' in three prominent Dutch companies that have made serious efforts to implement a customer strategy. These three frontrunners are a large bank, a travel organisation, and a telecom company.

The selected key informants included managers, personnel officers, works council representatives and employees.

## 3. Results[8]

### 3.1 Bank

There are not many economic sectors where the level of penetration of ICT is larger than in the banking and insurance sector. Therefore, it should come as no surprise that banks are ahead of most other companies in the implementation of CRM. Customer loyalty is a crucial asset in the very competitive market of financial products. Using CRM systems, they are better equipped to service the customer and to sell more and more efficiently to existing customers.

Widespread use of CRM-systems is only reported in the American banking sector, but European banks are rapidly following (IDC & CGE&Y, 1999).

The bank that featured in our research could be considered a fine example of an organisation that consciously took action to transform from a product oriented organisation to a customer oriented enterprise. This CRM-strategy was based on three tiers. Firstly, a drastic change of organisational structures, creating a customer oriented clustering of departments. Secondly, the introduction of

several programs to influence corporate culture, particularly by actively stimulating employee adoption of commercial values. Finally, the company-wide implementation of CRM-tools.

In the case of the featured bank, the transformation to a customer oriented enterprise affected the whole organisation. The Marketing cluster, already an important strategic player in the old organisation, has reinforced it's dominant position. Although only accounting for a limited number of employees, activities in this department are increasingly influential throughout the organisation. Partly because of the continuously rising star of marketers in the organisation employment in this department is rising, in spite of the fact that CRM-software claims more and more marketing activities. The function of marketer nowadays largely consists of model design and improvement. After the models have been perfected it's likely that at some point marketing staff has to be reduced.

In the cluster Sales & Service, management is concerned about a lack of qualified personnel. This is not surprising, considering the shortage of call centre employees, but this is not the whole story. Demands on call centre agents in the Sales & Service cluster are steadily rising. Agents are required to adopt commercial activities and to work with advanced computer systems to support these tasks. This has caused problems at the bank. Employees are frustrated by the malfunctioning system. On a more fundamental level, some employees don't appreciate their new sales role.

As part of the cultural program to improve commercial attitude, the bank initiated differentiation in the salary structure. This has strengthened the mild polarisation of the workforce that already existed before the transformation to a customer oriented enterprise.

The bank has developed in recent years into a large American style financial corporation, including aggressive marketing campaigns, internal competition and performance management throughout the organisation. Management is actively pursuing standardisation and commercialisation of activities, but meets with resistance from the work floor. Although some employees embrace the possibilities the new role offers, others cannot keep up with the speed of the change, or are uncomfortable with the nature of it.

## 3.2 Recreation

The featuring recreation industry organisation is a market leader in renting holiday-accommodation for short-time visits in designated accommodation parcs. Increasing competition and increasingly demanding customers have forced the organisation to introduce a new marketing strategy. Customer Relationship Management is seen as a part of a comprehensive sales and marketing concept. Central aims of this concept are acquiring the higher customer segments and selling not only accommodation but also arrangements. 'The rental of the cottage is just the beginning', the e-commerce director clarifies. The new marketing strategy includes making the most of the moments the organisation representatives are in contact with customers: in the parcs, through the call centre, through travel agents, and increasingly through the internet. The recently installed Internet call centre is an example of popularity of this channel. The idea behind this multi-channel approach is to 'serve the customer just the way he or she sees fit'.

The introduction of a new customer approach is time-consuming trajectory. Currently, this time is particularly devoted to train personnel to cultivate social and commercial attitude. In the near future, particularly customer service agents will have to acquire the competences needed to improve effective up- and cross-selling skills. ICT tools are expected to facilitate this process, but at the moment functionality is limited. The organisation stores data of around 3 million previous, current and potential customers. The last few years large investments in CRM related software have been made to use this data for marketing purposes. Products include a customer data warehouse, data mining tools and campaign management software. The organisations uses these tools to acquire more knowledge of customer characteristics and demands through customer profiling. Furthermore, client data is being linked to product data to introduce successful marketing campaigns.

From an organisation perspective the new marketing or CRM-strategy has predominantly resulted in the abandoning of the semi-autonomous country-structure and in the

reshuffling of the Sales & Marketing department. The smallest units in the Sales sub department are headed by Customer Group Managers, responsible for targeting distinctive types of customers. No large employment effects have so fare been reported, but the very gradual pace of transformation of the organisation and fact that the introduction of CRM in this organisation predominantly aims to cut costs, suggest that negative employment consequences are imminent.

## 3.3 Telecom

The featuring telecom organisation is one of the largest in the Netherlands. Not until recently, the telecom market in the Netherlands is fully privatised. As a result, a large number of national and international companies are involved in fierce competition, battled out in the media and even occasionally in court. Following the recent wave of take-overs and mergers, analysts expect an imminent shake-out of the telecom sector. A large company like the one we studied is not likely to fall victim to this, but times are rough nonetheless. To improve customer retention and increase market share, all big players in the Dutch telecom market are working to improve their client relationships through the use of CRM-technology. The one featuring in this research is no exception.

This telecom organisation has stated it's central items of strategy to be growth, innovative products and services, client satisfaction through operational excellence and a solid financial position.

Although a comprehensive customer orientation is at the core of the Telecom companies strategy, the concept of Customer Relationship Management has not been fully embraced. Due to several complicating factors, including lack of cash flow, privacy legislation and the hampering impact of traditional organisational boundaries, the organisation has only started up some half-hearted attempts to implement a company-broad customer strategy.

However, in some departments, CRM-tools have been implemented and organisational changes have been made, aiming to better service specific customer groups. These changes, even though small scale, have already had some distinctive results for employment and labour conditions. For example, the demand for data analysts has increased. The consequences for the quality of labour are divers, and depend on the type of system involved. The workflow-like system for call centre employees and the campaign management system for marketers are causing more standardised working practices and therefore cause predominantly negative effects, whilst the practice of acquiring more customer information on the work floor is supposed to increase employee autonomy and satisfaction.

## 3.4 Summary of case study results

All three case organisations were in different phases of development of their CRM-initiatives. The bank was most advanced, the telecom organisation the least far. In short, the results from the case studies are represented in the table below.

**Table 1.**    Summary of case study results

| Bank | Recreation | Telecom |
|------|-----------|---------|
| ▪ Customer oriented strategy exists<br>▪ Complete overhaul of organisational structures<br>▪ CRM tools implemented<br>▪ CRM tools are technological enabler for customer oriented strategy<br>▪ Shifts in type of employment, no structural loss of employment<br>▪ Predominantly negative impact on quality of labour observed. | ▪ Customer oriented strategy exists<br>▪ Complete overhaul of organisational structures<br>▪ Some CRM tools implemented<br>▪ No structural impact on employment<br>▪ No unambiguous impact on quality of labour observed<br>▪ Expectations for the future are predominantly negative. | ▪ Customer oriented strategy exists in some parts of the organisation<br>▪ No overhaul of organisational structures<br>▪ Implementation of CRM tools just started<br>▪ Impact on employment and quality of labour could not be observed yet<br>▪ Expectations for the future are ambiguous. |

Despite the different levels of maturity of the execution of the customer oriented strategy, similarities in the direction of development of the three organisations were imminent. Most importantly, in all three organisations the changing attitude towards customers, predominantly caused by market pressure, made management implement changes in the way the organisation was structured and the way technology was used to facilitate corporate processes. The only exception consists of a few business units in the Telecom organisation, where management is not fully convinced of the return on investment of CRM-initiatives.

The implementation of CRM technology has its impact on employment and labour, but the observed and expected effects are often ambiguous. CRM tools automate parts of the customer-organisation interface. These parts are usually the more straightforward tasks, like processing administrative changes, but can also substitute creative tasks like introducing marketing campaigns. Several informants in all three companies expected this to have a negative effect on employment, but no such effects could be observed at the time the research was conducted. The effects on labour quality were more apparent, but the direction of impact was not unambiguous. At the bank, where implementation of CRM tools was most advanced, virtually no positive effects could be observed. Instead, domination of system workflow over employee autonomy, combined with greater emphasis on individual performance, suggest that quality of labour overall has dwindled. In all three organisations the new orientation on the customer means management expects employees to improve their active sales skills. For commercially interested and talented employees, this means new career perspectives, for others it means a career on the sidelines of the companies operations, at best.

### 3.5    Validation of results against the survey data

Not all of the results of the case studies could be validated with we data obtained from interviews in 305 Dutch companies. The reason for this being that the survey was func-

tional to a much broader research design, with a different theoretical framework than the one presented for this research. The framework of the survey most significantly lacked the explicit CRM-angle. The data could nevertheless be used some of the findings of our case studies, because the questionnaire contains a question that explicitly asks for the existence of CRM-technology. The 305 companies in this sample were selected from 5 different technology dependent sectors on the grounds of being frontrunners in their technology position. The selected industries were the nutrition, paper-, wood- and furniture, metal, bank- and insurance and IT (hardware and services). Out of all 305 companies, 49% answered they introduced CRM technology. These were predominantly the larger companies.

Focussing on impact of CRM on employment and labour quality, the data suggest there are no significant shifts in labour demand. This is coherent with our findings in the case research. Although the not exactly significant results necessitate extreme caution, from table 1 can be deducted that companies with CRM technology have developed a higher labour demand for strategic management IT and marketing, sales and distribution functions. This could point to marketing staff dominance in strategic places and a higher dependency on information technology, both likely results of the customer oriented organisation.

**Table 2.** Shifts in labour demand for different organisational functions. All values above 2 represent an increase of labour demand

|  | CRM | N | Mean | F | Sig. |
|---|---|---|---|---|---|
| Middle management | No | 143 | 1,9860 | 0,036 | 0,850 |
|  | Yes | 142 | 1,9930 |  |  |
|  | Total | 285 | 1,9895 |  |  |
| Strategic management | No | 143 | 1,9720 | 3,790 | 0,053 |
|  | Yes | 142 | 2,0211 |  |  |
|  | Total | 285 | 1,9965 |  |  |
| Marketing, sales, distribution | No | 143 | 2,0490 | 2,154 | 0,143 |
|  | Yes | 142 | 2,1056 |  |  |
|  | Total | 285 | 2,0772 |  |  |
| Information technology | No | 142 | 2,1761 | 1,743 | 0,188 |
|  | Yes | 142 | 2,2465 |  |  |
|  | Total | 284 | 2,2113 |  |  |
| Research & development | No | 142 | 2,0493 | 0,045 | 0,833 |
|  | Yes | 142 | 2,0563 |  |  |
|  | Total | 284 | 2,0528 |  |  |

As far as labour quality is concerned, the most remarkable result showed companies with CRM to score significantly higher on level of decentralisation of responsibilities (see table 2). This result was expected in hypothesis 3, but the negative labour quality effects in the case studies suggested this hypothesis should be rejected.

**Table 3.**    Decentralisation of responsibilities. N=274, Cramer's V=0.139, p=0.21

|  | Few | Many |
|---|---|---|
| No CRM | 60% (81) | 40% (55) |
| CRM | 46% (63) | 54% (75) |
| Total | 53% (144) | 47% (130) |

Other results include the significantly higher percentage of employees in CRM-companies, that do intensive computer work for 6 hours or more per day (F=6,741,p=0,01), and the lower percentage of employees in CRM-companies that are exposed to the risk of low skill level employment (β=-0,131, p=0,057), particularly in service-oriented industries (β=-0,323,p=0,031).

## 4. Conclusions

The customer oriented organisation is on the rise. Technological and economical developments force companies in competitive markets, to change their strategic focus. No longer are optimising internal processes and extending market share, the cornerstones of strategy. Instead, the central question is how a company should operate to create the highest possible added value for (existing) customers. Information- and communication technology increasingly makes it possible to answer this question. To collect and analyse customer data, and to reuse this information promptly whenever employees are in contact with customers has become easier and cheaper. This is the core of CRM: making use of customer information to increase service levels, customer profitability and eventually customer loyalty.

The way Dutch companies translate their strategy of customer orientation differs considerably, as we have seen in the three case studies that featured in our research. Nevertheless, the logical pattern appears to consist of three distinctive features. First, a quite drastic overhaul of organisational structures, making 'customer groups' and 'customer channels', rather than internal functionality's, the leading principle in defining intra-organisational boundaries. Second, the implementation of CRM-technology, consisting of a central customer database and a range of analytical and customer contact supporting applications. Third, the introduction of cultural programmes to boost commercial attitude among front office staff, and to create a corporate culture in which customer relations are mirrored to reflect internal relations.

All three organisations featured in this research are, despite of their 'front running' status, still very much in the process of designing and carefully implementing their customer oriented strategy. The case organisations are struggling with this transition. The organisation as a whole, departments, managers and employees often haven't found their optimal balance in their new role yet. The transition has consequences for employment and labour quality, especially for front office employees.

Hypothesis 1 expected customer orientated strategy, facilitated by CRM technology, to have impact on the whole organisation, and particularly on the departments marketing,

sales and customer service. On the basis of the case studies, this hypothesis could be affirmed, even though caution is recommended, since especially the organisational transition in the telecom company was limited at the time of research. The bank showed the largest impact of customer orientated strategy, both on organisational structures and corporate culture. Influential characteristics of the transition include the increasing strategic dominance of the marketing department, particularly at the bank, the redesign of departments to make them mirror customer groups and channels, and the fact that in all three organisations, sales and service departments have increasingly merged into one commercially focussed department.

In hypothesis 2, we expected the implementation of CRM tools and strategy to cause negative employment effects. The results of our case studies and the data analysis haven't pointed towards unambiguous employment effects. The transition to customer oriented organisations has so far been realised without any major employment losses. On the basis of our research, one would even be inclined to conclude the customer oriented company increases the demand for labour. The demand for functions in the marketing department, notably analysts and statisticians, added to the increase in technical support staff, suggests CRM is good for employment. In the opinions of our informants, this however is a temporary effect. Advanced CRM tools are expected to substitute for labour input, particularly amongst marketing and call centre staff. On balance, on the basis of our material, hypothesis 2 could be affirmed nor rejected. Further research, preferably after the dust has settled down, is needed to make more exact claims on the real employment effects.

The same remark is relevant when looking at hypothesis 3. We expected a positive correlation between the introduction of CRM and the quality of labour. The prediction that companies with CRM delegate more responsibilities to the work floor is confirmed by the survey data analysis, but in the case organisations this hardly seems to be the case. Even though CRM gives call centre agents more liberties in their customer contacts, this does not lead to real empowerment. Call centre agents are still managed by planning and control principles. CRM tools add to this a strong system enforced workflow and the introduction of detail targets for cross selling, adding to the work pressure of an already risky profession in terms of occupational health.

In the case organisations, CRM strategy has changed the call centre function, creating a rift between commercially interested and talented all-round employees on the one hand, and the classical, usually older, service employees on the other. The position an employee has in this divide determines the outcome in terms of labour quality. Employees who are willing and able to (cross-)sell, can improve the range of their activities considerably, as well as improve their career and education opportunities. Employees who are less willing and able to become all-round sales- and service agents will see their opportunities, status and job content, and even their salary and job security decline. The case studies suggest that this divide can ultimately lead to a organisation wide divide, where marketers and commercial call centre agents represent high employment, and classical call centre agents and operations staff represent low employment. Taking this divide into consideration, we can cautiously conclude hypothesis 3 should be rejected on the basis of the negative effects on labour quality that we've observed in the cases. Especially in departments with direct access to CRM technology, autonomy, decision latitude and the level of required creativity are negatively influenced. For marketers these negative impact is partly counterbalanced by their better position in terms of influence on strategy, whereas for employ-

ees in the telecom organisation managers still expect more client satisfaction to automatically lead to more employee satisfaction.

This research project hasn't paid a lot of attention to the effects of CRM in terms of efficiency, financial results, customer retention or customer satisfaction. Other research suggest CRM is not even certain to have a positive impact on these aspects of customer orientation (Gartner, 2001). Nevertheless, customer orientation and CRM are increasingly popular in corporate Europe, and even with some national governments. When more companies have implemented their CRM strategy in full colour, including advanced technology and structural and cultural changes of the organisation, more structural research is needed to study some of the complicated and often counterbalancing effects the introduction of CRM can have on employment and labour quality. CRM holds the promise of semi-autonomous, customer oriented departments with empowered, enriched jobs for (particularly) front office employees. By finding rising task demands, system enforced workflow that limits employee autonomy, and expectations of loss of employment, this exploratory research has shown that CRM still has a long way to go before it can contribute to real improvement of labour quality.

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## Notes

[1] This research was conducted for the Ministry of Social Affairs and Employment of the Netherlands.

[2] www.crmguru.com/content/features/sims06.html

[3] www.dmreview.com/master.cfm?NavID=93&EdID=3219

[4] As the popularity of ethical standards in business indicates.

[5] http://www.businessfinancemag.com/specialreports/2000/crm/index.cfm

[6] Also in government the customer paradigm is growing in popularity. The collection and analysing of customer information in the social security sector for example, is largely done to improve service levels.

[7] Research conducted at University of Michigan Business School. Source: Automatisering Gids, 08-12-2000.

[8] For the full research results see: T.Kwakkelstein, E. Miedema & G. van Sloten (2001), De invloed van Customer Relationship Management op arbeid en organisatie, TNO Arbeid, Hoofddorp.