

## 2005 Speech Recognition Customer Satisfaction Survey

### Introduction

Nuance Communications commissioned independent research firm, ACA Research to assess customer satisfaction and overall end user experience with speech recognition technology.

### Objectives

The goals of this research were to:

- Determine current attitudes towards speech recognition applications as customer service channel versus IVR, the Internet and live attendants;
- Measure the customer satisfaction of speech recognition users;
- Identify the benefits of speech services to end users;
- Identify areas of concern for end users; and,
- Establish perceptions of deployments utilising technology from Nuance versus other systems.

### Methodology - Overview

The qualitative telephone survey was conducted over a five-week period during April and May 2005. The survey analysed responses from 400 end users of speech recognition technology, including 300 respondents who were asked to comment on a specific speech recognition application and 100 random end users who were asked to comment on their experiences with speech recognition in general. For the purposes of this report, the group of 300 respondents commenting on a specific application is referred to as 'Nuance End Users'. The 100 random end users are referred to as the 'Control Group'.

Results are based on answers to 7-point rating scales. For analysis purposes, the scale mean is shown along with the proportion of respondents who:

- strongly indicated one direction (6 or 7 on the scale);
- strongly indicated the opposite direction (1 or 2); and
- indicated a relatively neutral or mid-point rating (3, 4 or 5).

Please see *Methodology and Analysis* for further information regarding demographics, etc.

## Key Findings

The key findings from this research include the following:

47% of all respondents are highly satisfied with speech recognition applications. The key drivers of satisfaction are 'convenience' and 'timeliness'.

- Consumers are becoming familiar with speech recognition. 63% of respondents contact companies with a speech recognition system at least once per month, including 7% who contact these companies on a daily basis.
- 80% of respondents claim their experience with a speech recognition system provided the service level they would expect from the company they were contacting.
- Speech recognition is the preferred method to conduct self-service when compared with Internet and touch-tone IVR technologies. 56% and 54% of respondents are much more satisfied using speech recognition over the Internet and touch-tone respectively (these results exclude Control Group respondents).

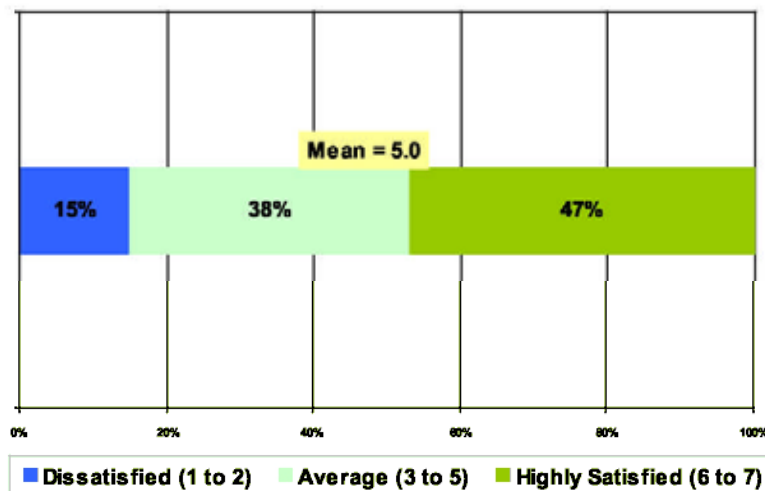
Almost 70% of end users surveyed agree that speech systems are convenient, easy to use, and that interactions with speech recognition systems are conducted quickly.

- Speaking with a 'real person' (i.e., live attendant) is the preferred method of contact for only half of the end users surveyed (this result excludes Control Group respondents).
- Over 90% of end users claim they will be equally or more comfortable using speech recognition systems in the future.

## Results

### Overall Satisfaction

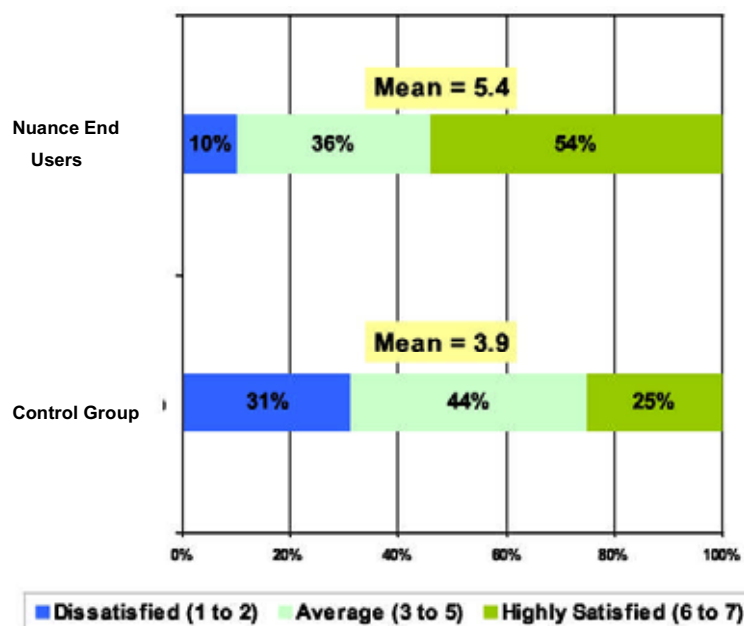
Overall, speech recognition end users indicate strong satisfaction with their experience, with 47% indicating they are *highly satisfied* with their speech recognition experience. *Figure 1* displays overall speech recognition experience satisfaction ratings. The average rating across all respondents is 5.0 on a 7-point scale, indicating that most speech recognition end users are satisfied with their experience.



**Figure 1. Overall Satisfaction with Speech Recognition Experience**

### Overall Satisfaction—Nuance End Users vs. Control Group

Survey respondents within the Nuance End User group are more inclined to be highly satisfied with the company they have contacted, showing more than twice the number of highly satisfied respondents as the Control Group.



**Figure 2. Overall Satisfaction with Speech Recognition Experience**

### Satisfaction Comparisons—Self-Service Channels

The research found speech recognition as the preferred method to conduct self-service when compared with Internet and touch-tone IVR technologies. 56% and 54% of Nuance End Users are much more satisfied using speech recognition over the Internet and touch-tone respectively. *Figure 3* compares satisfaction with speech recognition against other typical customer self-service channels.

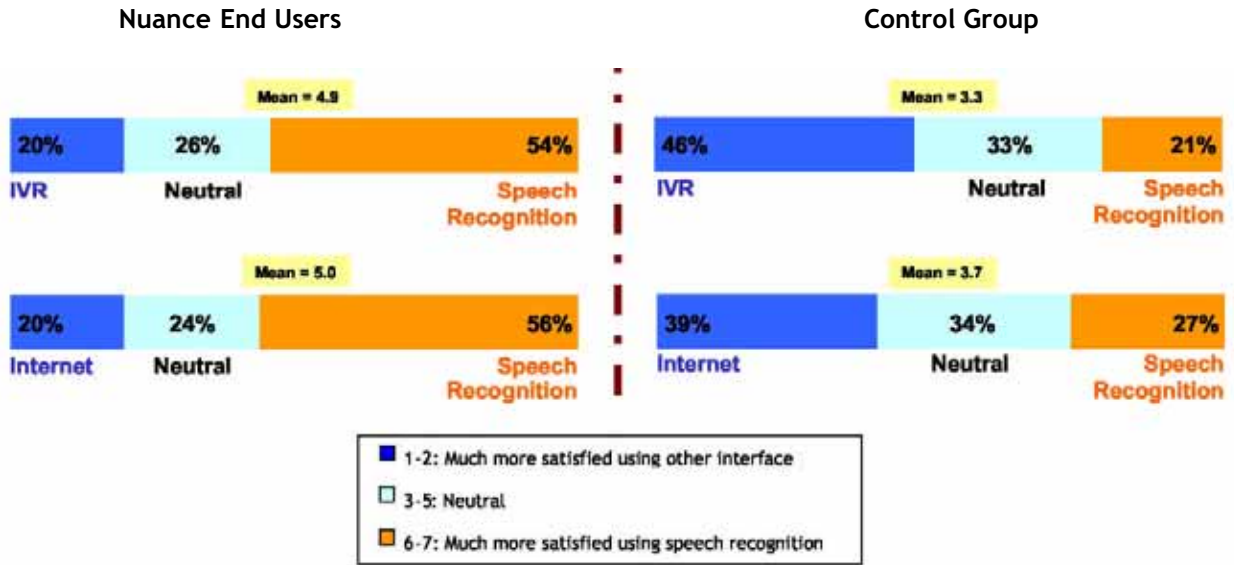


Figure 3. Would you be more satisfied using ?

### Satisfaction Comparisons—Speech Recognition vs. Live Attendant

Speaking with a live attendant is the preferred method of contact; however, preference for speech recognition tends to increase when faced with holding for two minutes before speaking to a live attendant. *Figure 4* compares satisfaction with speech recognition against dealing with a live customer service representative (live attendant).

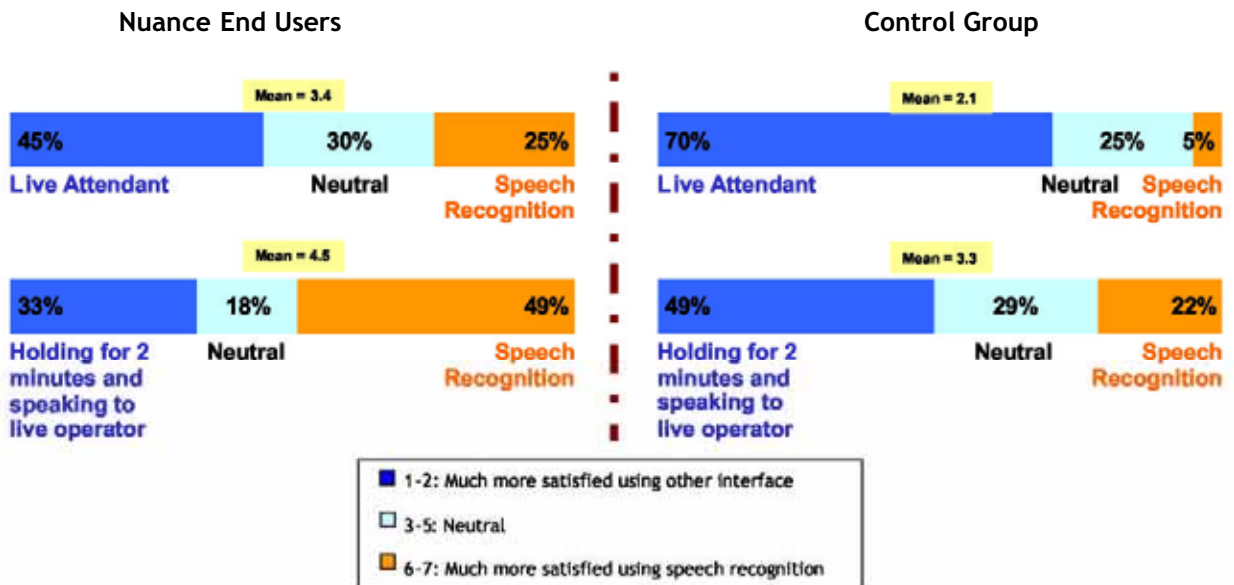


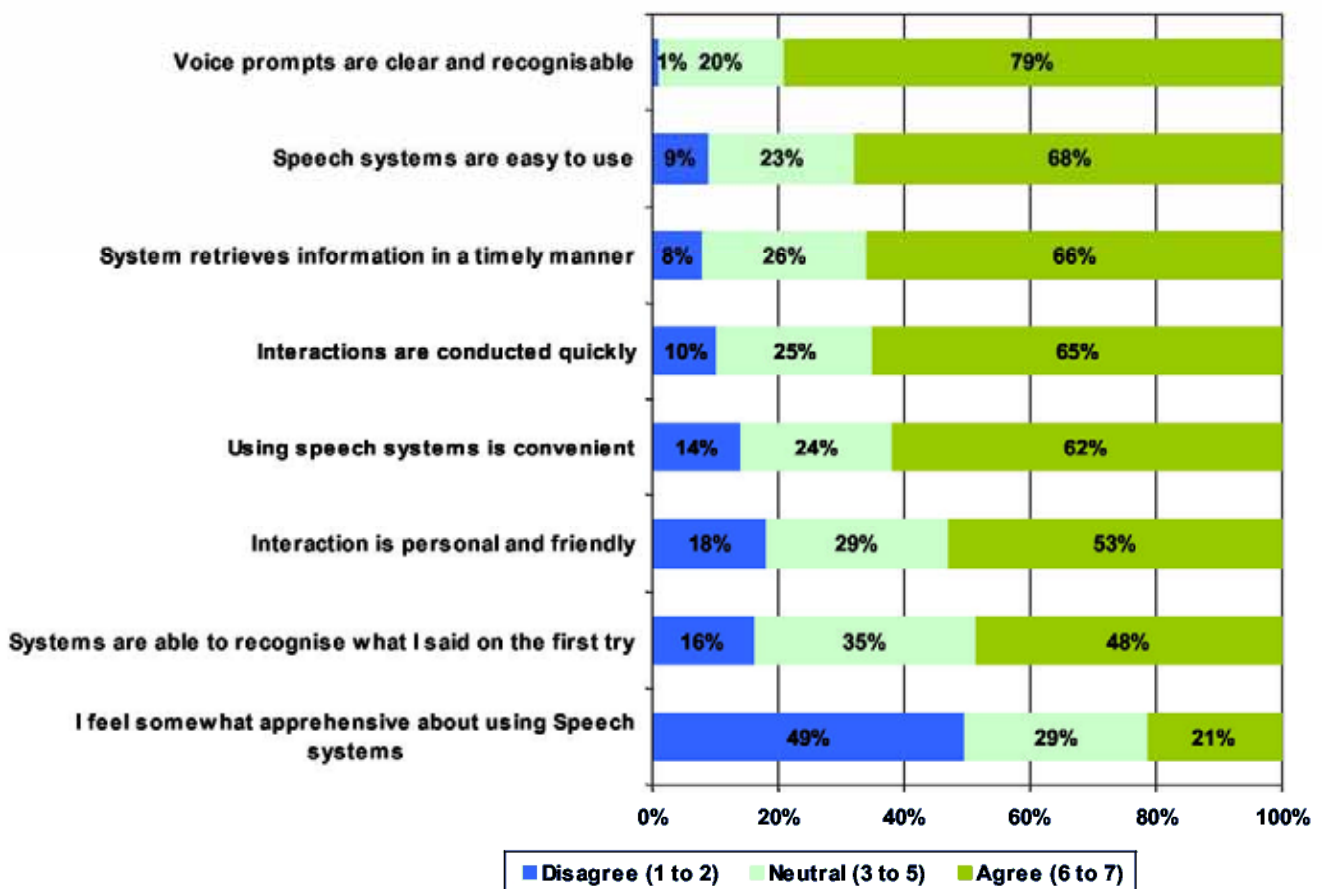
Figure 4. Would you be more satisfied using ?

**Satisfaction with Call Attributes**

Respondents rated their agreement with statements describing nine different speech recognition call attributes (i.e., interaction components). Results are displayed in Figure 5 (below).

Agreement with all positive statements is high, with mean ratings on a 7-point scale ranging from 4.9 to 6.3. The percentage who *strongly agree* with each statement ranges from 48% to 82%.

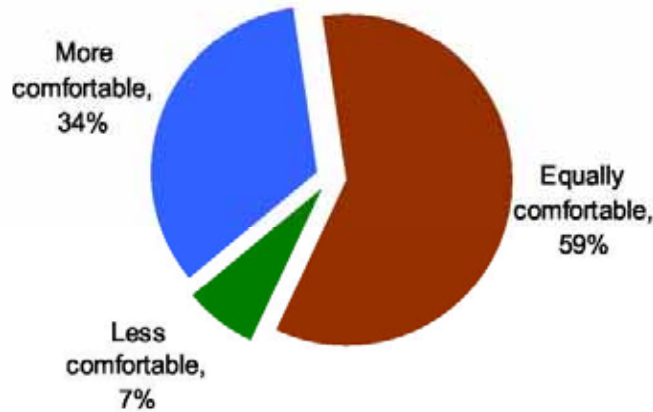
Importantly, most users do not feel apprehensive about using speech systems.



**Figure 5.** Please tell me if you agree or disagree with the following (above) statements based on your experiences using the speech recognition system?

**Future Interactions—Comfort Levels with Speech Recognition**

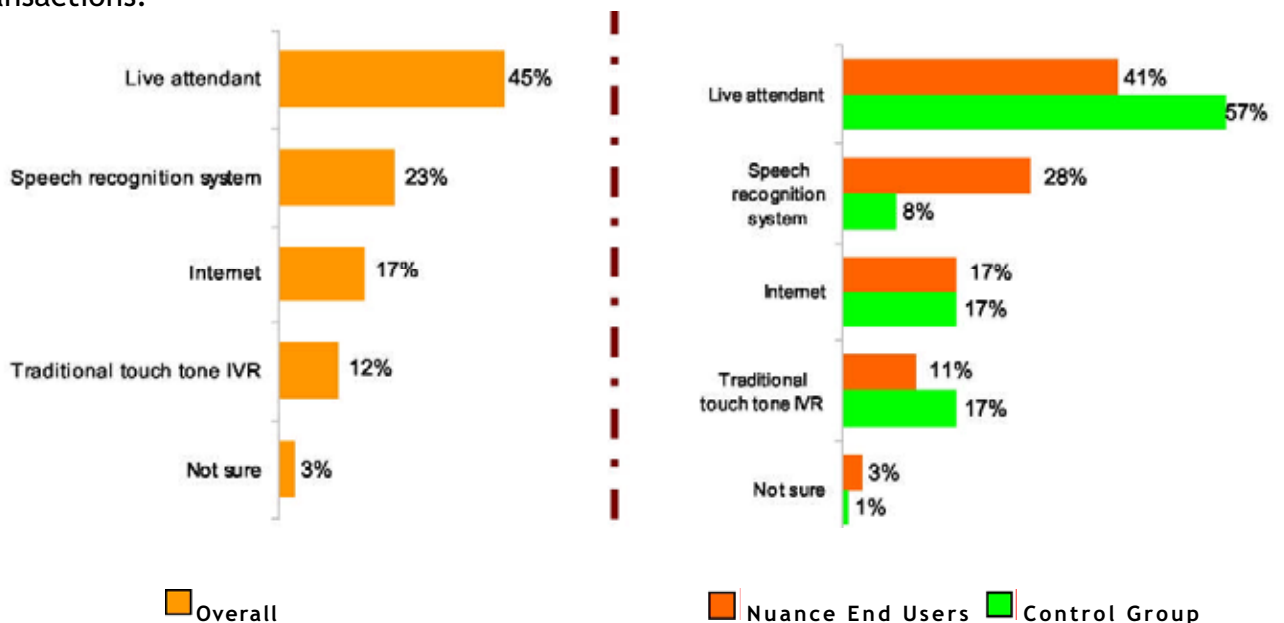
34% of end users say they'll feel *more comfortable* the next time they use a speech recognition system, as displayed in *Figure 6*. 59% say they'll feel *equally comfortable* the next time, while only 7% say they'll feel *less comfortable*.



**Figure 6.** Future comfort levels with speech recognition systems

**Future Interactions—Preferred Method of Service for Future Transactions**

*Figure 7* displays respondents' nominated preferred method of service for future transactions. It is not surprising that respondents generally prefer dealing with a live attendant. For self-service interactions however, 23% of respondents indicated that speech recognition was their most preferred method of conducting future transactions.



**Figure 7.** All things being equal, for future transactions which method would you MOST prefer to use?

### Meeting Expectations

Overall, 80% of end users claim their experience with the speech recognition system provided the service level they would expect from the company they were contacting, as displayed in *Figure 8*.



**Figure 8.** Did your experience with the speech recognition system match the level of service you would expect from the company?

### Conclusions—ACA Research

Australian consumers are becoming quite familiar with speech recognition with 63% of respondents contacting companies with a speech recognition system at least once per month, including 7% who contact them on a daily basis.

There is a high overall satisfaction with speech recognition systems—47% of all respondents stated they are *highly* satisfied with speech recognition systems. Convenience and timeliness are the factors that are driving customer satisfaction.

Generally, end users tend to agree that most aspects of speech recognition functionality perform well, especially the tone of the system's voice, the voice prompts being clear and understandable and general ease of use. Importantly, most users do not feel apprehensive about using speech systems.

Speech recognition tends to be preferred over using the Internet, traditional touch-tone IVR and holding for two minutes before speaking to a live attendant. Speaking with a live attendant, however is still the preferred method of contact.

A very positive 80% of end users claim their experience with the speech recognition system provided the service level they would expect from the company they were contacting.

The majority of end users claim they will be more or equally comfortable using speech recognition systems in the future, including 34% who would be more comfortable.

## **Interpretations—Nuance Speech Solutions**

ACA Research's findings have confirmed what many organisations that have successfully deployed speech applications in Australia and around the world have known for some time—that speech recognition is the preferred self-service channel for their callers.

It also reaffirms that callers have embraced speech technology and that caller comfort grows with each speech interaction. Other findings indicate that call attributes and effective deployment of a speech application will play a critical role in achieving success.

Whether your company already has speech services deployed in the market, or has just begun to explore the potential of speech, the message is clear: the time is right to establish an overall speech strategy for your organisation as it will deliver the key benefits of customer satisfaction, cost savings and an effective extension of corporate branding.

The successful introduction of this exciting self-service channel not only dramatically improves service levels to customers, but at the same time meets the challenge of managing growth and operational costs, regardless of the industry sector.

For further information on the **2005 Speech Recognition Customer Satisfaction Survey**, please contact [speech.survey@nuance.com](mailto:speech.survey@nuance.com).

### **About Nuance Speech Solutions**

**Nuance** is the most trusted name in speech. Through its global partner network, Nuance delivers field-proven applications that revolutionise the way people interact. Today, thousands of companies and millions of users around the world depend on speech solutions from Nuance to deliver vital business information and simplify every day life. For information, please visit [www.Nuance.com/speech](http://www.Nuance.com/speech).

### **About Nuance Communications, Inc.**

Nuance (Nasdaq: SSFT) is the leading provider of speech and imaging solutions for businesses and consumers around the world. Its technologies, applications and services make the user experience more compelling by transforming the way people interact with information and how they create, share and use documents. Every day, millions of users and thousands of businesses experience Nuance's proven applications and professional services. For more information, please visit [nuance.com](http://nuance.com).

### **About ACA Research**

ACA Research ([www.acaresearch.com.au](http://www.acaresearch.com.au)) and its wholly owned subsidiary callcentres.net ([www.callentres.net](http://www.callentres.net)) produce Technology, BPO, Call Centre and CRM client specific market research using both qualitative and quantitative research methods. The ACA Research group is the largest provider of call centre research through the Asia Pacific having produced over 50 publicly available industry reports in 12 Asia Pacific countries. The company was founded in 1993 and operates out of North Sydney and has affiliates in London, Boston and Singapore.

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