

Call Centres in Denmark 2004

Strategy, HR Practices & Performance

Report for the Russell Sage Foundation
The Global Call Centre Project – Denmark

Ole H. Sørensen, Technical University of Denmark

Nadia El-Salanti, Centre for Alternative Social Analysis

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Department of Manufacturing, Engineering and Management
Building 424
DK- 2800 Kgs. Lyngby
Denmark
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Summary

This survey is the first scientifically based benchmarking study of the Danish call centre industry. The main results from the study are based on answers from 128 call centres, which correspond to a response rate of 65%. The Danish study is part of a global project coordinated by researchers at Cornell University, US; University of Sheffield, UK; and Duisberg University, Germany. The project includes 18 countries worldwide.

The Danish call centre industry is rapidly growing. Managers have experimented with a wide range of HR practices. In this report, we examine:

- ◆ Selection and staffing strategies
- ◆ The skills of the workforce and investments in training
- ◆ Use of technologies
- ◆ Adoption of “high involvement work practices” such as quality improvement and self-directed work teams
- ◆ Use of performance-based pay
- ◆ Wages and remuneration
- ◆ Institutional supports, such as local government and training programs
- ◆ Union and non-union work practices

We compare call centres in:

- ◆ Different industry sectors
- ◆ Different customer segments
- ◆ In-house and independent (sub-contractor) status
- ◆ Inbound and outbound function
- ◆ Union and non-union effects

What we found...

Industry & organizational characteristics

- ✧ *Industry size*: The Danish call centre industry comprises about 300-400 call centre units employing 20,000-25,000 workers.
- ✧ *Industry evolution*: The Danish industry grew rapidly at the end of the 1990's. It still shows growth rates of around 10%, but the industry seems to be consolidating.
- ✧ *Call centre characteristics*: Call centres in this study have an average of 60 seats. Half of the centres have less than 28 seats. There is about 1.1 individuals employed per seat. The largest centre has 526 workstations.
- ✧ *In-house and independent centres*: In-house call centres are those that serve the customers of a parent company while independent centres are subcontractors that serve customers from a variety of outside companies. In-house centres in Denmark constitute 75% of the market while independent centres comprise 25%. The finance sector has in-house call centres only, whereas in the IT and telecommunications sectors, 65% of centres are independent.
- ✧ *Scope of call centre markets*: The typical call centre in this study serves the national market rather than a local, regional, or international one.
- ✧ *Business strategy*: The most popular business strategy reported by managers is customer loyalty followed by service differentiation; 18% focus on price leadership.

- ✧ *Hours of business:* Call centres are typically open 11½ hours per day on weekdays.

Management strategies & practices...

- ✧ *Selection:* Call center jobs are often viewed as low skilled and clerical, and the workforce is portrayed as young and unattached to the labor force. According to our survey, however, the education profile of call centre workers is considerably higher. The typical call centre worker in this survey is a woman (68%) with a vocational education degree. In 67% of the call centres, the typical employee has more than a secondary school education.
- ✧ *Training:* Call centres provide an average of 22 days of training for new hires, with a range of 1 day to 150 days. Training is longest in centres serving financial services and shortest in outbound call centres. In addition, call centres provide about 6 days of on-going training for experienced employees each year. On average, it takes 17 weeks to become a fully experienced core employee. This means that on-the-job learning is essential for workers to perform effectively.
- ✧ *Technology use:* Call centres seem to be moving from voice-only channels to multi-channel centres. Eighty-four percent of the centres in this study use email; 62% use fax. More complex technologies such as CRM, IP telephony and workflow management are mainly used in the large call centres.
- ✧ *Workload:* Call centre workers average about 80 calls per day, with a call handling time of 3 minutes per customer (same number of calls but half the time of the US survey results).
- ✧ *Work organization and teams:* Call centre employees have quite low levels of discretion regarding technology use, daily task assignments, and the pace of work. Problem-solving groups are used in 50% of call centres, while 30% make use of self-direct work groups.
- ✧ *Pay levels:* The annual pay of the typical call centre worker averages €36,000, with a high of €58,000 and a low of €23,000. The finance sector has the highest average salaries and the retail sector the lowest.
- ✧ *Pay for performance:* Where individual commissions are used, they account for an average of 31% of call centre workers' pay. Where group-based incentives are used, they account for 23% of the annual wage. Pay for overtime amounts to 23%.
- ✧ *Use of temporary workers:* 28% of the call centres in the survey employ temporary workers. 20% of the workforce in these centres is employed on temporary contracts. This corresponds to about 6% of the total workforce in the Danish call centres. 16% of the temporary workers are transferred to permanent positions each year. In other words, employers to some degree use temporary work as a screening device for new hires. Temporary workers are mainly employed as buffers for peak and odd hours of work.
- ✧ *Use of part-time and student workers:* 66% of the workforce excluding temporary workers is employed on full-time contracts, while 34% hold part-time jobs. Part-time employees average 22.5 hours of work per week. Fifty percent of part-time work is performed by students. Those who are not students work an average of 25 hours per week.
- ✧ *Monitoring and coaching:* Most call centres evaluate and monitor their employees. Eighty percent of call centres in this study give statistical feedback to core employees every month or more often. The call centres that monitor calls and give statistical feedback most intensively are also the ones that use coaching most

frequently and use the information to identify the need for education and to improve performance. Only the call centres in the IT and telecom sector say that they use this information for disciplinary actions.

Turnover and absenteeism

- ✧ *Turnover rates*: Total annual turnover (including quits, layoffs, dismissals, and retirements) averages 15% among call centres in this study. (This is about half of the corresponding figure in the US survey).
- ✧ *Quit rates*: The average quit rate is 10%. The highest quit rate is found within the IT and telecom sector (13%) and the lowest within the finance sector (6%). The large centres have a much larger quit rate (13%) than the small ones (5%). Outbound centres have a much larger rate (22%) than inbound (6%).
- ✧ *Absenteeism rates*: Call centres do not have significantly more sick days than that found in the general economy (8.9). However, the IT and telecom sector has a significantly higher number of sick days (10.9). There are no differences in rates across other types of centres in this study.

Regarding managerial employees...

- ✧ *Managerial pay*: Managers average €55,400 in annual pay, including performance based pay. Their salaries range from a low of €31,000 to a high of €107,000. The highest salaries are found within the finance sector and the lowest within the IT and telecom sector.

Regarding the institutional environment...

- ✧ *Local economic development agencies*: Call centres do not seem to be affected by the local economies to any large degree. However, some of the large independent call centres have used local incentives such as dedicated education, local programmes and higher unemployment rates. 20% of the centres have used public education and/or programmes.
- ✧ *External factors*: External factors put a light pressure on the centres to create jobs with more discretion and lower monitoring. The most important factors are corporate management, a tight labour market, trade unions and the presence of successful call centres.

Regarding the effect of unions...

- ✧ *Union presence*: 50% of the call centres negotiate wages and working conditions with trade unions. Independent and outbound call centres have less presence of unions than in-house and inbound centres. There is no dedicated trade union for call centre workers.
- ✧ *Wages*: Call centres with collective agreements pay core employees 10% more than non-union call centres.
- ✧ *Training*: Call centres with collective agreements provide more time for training and spend more money on recruitment, selection and training of core employees.
- ✧ *Turnover and absenteeism*: It has not been possible to detect a significant difference in turnover or absenteeism between unionized and non-unionized centres. However, in the IT and telecom sector that has the highest number of sick days there is a tendency that unionized centres have fewer sick days (8.6) than non-unionized (12.4).

Introduction

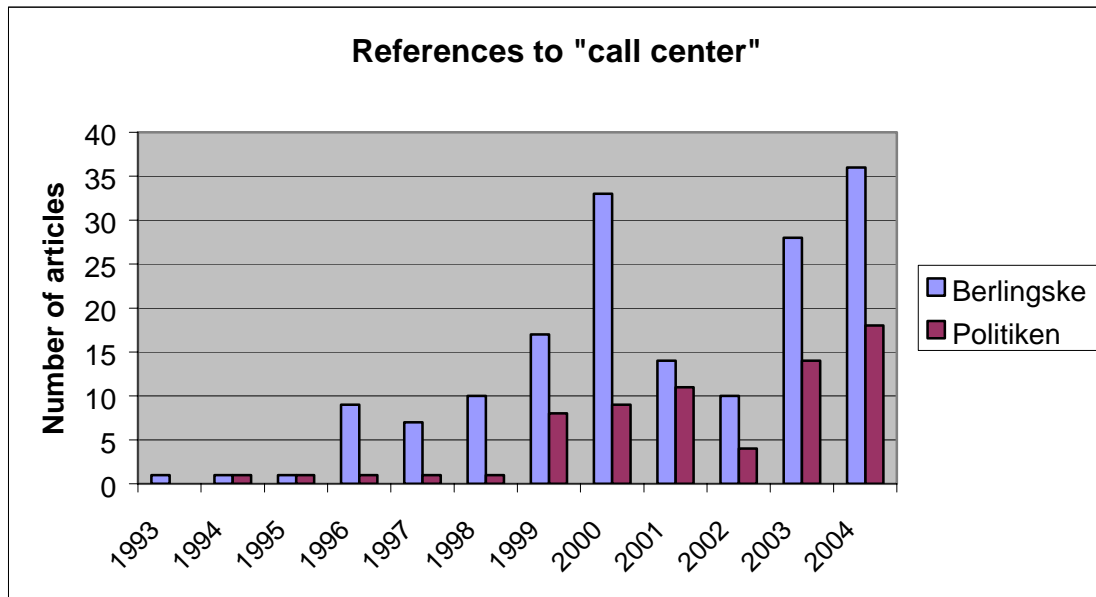
In recent years, the call centre industry has been one of the fastest-growing types of employment within the Danish economy. It is, however, important to note that in reality there is no such thing as a Danish call centre *industry* because most call centres are organizational units within established companies.

What is termed here "the Danish call centre industry" covers two kinds of call centres. First, there are the independent call centres that to some extent can be identified by an industry code. By using the NACE¹ industry code for call centres (748,600) only 47 centres can be identified, and only 37 have this code as the primary key. Some of these centres are very small, and some of them are clearly not call centres in the sense discussed here. Furthermore, there are companies clearly belonging to the call centre category which are not identified by the NACE code. Therefore, this source of data is not very precise. Second, there are in-house call centres. These centres cannot be identified from the industry statistics because they are departments within a company that can be part of any industry. Therefore, call centres have to be identified through searches and surveys which make the data on them insecure and possibly inconsistent as well.

A search in the Danish media database shows that before 1994 there were very few references to terms such as "call centre" or "contact centre". The search in the media database was limited to two of the large national newspapers to avoid fluctuations related to the introduction of new publications, e.g. due to the recent proliferation of free newspapers. The search shows a dramatic rise in articles about call centres from 1994 till 2000. In 2001 and 2002, the search shows a small decrease followed by a striking rise in 2003 and 2004. This probably mirrors the expansion of the industry in the same period. Furthermore, it illustrates that before 1994, organizational units with people working primarily with integrated telephone and "computer" technology were not named "call centres" or "contact centres". They were not considered as something special and were often just called "customer service departments," "sales departments," etc., according to the function performed. People within the industry explain the high number of articles in 2000 by referring to the millennium computer problem. This assertion has not been further corroborated. The first articles about call centres in Denmark describe the newly established call centre operation in the southern part of Jutland which was established in 1993. It was established there because of a significant German-speaking minority in the area, and because at the time the Danish working time regulation was more liberal than the German. Apparently, "the first" call centres were established in Denmark to service the German market during hours outside of regular business hours.

¹ NACE is the European Union (EU) classification system for economic activities. The acronym NACE means 'Nomenclature générale des activités économiques dans le communautés européennes'.

Figure 1: References to “call centre” in two major national newspapers



Source: Infomedia database, 2005.

Purpose

The purpose of the survey described in this report has been to map out the call centre industry and to get an understanding of the different forms of management practices used in the call centres and how these practices affect the economic performance and HR practices.

Method

The Danish part of the survey was carried out in cooperation with the Centre for Alternative Social Analysis (CASA) and the Department of Manufacturing Engineering and Management at the Technical University of Denmark. CASA was in charge of survey administration and the report in Danish. The survey was conducted in two phases:

1. The establishment of a survey population
2. The administration of the survey

The first phase was to establish a survey population. In Denmark there is no dedicated industry association for the call centre industry and the statistical material is very weak. Therefore, there is no pre-established list of companies acting as call centres or having call centre departments.

As a result, the project had to establish a database of call centres in Denmark. Various sources were used to obtain data for the project. First, the call centres already known from other projects were registered in the database. Second, relevant employer and employee associations were contacted and their contact persons were registered. From these sources, we also acquired contacts to other industry associations that could provide company names. Third, searches were performed on the Internet search machines Google.dk and Eniro.dk and in the job index web pages Jobzonen.dk and Jobindex.dk. All of the companies were contacted by phone and asked whether they were a call centre or not based on the following definition:

“An organizational unit where a minimum of 5 employees as their primary work task services customers, potential customers or citizens with the help of integrated telephone and computer technology”.

They were also asked to provide the name and e-mail address of the contact person and to indicate the number of persons employed. In the Global Call Centre survey (GCC) project, the recommended minimum of employees was 15. In the Danish context it was decided that a minimum of five employees made more sense because the call centres in Denmark are generally not very large. The definition was also used in the questionnaire.

Some of the companies were rejected based on the initial contact. Some could not decide whether they were call centres or not, and some of these companies later decided to abstain from participating in the survey due to the definition presented in the questionnaire. The total database used in the survey consisted of 226 companies.

It is very difficult to assess precisely how representative the survey population is for the call centre industry. Datamonitor (Computerworld, 2004) asserts that there were about 900 call centres in Denmark in 2003 with more than 29,000 employees. These figures are based on call centre units with two or more persons.

We estimate that a maximum of 300-400 companies exist that comply with our definition of a call centre. The call centres in the database therefore cover about 50 to 75 percent of the call centre units in Denmark. The method we have used to establish the database primarily covers the established part of the call centre industry. The less well-established call centres within the telemarketing area with a short life cycle and many part-timers/students are under-represented in the database.

The survey is based on a questionnaire developed by a group of researchers at Cornell University in the USA (Batt et al., 2005) and the University of Sheffield, UK (Holman, Wood, and Stride, 2005). The questionnaire has been translated into Danish. The Danish part of the survey was conducted during the period of May 2004 to August 2004. Initially, letters were sent out to the contact persons to inform them about the survey. A few days later, the contact persons received a link to the electronic questionnaire by e-mail. A paper-based version was also available, but no respondents chose that option.

Four reminders were sent out to secure a high response rate. When the data collection was finished, 118 companies had responded to the survey, which corresponds to an effective response rate of 52%. 30 persons responded that they did not have time or did not want to participate in the survey. In total we have heard from 65% of the survey population. Considering that the survey questionnaire is quite difficult and time-consuming to complete, the response rate can be considered satisfactory. The analysis shows that the non-respondents are distributed in the same way as the respondents of the survey. This indicates that the group of respondents is representative of the companies in the database.

The survey only maps out how the industry looks today. To collect more data about the evolution of the industry we invited six experienced actors from the call centre industry to participate in a ‘history workshop.’ A ‘history workshop’ is a qualitative method to establish a historical account of events over a period of years, based on experienced

actors from the field. The experts placed paper-notes on an open wall partitioned in yearly intervals within the following subjects: “Companies/industries”, “Technologies”, “Dilemmas, organizations and institutions”. The history workshop was completed in March 2005. The experts had 7-30 years of experience. They represented two different in-house call centres, two different independent call centres, a technology provider and a consultancy company.

About the survey and report

The fact that the Danish survey is part of an international survey has advantages and disadvantages. The advantage is that it will be possible to compare the results from the call centre industries in different countries around the world. The disadvantages are that in some cases the standardised questions do not seem relevant to Danish companies and that some of the questions can therefore be very difficult to answer.

The questions were directed to the person responsible for the call centre such as the director, the call centre manager, the HR manager, etc. Thereby, the survey is a management survey. It would have been interesting to perform a similar study based on an employee questionnaire. However, this issue is outside the scope of the research project.

This report is primarily a descriptive analysis of the data material and the history workshop. This means that the results are presented to the reader with a minimum of conclusions and discussion. All of the results have been analysed for differences within the following variables:

- In-house versus independent call centres
- Primarily inbound versus outbound activities
- Collective agreements versus no collective agreements
- Sector
- Size

Not all respondents have responded to all the questions. The symbol ‘n’ indicates the number of persons having responded to a question. The analysis has been checked for statistical significance ($p \leq 0.05$).

Large parts of this report draws on the survey report written in Danish based on the Danish survey (El-Salanti et al., 2005). Some sections have been more or less directly translated, whereas other sections have been added and new analysis results have been incorporated. Around thirty percent of the text, figures and tables in this report are new.

About respondents

About 50% of the respondents are managers of the call centres whereas about 40% have the title of department manager or senior manager in the company. Only 3% had the title of Human Resource Manager. The remaining respondents are leaders, supervisors, etc. 27% of the respondents are women (n=118). This is considerably less than the share of women among the employees in the industry.

In average, the respondents have worked in the call centre industry for 6.7 years. The shortest working experience was of 3 months, whereas the longest was 24 years.

Table 1: Experience of respondents

	(n=116)
Up till 3 years	28%
3,1-5 years	22%
5,1-10 years	30%
More than 10 years	20%

The industry

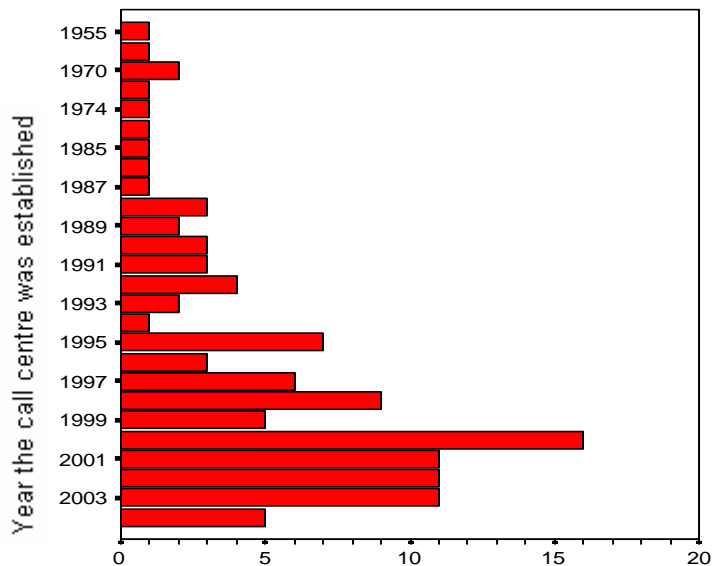
To understand the call centre industry in Denmark we first present the qualitative data on the industry evolution based on the information obtained in the ‘history workshop’. Thereafter, the quantitative data based on the survey are presented.

Overview of the industry evolution

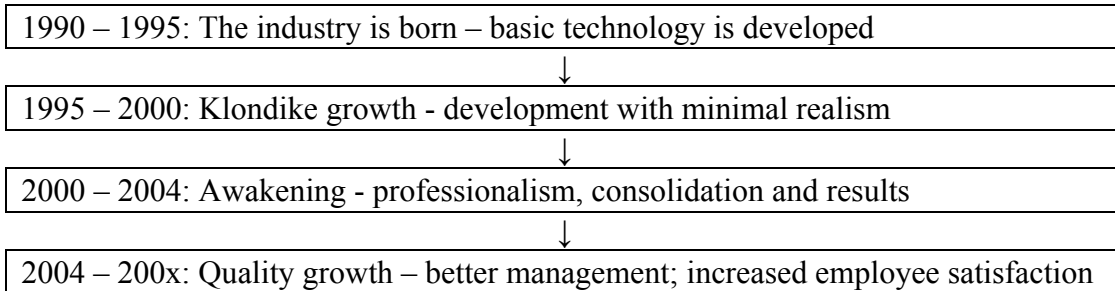
As mentioned above, there are very few hard data on the industry evolution. The industry has grown from very few call centres in 1990 to 3-400 call centres in 2004. The annual growth rate has been about 10%.

In the survey the managers were asked what year the call centre was established. This gives a rough picture of the development of the industry that largely corresponds to the impression based on the newspaper review. Some managers date their call centres back to before 1950. We presume that these managers refer to the company as such and not to the call centre unit.

Figure 2: Number of call centres by year of establishment



The following description is based on a history workshop. The workshop ended up with the description of four different periods of the Danish call centre industry evolution:



19xx – 1990:

Throughout the century some departments mainly focused on telephone inquiries and/or sales. These departments have mostly been within the large public telecom sector and within the postal services. The departments have used the phone as a tool in combination with various paper-based administration systems (one such system was referred to as the “drying line” in the workshop, a system where laps of paper were placed on a moving string under the ceiling. Server-based solutions began to emerge at the end of the 80s.

In the early 1980s, phone-answering-based units were set up in several industries. In the public sector citizens got the opportunity to call in about electricity, taxes, etc. The travel industry started to boom with low-priced charter-package travel and they set up booking units. The financial world also saw the opportunities in phone-based units, e.g. phone-banking, and some of the early call centres were set up in the period between 1980 and 1985. Larger phone-based units were also seen in other industries. All of these centres were phone-based without extensive use of computers. A “technology” that became popular in the 80s was open space offices, which also seems to be a necessary requisite for the establishment of profitable call centres in that less square meters than individual offices are necessary to be profitable.

1990 – 1995:

In this period computer-based call centre technologies emerged. In the beginning of the 90's, computers became more affordable, and a number of new technologies started to emerge. One such technology was the transfer of phone numbers from caller to receiver. And this made the routing of calls possible, which e.g. can be used for skill-based routing and Automatic Call Distribution (ACD). Workforce management systems were also introduced. At the end of the period the first customer relationship management systems (CRM) were introduced and also interactive voice response (IVR) systems. The first dedicated training for call centre agents started in this period, especially directed at voice and interaction training.

The first commercial call centres were established in the areas of hotline and helpdesk functions. This also applies to areas such as handymen accessible 24 hours, car accident hotline services, etc. Media and publishing companies started to establish call centres as well as did post order based retail companies. Public service institutions began to establish service functions on a larger scale. Help-lines were also established by charity organizations. Outbound telemarketing became more established, and already in 1988, the Danish Telemarketing Association was established.

1995 – 2000:

In this period the number of call centres increased in all industry sectors. Deregulation of the telecommunication market and the advent of the mobile phone technology introduced a number of new telecom-companies; both start-ups and entrants from foreign competitors. There was a large growth in customer service units in these companies, and during this period some of these grew from almost nothing to 500-600 employees without much control and without any major organizational renewal. Some of these centres were outsourced or established as independent companies, some of which still exist as independent players. The former state-owned telecommunication company (TDC) also established an independent call centre. Several other sectors were deregulated, which led to start-ups and mergers and to the establishment of more professionalized customer service units.

Some of the technologies behind this growth were developments of telecommunication technologies (better switch boards, etc.). Computers also developed, and especially stand-alone computers in local area networks with better graphical user interfaces (GUI) using mouse technology were introduced. E-mail and Internet got widespread acceptance and use during the period. Predictive dialling was introduced, but was not commonly used before the end of the period. Adjustable tables and better working-climate regulation were introduced in this period due to the Danish work environment regulation from 1995. Team-based organizing became more popular in the middle of the 1990s, even though some organizations started earlier. Call centre conferences started to emerge around 1993.

The Swedish independent call centre ProfCom entered the Danish market. According to the industry experts, ProfCom was very aggressive and put a large pressure on the Danish market, which meant that employees were under pressure and they did not develop at work. The industry adopted American norms for how to be profitable (the 75% rule). This pressure, combined with the growth in small telemarketing companies with quite dubious sales methods, gave the industry a bad reputation in the press. Labour unions started to focus on the industry at the end of this period due to the rising importance of this relatively new organisational approach and due to complaints from members. There was also focus on problems with monitoring and mystery calls. Burnout was discussed in the industry as a problem; however, nobody did anything about it. One of the early collective agreements with an independent call centre was negotiated in 1998.

2000 – 2004:

Especially the independent call centres started to realize that the economic situation was not sustainable, and that they had to use more systematically economic procedures and better administrative management techniques. Several call centre agent curricula were developed at business schools around Denmark. E-learning also became popular.

The explosive growth in the telecommunication companies stopped. The industry saw a consolidation of the independent call centres and there were some mergers and takeovers by trans-national call centre companies. The industry was still growing. More and more in-house call centres were established. To improve the economic performance, one of the large independent centres moved to a low wage region in 2001.

Database systems were professionalized and data warehouse technologies started to emerge at the beginning of the period. Voice recognition, speech synthesis and interactive voice response systems were beginning to find use. Cordless technologies such as cordless headsets made work postures more flexible. Some organisations started to experiment with self-managed teams around 2003. Workflow management systems became more widespread and prognostic tools were integrated into workforce management systems. Internet solutions with self-service also became more widespread. Some experts foresaw the death of the call centre industry due to the Internet and E-mail; however, this remains to be seen. Users now call with questions that cannot be answered on the Internet or if they do not have access to the Internet.

2004 – 200x:

The management of the call centres has started to become more professionalized. It seems that good management has become more important because most of the large centres now master the basic technologies. Better supervisory systems have been set up. There has been a general shift from focus on expenses to focus on quality. A quality award has been introduced and several of the independent call centres now try to qualify for the award.

The Danish labour union of HK (Commercial and Clerical Employees in Denmark) and the press have focused on better working conditions in the telemarketing call centres. HK established a website where companies that treated employees badly were blacklisted and member stories were exposed. This website was later closed because it was ruled illegal, and because HK changed their strategy, now focusing on the well-performing call centres. They started to put pressure on industry to negotiate collective agreements and the positive strategy made it easier to enter into negotiations. Call centres directed at citizen services are rapidly spreading to the public sector. According to the survey industry, managers expect further growth in the future.

Markets and industry segments

As described above, the data on the development and distribution of call centres is not very precise, and in fact there is no generally accepted definition of what a call centre is. In 2000, Datamonitor reported that there were 290 call centres in Denmark in 1998 and 335 in 1999 (EIRR, 2000a & b, 2000). They projected a growth rate of 9% until 2003. As mentioned above, in 2004 Datamonitor reported that there were around 900 call centres with 29,000 employees in 2003. This indicates a growth rate significantly larger than the 9% previously expected (ComputerWorld, 2004). The Danish survey report estimates that there is about 300-400 call centres with more than five employees. If the Danish call centre survey is representative of the whole call centre industry, the industry employs between 20,000 and 25,000 employees, which is around 1% of the Danish workforce.

Table 2 shows the distribution of call centres based on vertical markets found in the Danish survey, i.e. the segment in which the customers of the call centre are mainly situated. It can be seen that the financial sector, including banking and insurance, has a dominating position with around 18% of the call centres. The second largest area is telecommunication with around 11%.

For the analysis the Danish report groups the centres into 5 large sectors. Table 4 shows the segments. The grouping has been based on similarity of the typical work tasks in the call centres.

Table 2: Call Centres by vertical market

Vertical Market	% (n=118)
Insurance	8,6
Financial Sector (excl. Insurance)	9,5
Manufacturing	2,6
Utilities	7,8
Retail	6,0
Telecommunication	11,2
Media	6,9
IT	6,0
Public Service / local counties and regions	3,4
Public Service / state	3,4
Medical	1,7
Distribution and Transport	8,6
Food and Drink	1,7
Entertainment and Leisure	8,6
Printing and Publishing	3,4
Other	10,0
Total	100

The US report singles out ‘business to business’ in the analysis because the wages and conditions in this segment are larger than other segments. The Danish survey data have been analysed to see if this is also the case in Denmark. It has been investigated whether call centres in the ‘business to business’ segment stands out in comparison to other segments in relation to annual earning for core employees. This is not the case (Table 3). We have also checked in relation to types of influence and discretion. There are no significant differences between call centres that target the ‘business to business’ or ‘mass market’ segment. One difference is that the finance sector has a larger proportion of call centres targeting the mass market. This does, however, not seem to affect earnings. For this reason the ‘business to business’ has not been analyzed as a separate segment.

The US report also includes ‘subcontractors’ as a separate segment. In this report ‘subcontractors’ are called ‘independent’. In the Danish call centre industry the independent centres clearly differentiate themselves in relation to in-house call centres. We have chosen not to define the independent ones as a separate segment. Instead they are analysed in relation to in-house centres throughout the report. Table 6 shows that independent centres are distributed unevenly over the industry segments. Therefore, the special conditions in these call centres affect some segments more than others, but we expect that this mirrors the competitive conditions in the particular industry.

In the Danish survey the call centres within retail, local government and printing & publishing have the lowest earnings. There are only a few centres in each of these categories and they do not have similar activities. We have grouped them with other

segments in order to establish sufficiently large groups for statistical analysis. A separate analysis has been made of this group of ‘low wage’ call centres and the differences in relation to other sectors will be mentioned when they are significantly different from other sectors.

Table 3: Annual earning vs. customer segment

		Customer segment			Total
		Business only	Mass market only	Both	
Annual earning (DKR)	up till 2400000	3	11	16	30
	241000-280000	4	13	8	25
	more than 280000	5	10	16	31
Total		12	34	40	86

Organizational characteristics

The relative size of the segments in the Danish call centre industry can be seen in Table 4. Calculations based on the survey data show that 80% of the employees are employed in 33% of the call centres (40+ seats). The largest 10% call centres employ 50% of the employees in the call centre industry (150+ seats).

There are some differences between the individual industry sectors. Finance has the same pattern as the whole industry except that the largest bank employs more than 30% of all employees within the finance sector. The manufacturing, etc. sector has smaller centres that are evenly distributed in size, which means that the largest 10% of the call centres only employ around 35% of the employees. In the IT-sector the majority of centres are quite large. Therefore, centres with 40+ seats employ more than 90% of the employees within the IT-sector and the largest 10% of the call centres employ 60% of the employees. In the distribution/transportation and entertainment/leisure sector the two largest centres with respectively 150 and 250 seats employ 60% of the employees in the sector (10% of the call centres).

Table 4: Number of call centres and average seats by industry sector

Industry sector	Av. Seats	Share
Finance (Bank and Insurance)	80	17,8%
Manufacturing, Food, Retail and Utilities	40	17,8%
IT and telecommunication	113	16,6%
Distribution/transportation & Entertainment/Leisure ²	36	16,9%
Other	40	30,5%
Total	60	100%

The size of call centres has been reported on the basis of the number of workstations. The survey finds a large variance in the size of call centres. The average number of seats in the Danish call centre industry is 60 seats. However, the median is 28 seats, which means that half of the call centres has less than 28 seats, and that a few call centres are quite large. The largest call centre in the survey population measured by seats has 526 seats. The largest call centre measured by employees has 598 employees. The number of seats corresponds largely to the number of employees. The mean value of the call centres ‘seat to employee ratio’ is 1.09. This means that for every workstation

² These categories have been joined because job activities are quite similar.

the call centres in average employ 1.09 full- or part-time worker. The total ratio for all call centres is 1.06. These figures include both part-time and full time employees.

Table 5: Distribution of workstations (seats)

01-10 workstations	22%
11-20 workstations	23%
21-50 workstations	28%
50- workstations	27%
Total	100%
Mean: 59,7	Media: 28

Around 40% of the businesses run one or more call centres. Around 25% of the businesses run two or more call centres. Only 1 out of 20 (5%) call centres are part of a group with 5 or more call centres. The majority of the centres are owned by Danish companies. Some of the independent call centres are part of a trans-national or Nordic corporation.

The industry is dominated by in-house centres (73%). It is mainly the IT and telecom sector that has activities placed in an independent centre. In addition, this sector has seen the largest outsourcing activities. The distribution/transportation and entertainment/leisure sector also has a fair amount of independent call centres (25%). Most of the centres handle inbound calls (83%), and when these two categories are correlated, it can be seen that a majority of the outbound calls are handled by independent call centres. It should be noted that several financial companies have outbound activities.

Table 6: In-house vs. independent and inbound vs. outbound in relation to sector

	Finance	Manufacturing, etc.	IT and telecom.	Distribution, etc.	Other	Total
How would you describe this centre?						
In-house centre	100%	95%	35%	75%	64%	73%
Independent	0%	5%	65%	25%	36%	27%
The majority of your activities are?						
Inbound	100%	86%	80%	90%	68%	83%
Outbound	0%	14%	20%	10%	32%	17%

The competitive situation differs between the sectors. The travel sector has been very competitive since September 11th, whereas the competitive pressure in the financing sector has relaxed after some years with mergers and cut-downs. In the finance sector this seems to have led to an increased focus on quality and a move away from monitoring and tight control. In the utility sector deregulation and privatisation have resulted in increased competition and fewer and larger centres due to mergers and consolidation.

Most of the in-house call centres are located close to their parent company. These companies are mainly situated around the larger towns with a few exceptions such as utilities. Some independent call centres have moved to rural areas with high unemployment rates where they enjoy support from public programmes.

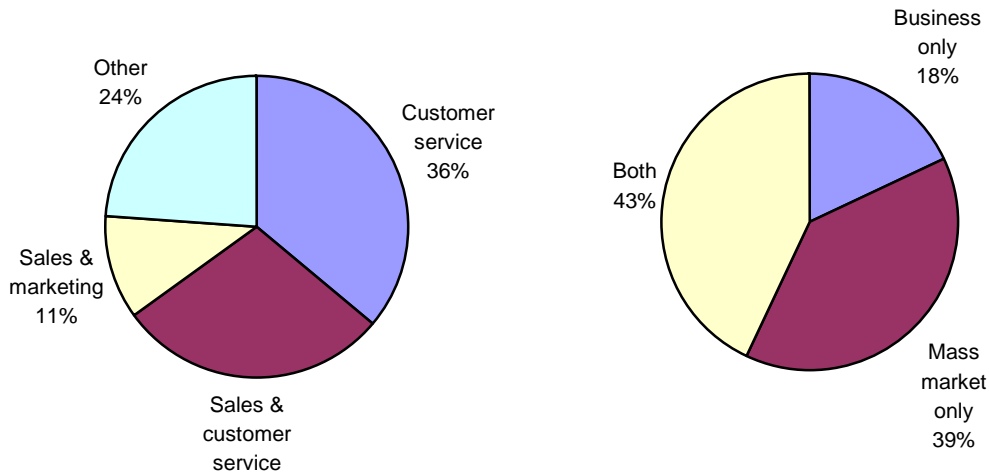
Off-shoring of Danish speaking call centres are rarely seen due to language barriers. Larger companies serving international markets are not bound by this constraint. The

only other countries speaking Danish (as their second language) are Greenland and the Faeroe Islands. Citizens of these two countries usually speak with much accent and examples of off-shoring have not been seen. There are a few examples of call centre operations placed in Ireland and hiring Danish employees to work in Ireland under Irish wage conditions. Some IT-support centres serve the Danish market from Sweden with a mixture of Nordic employees.

The strategy of the call centre

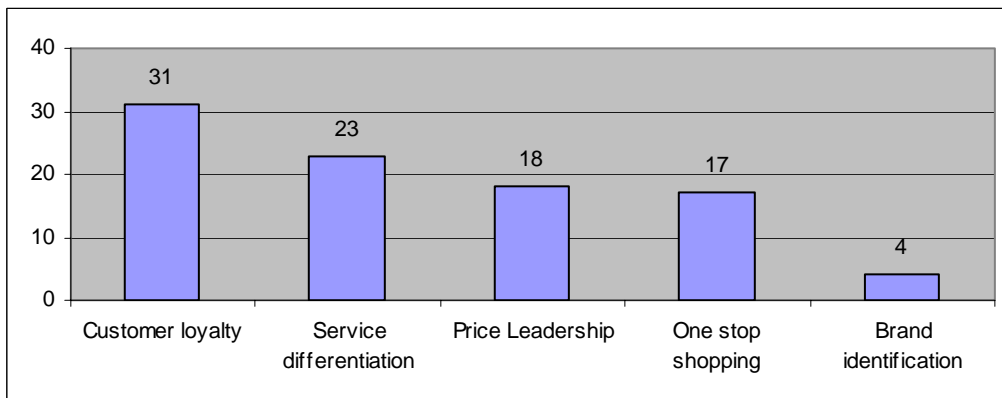
Customer service and sales are the main activities in the call centres in the survey. The majority of the centres both serve business and private customers. 18% of call centres primarily focus on business customers (B2B). 43% focus on both B2B and the mass market. The large majority of the call centres (72%) target the national market and only very few have international activities (3%).

Figure 3: Activities and target segments in the call centres (n=110)



The most important business strategy according to call centres in the survey is customer loyalty (31%) and the second most important is service differentiation (23%). Price leadership comes in as number three (18%).

Figure 4: Main business strategy of the call centre (n=115)



There is no difference between in-house and independent call centres, but it seems that in-house call centres are more inclined to follow a price leadership strategy than are the independent call centres. There are some differences between the different sectors. In

the insurance and manufacturing segment customer loyalty and one-stop shopping are the most important strategies. Within the IT and telecom sector customer loyalty in combination with price leadership are the most important strategies. In distribution, customer loyalty is most important.

The economical performance has improved within the last two years in the majority of the call centres that answered the question. 50% of the call centres have had increasing income, whereas only 5% have had decreasing income. 40% of the call centres expect to hire more employees next year and only 8% expect to reduce (n=88). The call centres reporting the number of employees in both 2001 and 2004 have had 30% more employees in 2004 than in 2001. This corresponds to a yearly growth rate of 9%.

Opening hours

The normal workday in Denmark is between seven and eight hours. The survey shows that two out of three call centres are open more than eight hours. The average opening hours are 11½ hours on weekdays. 16% of the call centres are open more than 12 hours in the weekends. The analysis shows that the phones are open on weekends primarily within distribution/transportation and entertainment/leisure. Moreover, it is especially the large companies with more than 50 workstations that are open 24 hours during the whole week.

Table 7: Number of hours per day that the phones are open

	Weekdays	Saturday	Sunday
Closed	-	52%	63%
Up till 8 hours	34%	29%	17%
8 – 12 hours	38%	4%	4%
12 – 24 hours	27%	16%	16%
Total (n=112)	99%	101%	100%

The presence of unions and employer associations

Industrial relations

The Danish call centre industry is characterised by a relatively weak institutional framework except for the finance sector, which is rather tightly organised. There are no special employer or employee associations dedicated to the call centre industry. In general, the employers of inbound call centres are organised in the employers' associations related to the vertical market served by the call centre. The employees are organized according to the type of work they perform, e.g. banking, technical support, switchboard, etc. "HK" – the Union of Commercial and Clerical Employees in Denmark - has been quite active in seeking to negotiate collective agreements in call centres, and it has been active in the press, criticizing 'the horrible working conditions' in certain parts of the industry, notably in telemarketing companies. The employers and employees in the finance sector are organised by the association dedicated to this sector. In the rest of the call centre industry, most of the organized employers are members of The Confederation of Danish Industries (DI).

The managers of the call centres who responded to the survey said that they were quite content with the relations between their centres and the unions. Only 5% characterized

the relations as bad. The relations with core employees are also characterized as either ‘good’ or ‘very good’ in more than 95% of the cases. The survey did not ask the unions or employees about their opinion.

Figure 5: Relation between management and unions (n=62)

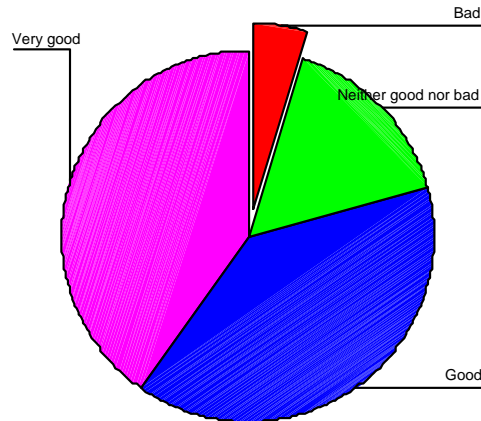
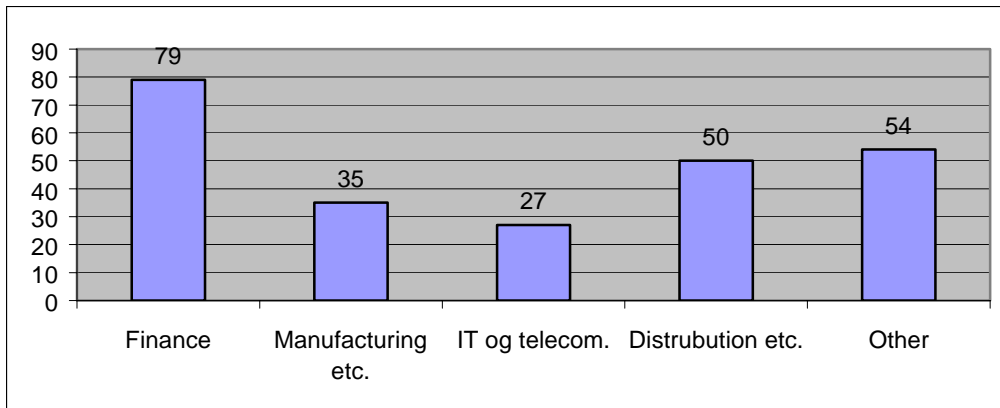


Figure 6 illustrates that there are significant differences in the institutional framework for call centres across different sectors, where especially the finance sector has a large degree of unionisation.

Figure 6: Percent of collective agreements, by sector

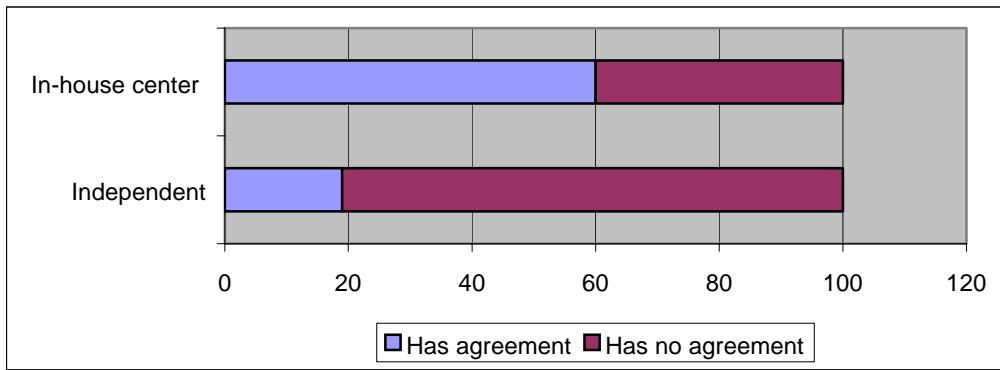


In the finance sector, about 80% of call centres have signed agreements (this means that an even larger percentage of employees is covered because most of the large call centres are covered). In the IT and Telecom sector, less than 30% of the centres are covered by agreements (in this case, some of the large centres do not have agreements). Fifty percent of all Danish call centres have work councils that cover core employees. These councils are most frequent in the finance and distribution sectors (63%) and least frequent in the other areas (30%).

HK has not been especially successful in establishing collective agreements in the independent call centres. The survey shows that the outbound and the independent call centres have a much lower organisation rate than the inbound and in-house centres.

However, HK has secured agreements in some of the larger independent call centres. Several of the in-house centres simply follow the collective agreement established for the company as such. This is despite the fact that working conditions often vary considerably between the call centre and other parts of the organization. The analysis shows that call centres with collective agreements pay 10% higher wages on average than call centres without collective agreements.

Figure 7: Agreements in in-house vs. independent centres (in percent)



In the survey, managers were asked how many of their employees were organized into a trade union. Forty-three percent of the managers did not know the answer to this question. The rest of the managers reported that an average of 75% of the core employees were union members. In 4 out of 10 centres, all core employees are organised in a trade union. In particular, the IT and telecom sector and the manufacturing sector come out at the low end. The analysis shows that in the IT and telecom sector there is a tendency for unionized centres to have fewer sick days (an average of 8.8 days) than non-unionized (an average of 12.4 days). This difference, however, is not significant because the variance is high and the number of centres is low (n=12).

Table 8: Core employees that are members of a trade union (percent of centres)

0% - 10% members	9%
11% - 75% members	28%
76% - 99% members	24%
100% members	39%

Counter-intuitively, the larger the centre is, the lower the unionization percentage. This might be related to the uneven distribution of large call centres in different sectors, i.e. IT and telecom and distribution sectors have some very large centres and a low organization rate.

Table 9: Organization rate vs. call centre size (number of call centres)

	-10 seats	11-20 seats	21-50 seats	50 – seats
0% -10%	0	0	2	3
11 – 75%	4	1	4	6
76 – 99%	1	2	6	4
100%	10	5	3	3

In 2000, HK stated that “it is not particularly concerned about the issue of call centres as they either already have a collective agreement in place or the terms and conditions

offered to employees follow the same norms as those governing the rest of the labour market” (EIRR, 2000a & b). From the historical account above, it appears that HK’s opinion about the matter later changed when it started to focus on the small telemarketing companies and created the homepage “www.blacklisted.dk”.

Institutional framework

The survey indicates that the presence of a qualified workforce is the most important factor for companies when deciding on the location of a call centre. The second most important factor is related to the historical location of the company’s headquarters. Infrastructure was also mentioned as an important factor influencing the choice of location, whereas wages and living expenses score very low. Several managers stated that there was no special reason for the location of their call centre.

In general, subsidies do not seem to play an important role in corporate locational decisions. However, a small number of independent centres have explored local public support in terms of special educational programs and unemployment subsidies. This is the case, for instance, in the low wage area around the Danish city of Vordingborg, where the local business school has developed a vocational call centre education programme based on a grant from the EU “Social fund”, in cooperation with one of the largest Danish independent call centres.

Only 6% of managers stated that the presence of other centres in the local area is a valuable resource in relation to the recruitment of qualified core employees. Twenty percent of the call centres have used public education and/or programmes. External factors do not seem to have a large impact on the human resource practices of call centres. The most important factors are the policies of corporate management, a tight labour market, trade union presence, and presence of other successful call centres. These factors, most importantly corporate management, primarily seem to put pressure on the centres to create jobs with more discretion and lower monitoring – but only ‘to a certain degree.’ Managers experience some pressure from trade unions and corporate management policies to bargain collectively with a trade union and to use sophisticated human resource practices.

Employment and human resource management

Employee background

According to the survey, women are over-represented in the Danish call centre industry. 68% of core employees are women. A third of the call centres employ more than 75% women. The larger the call centre becomes, the lower the rate of women employed. Thus, it is especially the smaller call centre units that employ a higher relative proportion of women.

Table 10: The rate of women in the workforce – share of call centres (n=107)

Up till 50%	28%
50% to 75%	35%
More than 75%	37%
Average number of women	68%

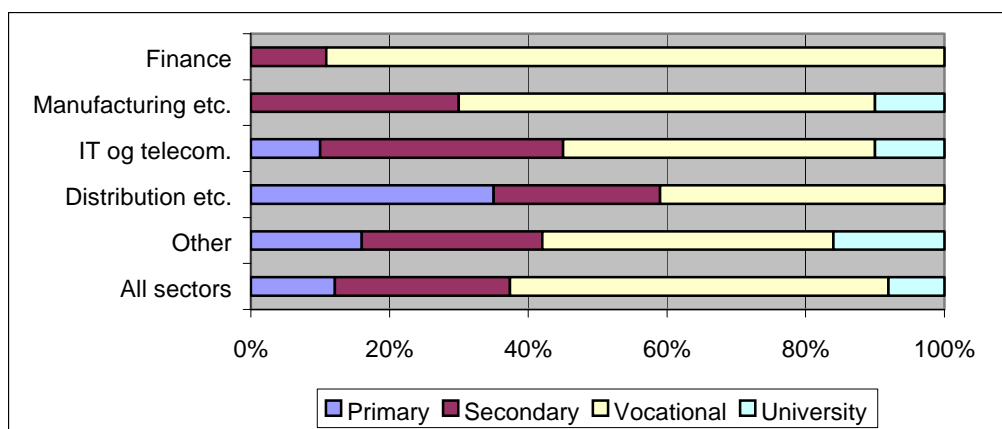
Forty-three percent of call centres reported that they employ students among their core employees. Among these centres, 23% of the employees on average are students.

Twenty percent of the call centres employ more than 50% students (n=110). Outbound call centres are particularly likely to use students. There are no significant differences in the use of student employees across different sectors.

Twenty-eight percent of call centres in this study employ temporary workers. On average, 20% of the workforce in these centres is employed on temporary contracts (n=91). This corresponds to about 5.5% of the total workforce in the Danish call centres. This figure has been estimated by summarizing the number of temporary workers in each call centre that use temporary employees and comparing to the total number of part- and full-time employees in the industry. The figure is 7.5% if the call centres that did not answer the question are removed from the total workforce. The call centre with the largest share reported that 65% of their employees are temporary workers. Temporary workers are mainly employed as buffers for peak and odd hours of work. They work 22.5 hours per week on average. Every year, 16% are transferred to permanent contracts.

With respect to education levels, in 50% of the call centres, the majority of the employees have some sort of vocational education. In 33% of the call centres, the highest level of education of the majority of workers is secondary school. Only 8% of call centres managers reported that the majority of workers have a university-based education. Moreover, relatively large differences exist in the education level of core employees across the various sectors. In the finance sector and the Manufacturing, Food, Retail and Utilities sector, no employees have less than a secondary school degree. The Distribution/transportation & Entertainment/Leisure sector employs no workers with a university degree.

Figure 8: Educational level



Labour turnover and absenteeism

It is generally acknowledged that the call centre industry has a relatively high labour turnover. About 10% of call centre workers quit their jobs within a year. About 5% are fired and 6.6% are promoted within or outside the call centre, or they are transferred to other departments within the organisation. This means that the total annual turnover is about 15% on average, when promotions are not included. The average tenure of core employees is about 5 years, and the tenure of managers is marginally higher (5.6 years). There are no differences in turnover by sector or call centre size. Three out of 10 core employees have less than one year’s tenure. Tenure is generally lower in outbound and independent centres.

There are big differences in these patterns across industry sectors. The quit rate is highest within the IT and telecom sector (12.7%), whereas the finance sector has the lowest quit rate (6%). The largest call centres have the highest quit rates (12.7% in centres with 50+ seats) and the smallest call centres have the lowest (4.3% in centres with less than 10 seats). The quit rates in outbound centres are markedly higher than in inbound centres (22% versus 6%). This is probably related to the extensive use of students in the outbound centres. The average job tenure is 4.9 years for core employees and 5.6 years for managers.

Table 11: Average tenure for core employees and managers

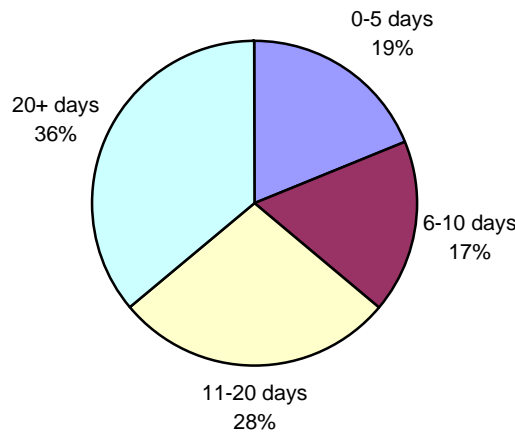
	Average	
	Core employees	Managers
Average tenure (n=96,91)	4,9 years	5,6 years
Share with less than 1 year tenure (n=94,78)	31%	21%
Share with more than 5 years tenure (n=85,77)	31%	49%

Generally, the number of sick days taken in call centres is not significantly different from other comparable industries. However, employees in the IT and telecom sector have more sick days than employees in the rest of the call centre industry (10.9 versus 8.6 sick days a year). There are no significant differences in sick days between inbound/outbound, in-house/independent or with/without collective agreements.

Recruitment and careers

Core employees in Danish call centres receive 22 days of training on average in their first year of employment. Temporary workers receive an average of 12 days.

Figure 9: Days of training of core employees the first year – share of call centres



There are large differences. Some jobs seem to be easy to learn, in that employees only receive 1 day of training, whereas other jobs require up to 150 days. The median is 15.5 days. This means that half of the call centre employees receive less than 15.5 days of training during the first year. In addition, call centres provide an average of 6 days of on-going training for experienced employees each year. Figure 9 shows how the training needs are distributed between the call centres.

The survey reveals that it takes 17 weeks on average for a newly hired worker to become fully competent. The median is 12.5 weeks. This means that learning on the job is an essential part of becoming a skilled call centre employee. Practices also vary within this field. Some managers say that it takes only 1 day, whereas the maximum is 100 weeks.

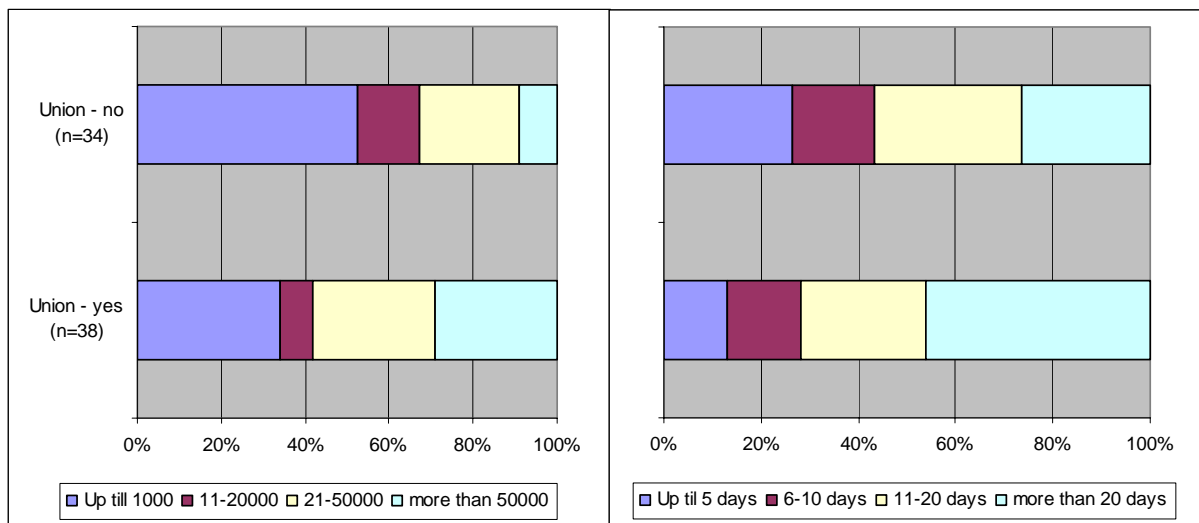
There are differences between the sectors as well. The required time for training is highest in the finance sector and lowest in the distribution/transportation & entertainment/leisure sector. There are no significant differences between in-house or independent call centres. However, there are differences between inbound and outbound call centres (Table 12).

Table 12: Average days of training versus primary activity

	Average	Median
Mainly inbound calls (n=79)	24.3 days	20.0 days
Mainly outbound calls (n=15)	9.3 days	10.0 days

The analysis shows that the call centres spending most time and resources on hiring and training employees have a larger tendency to enter into collective agreements with unions.

Figure 10: Cost and duration of training in relation to collective bargaining



There has been little research specifically focusing on the Danish call centre industry. In the finance sector recruitment has primarily been internal and careers have also been internal. However, this pattern has been changing within the last few years.

The survey indicates that it costs around €6,000 (DKr 43,674 on average) to recruit, select and train a new core employee. The median is somewhat lower, namely, around €3,000. Table 13 shows that there are large differences between the sectors. It can be seen that the most spending half of the call centres in the financial sector spends more than 5 times as much as the least spending half of the centres in the IT and telecom sector.

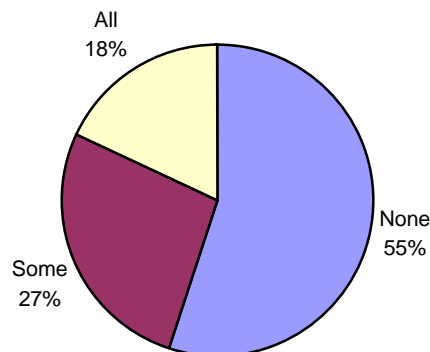
Table 13: Relative cost of recruiting, selecting and training a new core employee versus sector

	Average	Median
Finance (n=13)	1,3	2,2
Manufacturing, Food, Retail and Utilities (n=8)	0,8	0,7
IT and telecommunication (n=11)	1,0	0,4
Distribution/transportation & Entertainment/Leisure (n=13)	1,0	1,3
Other (n=21)	0,9	0,4
Total (n=66)	1,0 (€6,000)	1,0 (€3,000)

There are also large differences between in-house or independent call centres and according to whether the primary activities are inbound or outbound. The average spending is twice as high in in-house centres as in independent centres, and it is five times as high in centres with inbound activities as in centres with outbound activities. The highest spending half of the inbound call centres spend more than ten times as much as the lowest spending half of the outbound call centres. This also indicates that a few of the outbound centres spend relatively much on recruiting, selecting and training new core employees.

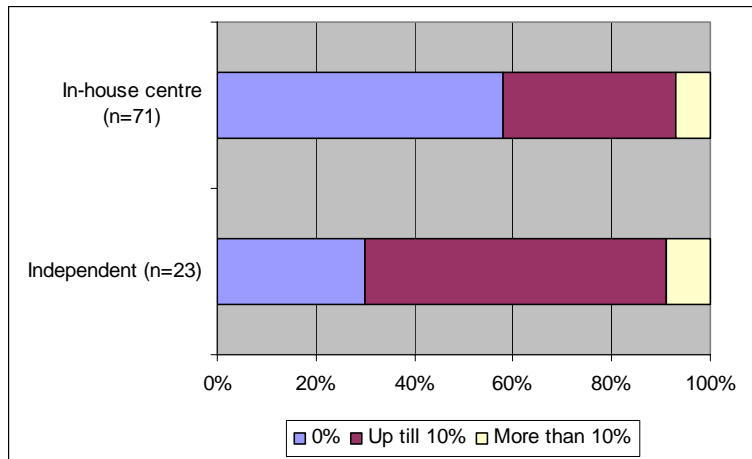
Figure 11 illustrates that about half of the call centres in the survey uses some sort of test when recruiting new employees. However, only 18% does this systematically. The usage of tests is most common within the finance sector and least within distribution etc. The larger the centre, the more common it is to use tests.

Figure 11: Share of employees that are recruited based on some type of test



The survey reveals that within 10% of the call centres more than 10% of the employees get promoted and more than 10% are promoted outside of the call centre. In 40% of the call centres up till 10% of the employees are promoted within the call centre. In 30% of the call centres up till 10% of the employees are promoted outside the call centre. Figure 12 illustrates that there are differences according to the type of centre. Promotional opportunities are higher in the independent centres than in the in-house centres.

Figure 12: Promotional opportunities in relation to type of centre

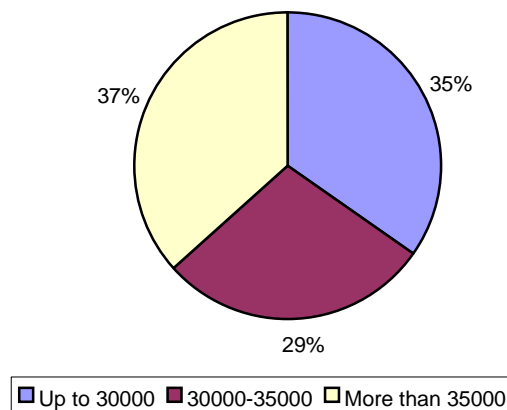


Wages and remuneration

According to the survey the average yearly salary for core employees was about DKK 270,000 (€36,000) in 2004. The lowest wages were DKK 170,000 (€23,000), whereas the highest were DKK 430,000 (€58,000).

There are no differences between in-house and independent centres and no differences in relation to size. However, there are differences between centres with and without collective agreements. On average, employees in centres with collective agreements earn 10% more than employees in centres without agreements. There are considerable differences between sectors. The finance sector has the highest salaries; 25% higher than the lowest wages in the IT and telecom sector.

Figure 13: Average yearly salary (incl. pension) for full time employee (€)



Only 31 centres out of 128 (24%) reported the typical hourly wage for core employees in the survey. The mean value is DKK 114. The minimum is DKK 95, and the maximum is DKK 150. The minimum value is 16% higher than the general industry level in Denmark. This indicates that core employees do not have low wage jobs. The finance sector generally has higher levels than the other sectors. The largest variance in pay is found within the IT and telecom sector. On average, temporary employees are paid 20% less than the core employees. The highest difference of 64% is found in the finance sector.

38% of the centres do not use any types of performance-based pay, whereas the rest of the centres use one or more of the following performance-based pay: individual, group-based or overtime. In centres where the wages are paid on an individual commission basis, the commission amounts to an average of 31% of the wage. When group-based incentives are used, it amounts to an average of 21% of the wage. Pay for overtime work amounts to 23% of the annual wage in the call centres paying for overtime.

The salaries for managers show patterns similar to the salaries for employees. The average salary for team-leaders and up is DKK 412,518 (€55,400). The finance sector pays the highest salaries, whereas the IT and telecom sector pays the lowest. There is a considerable variance in the figures. The lowest salary is DKK 230,000 (€31,000), whereas the highest salary is DKK 800,000 (€107,000). 30% of the centres use individual commission, amounting to around 20% of the yearly salary.

Work organization

Job design and work organisation

Only little research has been done within the area of job design in the Danish call centre industry. However, a number of intervention projects have been implemented with the purpose of improving the work quality in 4 call centres funded by the EU Social Fund. The results from these interventions indicate that a focus on self-managed teams, increased support and supervision and improved worker-management relations lead to improved work satisfaction, better working conditions, and improved service quality. The participants of the history workshop pointed to a trend away from focus on costs towards focus on quality.

Part-time

The majority of the core employees in the Danish call centre industry are employed on full-time contracts (66%, n=110). However, around a third of the core-employees are employed in part-time jobs, defined as jobs with less than 35 hours a week. The average part-time percentage for call centres is 28%. The normal work week in Denmark is 37.5 hours a week. The average work week for part-time workers in this study is 21.9 hours per week (n=77).

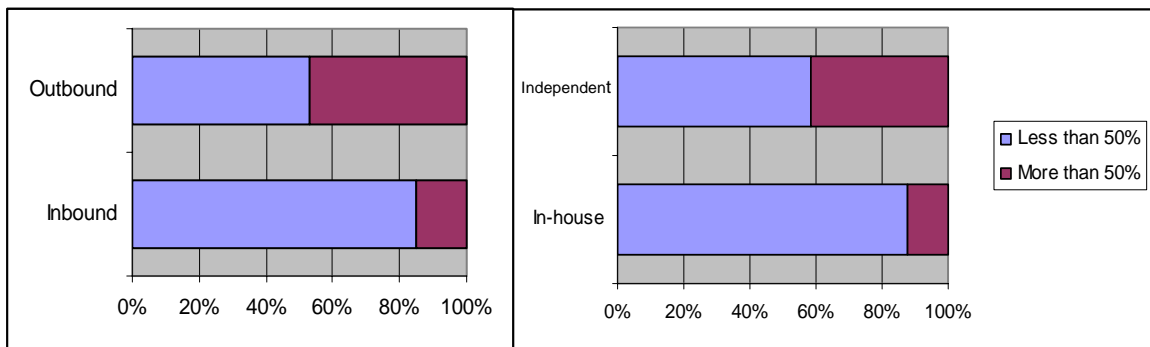
Managers in some large call centres report that they rely 100% on part-time employment. Several of these centres rely entirely on student employment. When the 20% call centres with more than 50% students are excluded, the part time percentage of the industry as a whole is as low as 21%, and the mean value in the call centres is 23%. Part time employees in centres with less than 50% students work 23.4 hours per week on average (n=56). If students working part-time are subtracted from the total number of part-time workers, the percentage of part-time core employees in the industry is down to 16% - i.e. about 50% of the part-time work is performed by students (n=86). In call centres reporting that they do not employ students, the average work hours of part-time workers is 25.0 hours a week. In other words, the students do not work significantly less than other part-time employees.

The percentage of team leaders in part-time jobs is 21%. In this case, the mean value of part-time team leaders in each company is 26% (n=28). Only around 3% of the

managers are employed on part-time contracts (n=22). The percentage might be even lower because many call centres chose not to answer the question about part-time work for managers and team leaders. In sum, whereas a large number of call centres make use of part-time employment in the core-employee positions, this pattern does not apply to managerial positions.

Figure 14 shows that most of the centres that employ more than 50% students are outbound and independent. When part-time employment is considered, excluding students, then we find no difference in the use of part-time contracts between in- and outbound and in-house/independent centres.

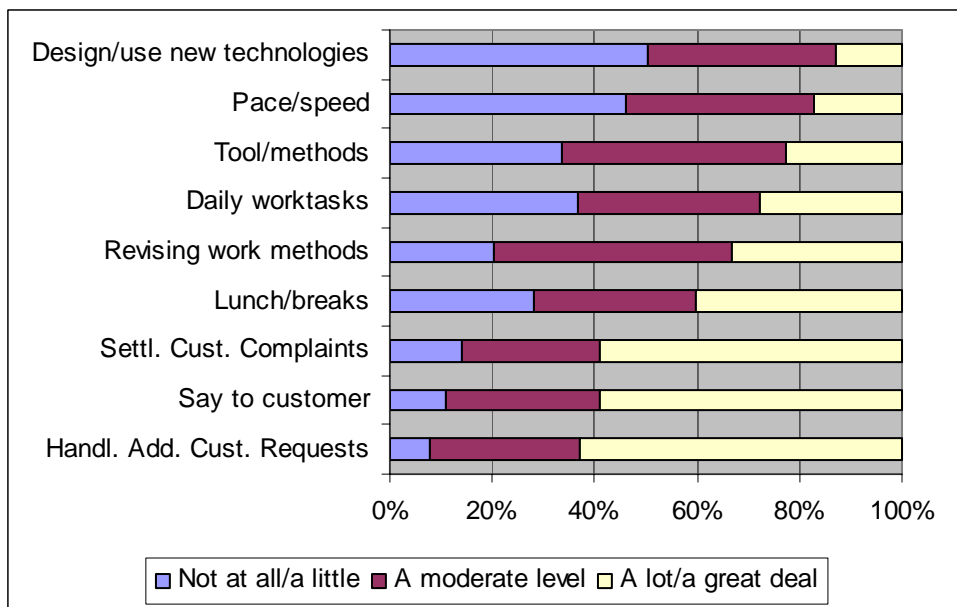
Figure 14: Percentage of students distributed by types of call centre



Discretion at work

Only a few call centres report that employees have a large degree of influence in their work. Figure 15 illustrates the degree of influence employees have in various areas.

Figure 15: Discretion at work



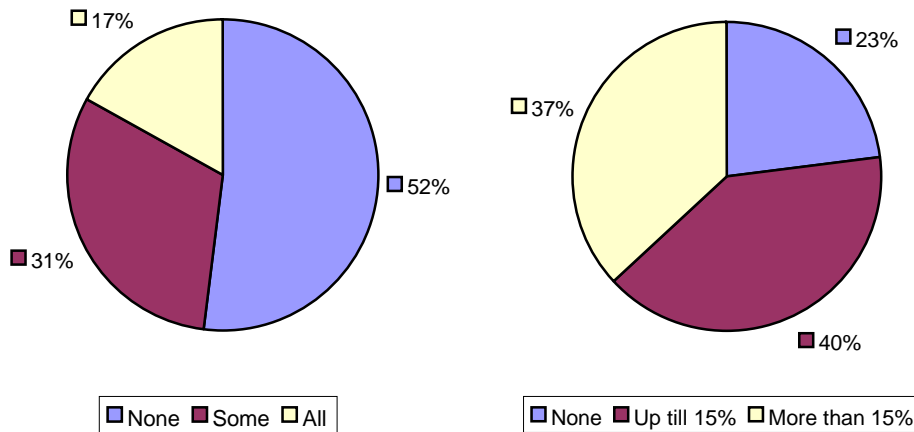
Most workers have low influence on working tasks, workings methods, work pace, and the use of new technology and methods. However, the majority of call centres report that core employees have a relatively high degree of influence on how to handle supplemental requests from customers or unexpected problems. They can also handle customer complaints without referring them to other agents or supervisors and have a

high degree of freedom in how they can speak to customers. Only a very few call centres use written scripts, and these are primarily outbound centres. Generally, employees in inbound centres have more influence than employees in outbound centres. Compared to other sectors, employees in the finance sector have more influence over when to take breaks and how to handle unexpected questions and problems. Employees in small centres generally have more discretion in areas of daily work tasks and design and use of new technology than to those in large centres.

Self-managed teams

On average, 30% (n=87) of the employees in the call centres work in some form of self-managed team – that is a group in which employees have some discretion regarding choice of tasks, methods, and work pace. Self-managed teams are found in almost 50% of call centres in this study. In 17% of the call centres, all core employees are organised into self-managed teams. Self-managed teams are seldom found in centres serving the manufacturing sector. The analysis shows no differences across other categories.

Figure 16: Share of core employees in some form of self managed team/development group (n=87)

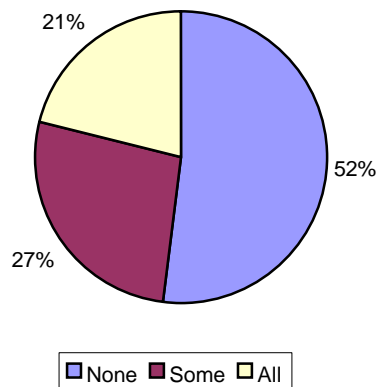


23% of the employees in the call centres are involved in some sort of development group activity. About one-fourth of the call centres do not involve employees in any development groups, whereas four out of ten call centres involve some of their employees in development groups.

Flexible work

An average of 25% (n=91) of the call centres offer flexible working conditions, such as shared jobs, the ability to work from home, and flex hours. There is wide variation in practices across different types of call centres. Flexible working conditions are found in about 50% of all call centres. In 20% of the centres, this applies to all core employees. The analysis shows that flexible working conditions are most common in the finance sector. The IT and telecom sector has the least flexible working conditions.

Figure 17: Share of core employees with flexible working conditions (n=91)



Working conditions

According to the ‘history workshop’, some call centres have moved away from automated call handling because the working conditions for the call centre employees were severely affected when unsatisfied customers came through to a live agent after unsuccessful attempts with the automated system. Thus automated call handling not only had a negative effect on working conditions, but on customer satisfaction.

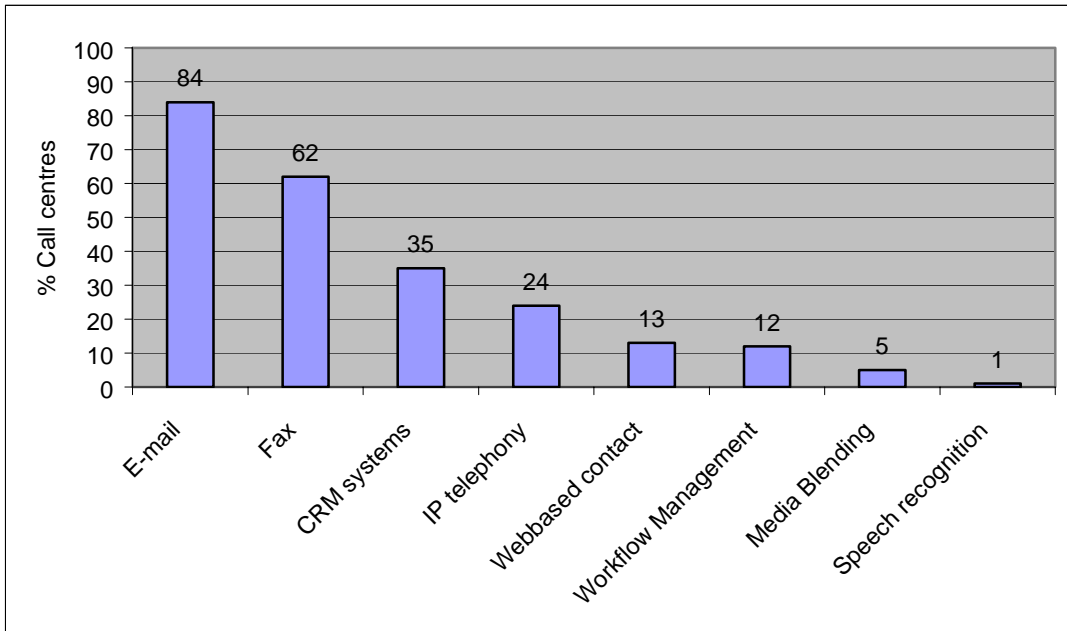
Other major problems in the industry seem to be shift work, heating and ventilation, and the psychosocial working environment. Unfortunately, research results published in this area are limited in Denmark. Internationally, the main problems in call centres seem to be poorly designed jobs with limited discretion, fast pace, and specific health problems related to phone and video display units such as sore throats, voice loss, deteriorating eyesight, headaches, and hearing difficulties (Paul & Huws, 2002).

Technology use

E-mail and fax are the most often used technologies in call centres. One out of three call centres use customer relationship management systems (CRM), and one out of four uses IP telephony. Only very few call centres use other technologies mentioned in the survey (speech recognition technology, media blending, workflow management, and web-based interactions).

The early call centre technologies such as interactive voice response (IVR) and automatic call distribution were mainly adopted to reduce costs. The general impression is that customers do not perceive machine-handled interactions as positively as human service. Therefore, in Denmark, there appears to be a move away from these technologies as call centres focus more on quality. However, voice recognition (VRU) and interactive voice response units were still used in 23% of the centres in this study. In these centres, one or more customer calls are fully handled by VRU or IVR. The analysis shows no difference in the use of VRU and IVR in relation to sectors, inbound/outbound functions, or in-house/independent status.

Figure 18: Call centres where core employees regularly the mentioned technologies (n=93)



Sixty percent of the call centres in our study (n=86) use consultants when new technologies are implemented. Workflow management, media blending, and speech recognition are primarily used in large call centres with more than 50 seats. Computer database technologies, such as customer relationship management (CRM) and data warehouses, seem to be the backbone of the larger call centre operations. These technologies make it possible for the call centre agent to give the customer a feeling of recognition, and it makes it easier to engage in ‘up-selling’ and ‘cross-selling’. Without these technologies, some of the finance organisations would have to have a much larger network of local sales offices.

The Internet and e-mail have opened up new communication possibilities that in some centres create a broader variety in the job tasks for each employee. However, it depends on managerial choice as to whether these types of activities are organised as distinct, fragmented jobs or integrated into broader, enlarged jobs.

Performance

Goals and performance

72% (n=93) of the call centres in this survey set goals for how long time customers should wait before their calls are answered. 17% do not set goals, and 11% find the question irrelevant (e.g. outbound services). On average, managers report that 84% of calls should be answered within 36 seconds. However, there is a large variance in responses to this question. The percent of calls to be answered in the target time varies between 20% and 100%, while the actual answering time varies from 5 to 180 seconds. These differences are not related to sectoral differences. However, it is interesting to note that the IT and telecom sector, with the largest employee turnover, seems to have the strictest goals. On average, 83% of the calls are answered within the targeted time, but the range of variation is between 24% and 100%. There are no significant differences based on sector, size, union presence, or in-house/independent status.

Table 14: Call centre targets by sector

	Call share	Answers before
Finance (n=16)	84% (80% -100%)	29s (10s-180s)
Manufacturing, Food, Retail and Utilities (n=14)	85% (70% -100%)	33s (10s-120s)
IT and telecommunication (n=10)	86% (65% -95%)	31s (10s-60s)
Distribution/transportation & Entertainment/Leisure (n=10)	84% (80% -100%)	48s (10s-180s)
Other (n=17)	80% (20% -100%)	42s (5s-180s)
All (n=67) Numbers in parenthesis are min. and max. values	84% (20% -100%)	36s (5s-180s)

The core employees in the survey handle about 80 calls per day (n=87) with an average duration of approximately 3 minutes (n=65). The number of calls varies between 10 and 500, with a median of 65; and the duration varies between 5 seconds to 8 minutes. The analysis in relation to sectors shows that the average duration is longest in the IT and telecom sector. This sector has the largest proportion of problem-solving related calls. The distribution/transportation and entertainment/leisure category of centres handles the largest number of calls per employee per day.

Table 15: Average number of daily calls and duration related to sector

	Av. No. Call	Av. duration
Finance	69	3 m, 07 s
Manufacturing, Food, Retail and Utilities	58	2 m, 18 s
IT and telecommunication	79	3 m, 39 s
Distribution/transportation & Entertainment/Leisure	92	2 m, 35 s
Other	99	2 m, 50 s
Total (average)	81	2 m, 54 s
Total (median)	65	3 m, 00s

On average, 6% of calls are lost because customers abandon the line (n=82, variation between 0% and 40%). Table 16 shows that there are large differences between sectors along this dimension, with the distribution category losing the most calls and manufacturing losing the least. It is worth noting that IT and telecom seems to live up to its strict goals.

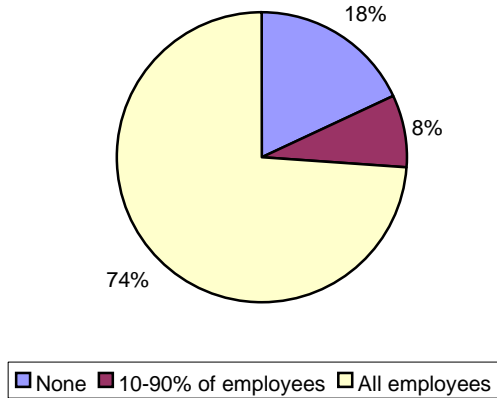
Table 16: Share of lost calls related to sector

Finance (n=17)	5,4%
Manufacturing, Food, Retail and Utilities (n=15)	3,7%
IT and telecommunication (n=12)	4,0%
Distribution/transportation & Entertainment/Leisure (n=15)	12,7%
Other (n=23)	5,9%
Total (n=82)	6,3%

Performance evaluation and feedback to employees

Most of the call centres in this survey regularly evaluate the performance of the employees by some sort of formal performance appraisal system. Figure 19 indicates that 92% of call centres regularly evaluate employees. Only 8% never evaluate any of their employees.

Figure 19: Share of core employees whose performance is regularly evaluated



The larger the call centre is, the more frequent and systematic is the performance evaluation system. The finance sector uses evaluations the most (80%), whereas the distribution category shows the lowest frequency (63%). There are no significant differences in the frequency of evaluations between in-house and independent centres, but outbound call centres evaluate employees more frequently than do inbound call centres.

About half of the call centres has a formal system to collect feedback from customers on the services of the call centre. The larger the call centre is, the more often such systems are used. There is a marked difference between the centres on this issue: 34% never or rarely collect this information, whereas 20% do it every month or more frequently.

Figure 20: Frequency of customer satisfaction feedback to employees

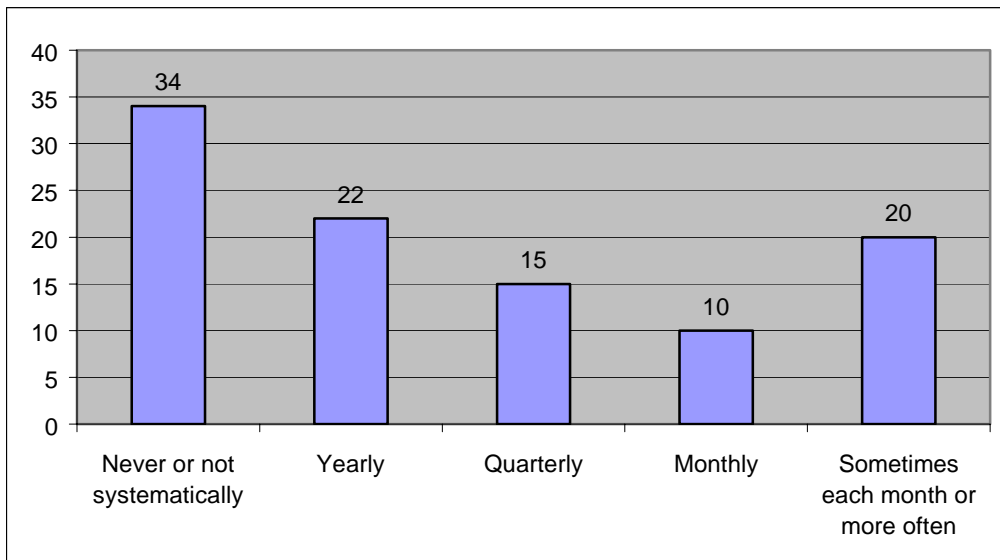
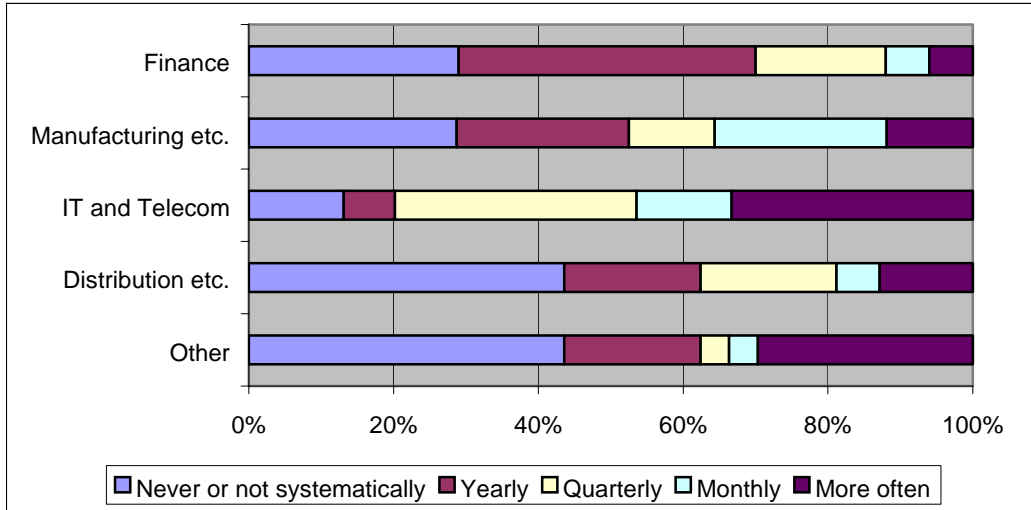


Figure 21 indicates that feedback on customer satisfaction is most frequently given to employees in the IT and telecom sector, and least frequently in the finance sector. Most of the managers say that their customers are either satisfied or very satisfied with the service of the call centre (88%, n=92).

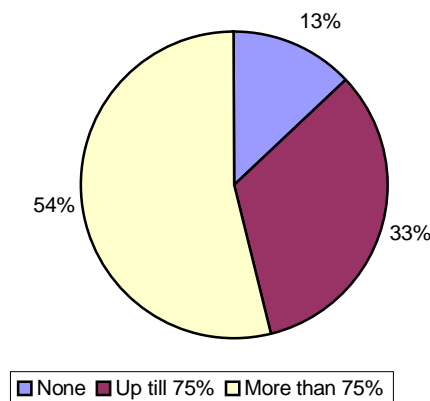
Figure 21: Customer satisfaction feedback to employees in relation to segment



The survey included questions about how core employees are measured and how this information about employee performance is used. A manager in the finance sector illustrated the importance of this: “The interesting question is not what we can measure. Assume that we are able to measure everything! The interesting question is how the data are used.”

On average, the call centres in the survey answered that 70% of the activities of the employees are measured regularly. Figure 22 illustrates that only 13% of call centre managers answered that they do not measure the activities of their employees. By contrast, 54 percent measure up to 75% of employees activities, and one-third measure over 75% of workers’ activities.

Figure 22: Share of core employees work activity measurement (n=91)



Our analysis also shows that the larger the call centre is, the larger becomes the share of activities measured. There are no differences in relation to sector or type of call centre. However, there are significant differences in how the information is used in relation to

employees. Table 17 shows that in about 20% of the centres, employees receive daily statistical feedback on their performance. But in just as many centres, the employees only receive statistical feedback on a quarterly basis or less. The analysis shows that large centres have a tendency to give core employees statistical feedback more frequently than small ones.

Table 17: Statistical feedback to core employees about performance (n=94)

Quarterly or less	19%
Monthly or more	32%
Weekly or more	27%
Daily	22%

There are also large differences between call centres as regards the use of call monitoring and coaching of experienced core employees. As shown in Table 18, in 30% of the call centres, managers or supervisors frequently listen in on conversations between experienced core employees and customers. In 25% of the call centres, by contrast, this monitoring is rarely or never done. The analysis shows that call monitoring is practiced more often in independent call centres than in in-house centres. It is much more frequently practiced in outbound (86%) than in inbound (44%) centres.

Table 18: Call monitoring of experienced core employees (n=89)

Never or once a year	26%
Quarterly or less	24%
Monthly	20%
Several times a month or daily	30%

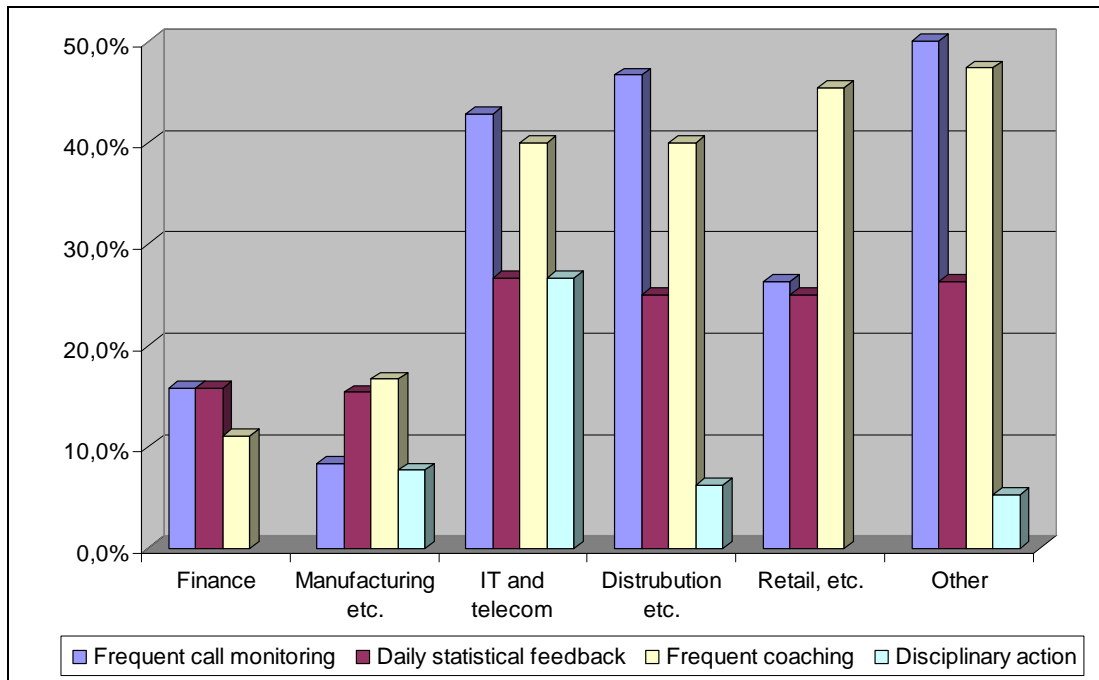
Call centres also vary with respect to the frequency of feedback and coaching to experienced core employees. Table 19 illustrates that in 18% of the centres, feedback and coaching are rarely given, whereas in every third centre, they are frequently provided. There are large differences between the different types of centres. Feedback and coaching are more frequently used in outbound than in inbound centres.

Table 19: Feedback and coaching for experienced core employees by supervisors/managers (n=90)

Never or once a year	18%
Quarterly or less	24%
Monthly	24%
Several times a month or daily	33%

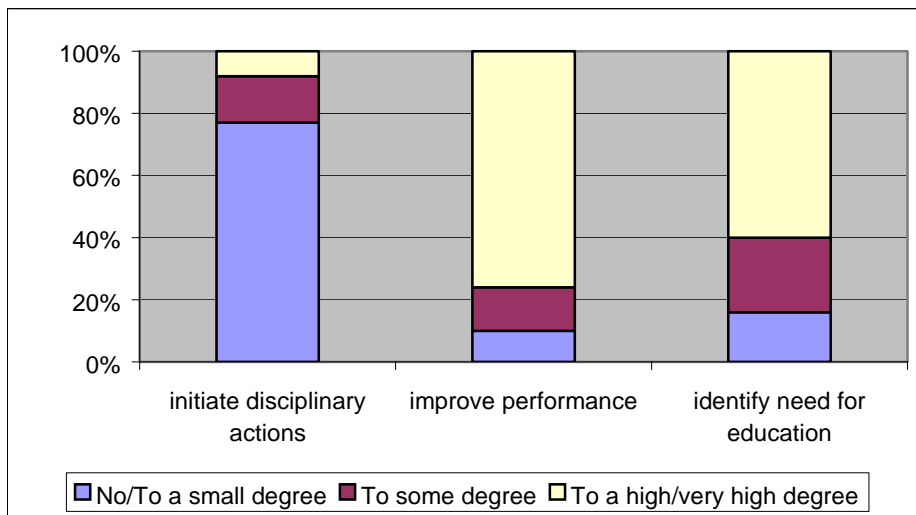
In addition, there is a clear correlation between the use of monitoring and feedback: the more call monitoring is used, the more feedback is given. Figure 23 shows that frequent call monitoring is most common in three sectors: IT and telecom, distribution, and other.

Figure 23: Use of measurement data and call monitoring (n=89+)



In this analysis, the call centres paying the lowest wages have been analyzed as a separate sector (retail etc.). It can be seen that this sector also uses call monitoring, but not as frequently as the most intensive sectors. The IT and telecom, distribution etc. and retail etc. sector (and other) give employees frequent feedback based on statistical data. Frequent coaching is used more often in the same four sectors - more than twice as often as in the finance and manufacturing sectors. In sum, the survey data indicate that monitoring is probably used in conjunction with coaching activities.

Figure 24: Use of measurement data (n=89+)



According to Figure 24, statistical data and call monitoring are primarily used to improve performance and to identify educational needs among Danish call centres. Only the IT and telecom sector uses the data for disciplinary action. The analysis shows that large centres use the information more frequently than do small ones. Otherwise, there are no differences between by type of call centre (in-house/independent, in-/outbound, with/without collective agreements).

It is difficult to draw any conclusions based on these findings, but it is striking that the IT and telecom sector, which is the sector most focused on measuring and disciplinary action, has the highest quit rate and the largest number of sick days. An even more interesting observation is the fact that it is exactly the opposite of what is seen in the US (Batt et al., 2005).

References

Batt, Rosemary, Virginia Doellgast and Hyunji Kwon. 2005. *The U.S. Call Center Industry 2004: National Benchmarking Report – Strategy, HR Practices, & Performance*. Ithaca, NY: Cornell University.

Computerworld. 2004.30. Danske callcentre vokser voldsomt. *Computerworld*. April 30th 2004.

European Industrial Relations Review (EIRR). 2000a. Call centres in Europe: part one. *European Industrial Relations Review*. 320/September: 13-20.

European Industrial Relations Review (EIRR). 2000b. Call centres in Europe: part two. *European Industrial Relations Review*. 321/October: 13-19.

El-Salanti, Nadia, Inger-Marie Wiegman and Ole H. Sørensen. 2004. *Call Centre i Danmark 2004 – Ledelse, samarbejde og teknologi*. Copenhagen. CASA.

Holman, David, Stephen Wood, and Chris Stride. *Human Resource Management in UK Call Centres*. Institute for work and Psychology, University of Sheffield, and Call Centre Association of the UK.

Paul, Jane and Ursula Huws. 2002. *How can we help? – Good practice in call centre employment*. European Trade Union Confederation.

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