Is there anybody out there? An International comparison of access to call center services for the hearing impaired.

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ABSTRACT

The call centre industry is a relatively new phenomenon and as organisations are increasingly providing customer service and managing relationships with customers via call centres many issues of access to services and service quality are raised.

The Australian Disability Discrimination Act (DDA, 1992) is now a relatively mature piece of legislation and therefore expected to be further embedded in the procedures, practices and policies of companies than the younger UK DDA 1995.

This paper firstly summarises the requirements of both Acts and then investigates the results of both UK and Australian studies on the provision of services for the hearing impaired in call centres. From this it is aimed to identify international best practice.
1.0 Introduction

1.1 Access to Services

The importance of access as a component of service quality improvement has been recognised in many areas, with increasing access at times and in locations which are convenient to the customer. Examples of this are in the retail industry where many retail outlets have increased the number of hours they are open, and they now open on what were, traditionally, public holidays. These developments have improved accessibility to retail services, by making them available when there are likely to be the maximum number of customers. In other cases, there have been enabling technologies which have served to improve access in a way that is convenient to customers. For example, the development of autotellers and telephone banking have opened many banking services 24 hours, 7 days, providing convenient services with improved access achieved by extending the time period access is available. The ServQUAL (Zeithaml, Parasuraman & Berry, 1990) model of service quality recognises access as one of service quality and, as such, amenable to improvement. The development of call centres has enabled companies to revisit the ways in which they manage their relationships with their customer base.

The proliferation of call centres has the potential to exclude some potential customers such as the hearing impaired (Staples, Dalrymple, Fathers & Brett, 2000). This is not only poor business strategy, it is in contravention of the companies’ statutory responsibilities. There is technology available that is compatible with call centres which would enable deaf/hearing impaired people to access services. Enabling technology in the form Teletypewriters (TTY) has been in existence for about 40 years allowing deaf/hearing impaired people to communicate via telephone. The relatively modest cost of this technology, particularly relative to the total costs required to initiate a call centre service, makes companies vulnerable to legal redress by disadvantaged customers and prosecution by enforcement agencies.

1.2 Australian Legislative Framework

In Australia, the Disability Discrimination Act (DDA, 1992) is “An Act relating to discrimination on the grounds of disability” The DDA made discrimination in the provision of goods or services on the grounds of disability illegal (DDA, 1992).
“It is unlawful to provide goods or services, or makes facilities available, to discriminate against another person of the ground of the other person’s disability or a disability of any of that other person’s associates” (DDA, 1995).

In the a manner in which those goods or services are made available to the other person (DDA, 1995).

This section does not render it unlawful to discriminate against a person on the grounds of the person’s disability if the provision of the goods or services, or making facilities available, would impose unjustifiable hardship on the person who provides the goods or services or makes the facilities available (DDA, 1995).

The Act provides for there to be a Disability Discrimination Commissioner. The Human Rights and Equal Opportunities Commission (HREOC) is the body which is empowered to investigate and determine cases. In the case of Australia, discrimination on the grounds of disability is treated in the same way as discrimination in the grounds of gender or race.” (Dalrymple & Phipps, 1998).

1.3 UK Legislative Framework

The UK legislation is less mature, and represents a stand alone system of regulation (Dalrymple & Phipps, 1998). Since 2 December 1996, Part III of the Disability Discrimination Act 1995 ("the Act") has placed duties on those providing goods, facilities and services ("service providers") not to discriminate against disabled people. The duties are: not to refuse service; not to provide a worse standard of service; and not to offer service on worse terms. At the time the UK data was collected the scope of the legislation was less far reaching. It was, in fact, a very weak piece of legislation with many exceptions. The incoming government introduced significant strengthening. That Government's manifesto commitment:

"We will seek to end unjustifiable discrimination wherever it exists. For example, we support comprehensive, enforceable civil rights for disabled people against discrimination in society or at work, developed in partnership with all interested parties."

It perceived that implementing the remaining duties in the Act was a significant step towards that commitment setting up a Ministerial Task Force which reported in December 1999. They also established a Disability Rights Commission under the Disability Rights Commission Act (1999) seeking to ensure a strategy for aiming to achieve comprehensive and enforceable civil rights. The Disability Rights Commission
replaced the National Disability Council. On 9 June 1998 the Government further announced the timetable for implementing the remaining duties in Part III of the Act relating to access to services. These duties require service providers to make reasonable adjustments to the way in which goods, facilities and services are provided in order to make them more accessible to disabled people:

“a. **practices, policies and procedures** - service providers will be required to take reasonable steps to amend practices, policies and procedures which make it impossible or unreasonably difficult for disabled people to access the service - for example, amending a "no dogs" policy in cases where visually impaired people wish to enter premises with the help of a guide dog;

b. **auxiliary aids** - service providers will be required to take reasonable steps to provide auxiliary aids and services where this would enable or facilitate disabled people’s use of a service - for example, lifting items off shelves in shops for those unable to manage alone; and

c. **physical features** - where a physical feature of the premises makes it impossible or unreasonably difficult for disabled people to use a service, service providers must take reasonable steps to amend or remove the feature, or provide a reasonable means of avoiding it, or provide the service by a reasonable alternative means.

These will be implemented in two stages:

from October 1999 all the duties relating to practices, policies and procedures, auxiliary aids and services, and providing the service by a reasonable alternative means

from 2004 removing, altering, or avoiding physical features that prevent access to the service”

These new duties related to businesses and to other providers of services to the public where physical features make access to their services impossible or unreasonably difficult for disabled people. They were viewed as an important step towards ensuring that disabled people have similar access to services that other people take for granted.
Thus, the amendments to the 1995 Act, the regulations and additional legislation have all served to strengthen the position of disabled consumers of goods and services, bringing the legislation further into line with international good practice. These changes have all been introduced since the UK data collection.

Prior to the enactment of the initial legislation, operations managers were forewarned about the changes to operations and service provision requirements to enable them to adjust goods, services, buildings, plant and equipment, where necessary to comply with the new law and thereby eliminate discrimination (Dalrymple & Phipps, 1998).

Staff training was also to be undertaken to ensure that staff were appropriately informed of the changes. In particular, for call centre operators it was an opportunity to provide training for staff and upgrading of facilities to make appropriate provision for their customers whose disability involved hearing impairment (Dalrymple & Phipps, 1998).

1.4 International Comparison

The UK DDA now has a Disability Commissioner with powers and responsibilities, including to advise on issues, but until Disability Rights Commission Act (1999) it relied upon individuals who had been discriminated against to bring forward cases. The onus has been on the individuals to both bring the case forward and proof. The Australian legislation establishes an organisation (HREOC) which is proactive and seeks out discrimination and attempts to remedy discriminatory practices. The UK legislation at the time the data was collected was less robust and provided only for an advisory body.

Both Acts make discrimination in the provision of goods and services illegal. Companies operating call centres which do not make appropriate provision for deaf and hearing impaired customers are, therefore, failing to fulfil their statutory duty. It was hypothesised that this would be evident in the results of examining fundamental discrimination issues such as access and equity. This research seeks to establish the level of compliance of a sample of UK and Australian call centres with their respective statutes.

1.5 The Development of the Call Centre Industry

It is widely held in the service sector, where customer relationships are often ongoing, that it costs significantly more to attract new customers than it does to retain existing customers. With this in mind CRM is being viewed as a more important activity for companies as a means of retaining existing customers and ensuring that they are satisfied. Call centres provide valuable information and feedback to companies on the performance
of their goods and services. The call centre industry is one of the most rapidly growing industries in the developed world today (Dalrymple & Phipps, 1998). The growth of the industry demonstrates the commitment of companies to their relationships with customers. It also reflects the desire of companies to improve access to their services, in a cost-effective manner, and retain satisfied customers (Bird, 1998).

Before September 1996, the Australian Call Centre industry was small and dominated by a selected few industries - telecommunications, credit cards, airlines and car hire taxi companies. Australia then had some 800 call centres in total containing possibly 10,000 employees. Since 1996 the number of call centres has grown from 800 to 5,600 sites and employment has grown from 10,000 to 100,000 (Kjellerup, 1999).

Finding statistics about call centres can be very challenging, and even more difficult to make sense of them. In the US, the publishing of call centre statistics has become a growth industry in itself but the lack of rigorous academic analysis of the findings result largely in unsubstantiated claims (Dawson, 2000).

Clearly while there are potentially many estimates as to the size of the industry, most experts would agree that it is a substantial and growing sector (Staples & Dalrymple, 2000)

1.6 The Frequency of Occurrence of Hearing Impairment

In 1993, 18.1 per cent (3,176,700) of the Australian population had one or more disabilities. Of these 999,800 persons, 31.5% reported a hearing impairment. The incidence of hearing impairment increases with age (ABS, 1993). However the proportion of people with a disability who have a hearing impairment only, remains relatively constant across age groups, showing that the rate of increase with age is similar to that for all disabilities. Add to the hearing impaired and deaf people those with speech disability and those who cannot use conventional speech telephones and this constitutes a significant market. Australia, in common with many developed countries, has an increasing ageing population. In 1993 there were 2,763,000 person aged 60 or more and, of those 21.1 per cent (581,900) had a hearing impairment. (ABS, 1993)

According to the Royal National Institute for the Deaf (RNID) there are around 8.7M deaf or hearing impaired adults in the UK today, of which approximately 420,000 have insufficient hearing to use a voice telephone at all (reference RNID UK). This amounts to around 14% of the population (Phipps, 1998). These figures have remained fairly constant for the last 15 years. Most hearing impairments develop with increasing age,
around 54% of adults over 60 are hard of hearing or deaf, (RNID), and it is estimated that this rises to 70% in people over the age of 70 (Freeland, 1989; Phipps, 1997). It is likely that each generation of elderly people will be more technologically literate than the one before, and thus will be more willing to use technology to aid them in communications. (Phipps, 1997)

Companies that provide goods and services through call centres may miss important market segments and opportunities if they fail to service this market. Thus, we have a growing problem with disability resulting from hearing impairment, and hence the size of the market represented by the hearing impaired, and there is legislation which outlaws discrimination against these disabled people. This research targets the reality in the context of the call centre environment.

“The assumption is that as each more technologically aware generation gets older there will be more people who will make use of technology such as TTY’s”

2.0 Methodology

2.1 Customer Service

Call centres were contacted by the researchers on behalf of a deaf person to find out about how that person could access the services of the call centre. Each call centre was then asked:

- if they had a Teletypewriter (TTY) line,
- the TTY number and the hours the service was available
- If the company did not have a TTY line they were asked if they would accept a call from the Australian Communication Exchange-National Relay Service (ACE-NRS) or Typetalk (UK).

This relay service acts as an intermediary in relaying messages in each direction between a person operating a Teletypewriter (TTY) and a standard speech telephone operator. Calls were timed and operators were given a rating according to a method devised by Phipps(see below). This method rates operator knowledge of how hearing impaired customers can access services.

Figure A: Operator Ratings - Phipps Method

Rating 1 - the operator had the information and could answer the questions immediately
Rating 2 - the operator thought there was a TTY service but had to find details
Rating 3 - the operator did not know if there was a TTY service available and needed to find details

Rating 4 - the operator did not know what a TTY was, and this had to be explained by the interviewer before the question could be answered

3.0 Results

Results were obtained from call centres of 52 Australian companies and 38 UK companies.

Is there a textphone/teletypewriter (TTY) service available?

12 of the 52 (23%) Australian companies sampled reported having their own teletypewriter service with 40(77%) not. The initial response from 7 of the 38 (18%) UK companies was that their service was not applicable and they could see no reason for the textphone user needing to contact them. 3 of the 7 did not answer any questions from the customer service section of the questionnaire, whilst 3 did answer whether they had a textphone line available, all saying no, and 1 answering the query on accepting calls from Typetalk, again saying no. 4 UK companies did not reply to this question on whether they had a textphone service. A textphone number was requested to show the existence of the service from the remaining 34 companies. 13 of the 34 companies (38%) reported that they have their own textphone service.

![Figure B: Percentage of Companies with their own textphone service](image)

Two of the Australian companies that reported a TTY service could not provide the number. An operator at RACV stated that “you will need to be able to tell me what the call is regarding before I can give you an appropriate TTY number”. An operator from Bank West stated that “we do have a TTY, the number is in the Whitepages telephone...
directory, which I am just reaching for, you can never find these things when you are looking for them”. Two of the UK companies that had no textphone number available, (Barclays Stockbrokers Ltd and Racal-BRT Ltd) stated that they have a line available for a textphone, but have yet to get a terminal attached (Phipps, 1998).

**Calls from a relay service**

Of the 40 Australian companies that did not have their own TTY service 9 (22.5%) reported that they would not accept calls from ACE-NRS, while the remaining 31 (77.5%) reported that they would. There were 6 UK companies (16%) and 9 Australian companies where the operators stated they offered no service at all to teletypewriter/textphone users. Although 1 UK company suggested that they did have a fax machine, and 4 Australian companies suggested they could be contacted via email while 1 other Australian company suggested that a $100 piece of equipment could be purchased as an alternate method to access the service.

**Figure C: Call Duration Vs Percentage of Occurrence**

**Figure D: Operator Ratings Vs Frequency of Occurrence**

<table>
<thead>
<tr>
<th>Operator Ratings</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>1</td>
<td>16</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Australian</td>
<td>8</td>
<td>8</td>
<td>15</td>
<td>21</td>
</tr>
</tbody>
</table>

Of the 8 Australian operators that thought their was a teletypewriter 5 were able to provide the number and 3 found they were mistaken of that no detail about such a service were available to them. Of the 16 UK operators that thought their was a textphone service 6 were able to provide the number, 4 found that the service had been discussed
but was not available yet and a further 6 of them found they were mistaken of that no
details about such a service were available to them. Of UK operators ranked 3 and 4, 2
provided textphone number. No Australian operators ranked 3 and 4 were able to provide
a tty number.

![Figure E: Operator Rating Vs Percentage of Occurrence](image)

**Figure F: Mean Time and Standard Deviation**

<table>
<thead>
<tr>
<th>Country</th>
<th>Mean Time (minutes)</th>
<th>Standard Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>3.46</td>
<td>2.06</td>
</tr>
<tr>
<td>UK</td>
<td>4.1</td>
<td>1.63</td>
</tr>
</tbody>
</table>

![Figure G: Mean Call Duration for Operator Rating Analysis](image)

4.0 Analysis
From the Figure B it can be seen that the percentage of UK companies offering their own TTY service is 15% higher than the Australian. The slightly larger Australian sample (52 as compared to 38 UK call centres) may explain some of the difference. This result is unexpected given the differing legislative frameworks in place at the time the data was collected. The UK DDA 1995 had not long been in effect when the UK component of the call centre study was undertaken and the additional publicity it received may help explain the higher level of compliance. On the other hand the Australian results are disappointing with only 12 of 52 (23%) companies offering their own TTY service. Of the 12 Australian companies that offer TTY services only 10 were able to supply the TTY number. Begs the question how useful is a service without a number. An operator from Bank West commented ‘you can never find these things when you are looking for them’, while two UK companies responded that they had a line set up for TTY calls but had yet to put get a TTY terminal. This provides some insight into the difficulty a hearing impaired customer may incur when trying to access similar services.

Some of the poor results may be partly due to the youth of both the industry and the Act in the UK at the time of, but the trend suggests that companies are a big step behind when addressing the provision of goods and services for the disabled.

While the average call time for the UK was approximately 30 seconds longer (see Figure F) than Australia, the length of the call does not vary as much as Australia. The time taken for an average call does not differ largely between the regions it should be highlighted that a call of roughly 4 minutes is quite a long call when enquiring about what should be very standard information for call centre operators. For the Australia operators roughly 65% of calls took longer than two minutes whereas 90% of the UK did. These results suggest that operator training is a real issue in call centres. This argument is further strengthened when you examine the operator ratings in Figure E.

A number of trends are evident. Roughly 40% of Australian operators and 25% of UK operators gained a rating 4 meaning they did not know what a TTY was and had to have it explained. In real terms this means that roughly 2 of every 5 Australian and 1 of 4 UK operators sampled is likely to have no idea what a TTY is.

An even larger portion of operators (85% Australia, 97% UK), which incorporates rating 2,3,4 are either unaware of what TTY and relay services are or could not give an immediate answer about whether their company offers these services. On the other hand 15% of Australian and 3% of UK operators gained a rating 1 and knew immediately of the services provided by their company.
Operators who did not know about these issues detained the caller for roughly 2-3 minutes longer than those who did (see Figure G). A difference of 2-3 minutes between ratings 1 and 4 also suggests a need for operator training to raise awareness. In the call centre industry where inbound calls are received by the hundreds and thousands, a difference of 2-3 minutes per call would have an enormous impact on employee performance and hence the financial performance of the company.

The results suggest also strongly suggest that for many call centres there is no strategy in place for providing access to services for hearing impaired potential customers.

Call centres operators are the gate-keepers of information in a company, specifically knowledge about how to access the companies goods and services. Unless they are trained to be able to provide accurate information about how hearing impaired customers can access their services a company is not fulfilling its statutory responsibilities.

5.0 Conclusions

Although the Australian Disability Discrimination Act 1992 is now nearly 8 years old and should be embedded in the procedures of companies, evidence from the call centre industry suggests this is not the case. While the UK DDA is a much younger Act and was initially less robust in its scope and power the Australian Act does not appear to be significantly further embedded in the procedures of call centres. Perhaps the step by step process of implementation approach of the UK DDA 1995 and some of the political fighting that has been done to strengthen the Act has helped facilitate its uptake in UK companies and allow it to become more well known in call centres.

The Australian legislation is now relatively mature and therefore it could reasonably be expected that the legislation would be embedded in the policies of companies and the ways in which they operate (Staples & Dalrymple, 2000).

Future studies will investigate some USA data, employment issues in call centres and determine the accuracy of the information obtained from operators about services.

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7.0 References


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