Voicemail Transcription for Autoattendants

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CTO, SpeechPhone

Voice Search 2008
Today’s Marketing Study

Are you a:

• Speech technology provider?
• Platform developer?
• Application developer?
• Service provider?
• Sightseer?
Welcome to the XYZ Corporation… Please say the first and last name of the person you are calling.

Jane Smith

Who's calling, please?

David Thomson

You have a call from David Thomson. Will you accept the call?

No.

I'm sorry there is no answer. I can take a message or try another person. After the tone, please say ‘Locate,’ ‘Try Another Person,’ ‘Take a Message,’ or ‘Operator.’

Take a Message.
Vision: One Service for Everything

What would you like to do?

- Find nearest Pizza Hut.
- Check today’s calendar.
- Weather report.
- Conference call.
- Stock price for AT&T.
- Buy movie tickets.
- Make airline reservation.
- Pay bills.
- Check my order status.
- Today’s headlines.

Mandi
The Current Mandi Solution

What would you like to do?

- Check my voicemail.
- Change my greeting.
- Change my virtual extension.
- Dial a number.
- Call Michael Metcalf.
- Check my e-mail.
- Enable call screening.
## Caller Usage – Call, Voicemail, Email

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call &lt;name&gt;, &lt;name&gt;</td>
<td>17.82%</td>
</tr>
<tr>
<td>Lookup number/email</td>
<td>0.17%</td>
</tr>
<tr>
<td>Dial a number</td>
<td>11.36%</td>
</tr>
<tr>
<td>Voicemail</td>
<td>18.22%</td>
</tr>
<tr>
<td>Email</td>
<td>1.52%</td>
</tr>
<tr>
<td>Take a message</td>
<td>0.40%</td>
</tr>
<tr>
<td>Accept/reject call</td>
<td>9.71%</td>
</tr>
<tr>
<td>Locate, another person, operator</td>
<td>0.63%</td>
</tr>
<tr>
<td>Screen, do not disturb</td>
<td>1.84%</td>
</tr>
</tbody>
</table>

**Total utterances: 3512**
<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.96%</td>
<td>Change virtual extension</td>
</tr>
<tr>
<td>0.88%</td>
<td>Change greeting/password, minutes</td>
</tr>
<tr>
<td>1.82%</td>
<td>Main menu</td>
</tr>
<tr>
<td>0.09%</td>
<td>News</td>
</tr>
<tr>
<td>0.14%</td>
<td>Mandi Live</td>
</tr>
<tr>
<td>0.03%</td>
<td>Bible By Phone</td>
</tr>
<tr>
<td>0.37%</td>
<td>Help</td>
</tr>
<tr>
<td>21.56%</td>
<td>yes</td>
</tr>
<tr>
<td>4.27%</td>
<td>no</td>
</tr>
<tr>
<td>4.78%</td>
<td>Good-bye</td>
</tr>
</tbody>
</table>
Voicemail Transcription

Providers

• Simulscribe “cutting edge voice recognition”
• Spinvox
• Jott
• Phonewire “People Powered”
• DictoMail
• Callwave – BlackBerry / summary

Carriers

• Cincinnati Bell
• Verizon
• Alltel
• Vonage
Hi, David. Don’t forget tomorrow’s meeting about …

1️⃣ A caller leaves you a voice message.

2️⃣ SpeechPhone transcribes the voicemail into text.

3️⃣ You receive the text message in your email inbox.
Hi, David. Don’t forget tomorrow’s meeting about …
Trial Setup

• Invited 45 participants
  - Mandi subscribers
  - Actually use the service
  - Customers for at least a few months
  - Pay their bills
• Contacted via email and voicemail
• 19 signed up (3 unsolicited)
• All filled out entrance survey
Thank you for signing up for our latest experimental service - a feature that transcribes your voicemail into text and emails you the result. Your subscription is free for the duration of the study.

★ Please enter your Mandi number, including area code:

★ Enter the email address where you want your transcribed voicemail sent:

★ What do you primarily use Mandi for?
  ○ business ○ personal ○ both

★ How many hours per day do you spend on the phone?

★ What percentage of your calls end up going to voicemail?

★ Do you get voicemail at another location besides Mandi (cell phone, home answering machine, etc.)?
  ○ yes ○ no

★ How do you usually listen to voicemail?
  ○ by phone ○ on a computer ○ both

★ How often do you check voicemail?
  ○ at least hourly
  ○ 2-3 times per day
  ○ daily
  ○ 2-3 times per week
  ○ once per week or less

★ How often do you check e-mail?
  ○ at least hourly
  ○ 2-3 times per day
  ○ daily
  ○ 2-3 times per week
  ○ once per week or less
You will be testing a service where your Mandi voicemail is transcribed and sent to you as text email. It works like this:

1. A caller leaves you a voice message.
2. SpeechPhone transcribes the voicemail into text.
3. You receive the text message in your email inbox.

Have you heard of a service like this before?
- yes  no

If SpeechPhone were to offer this feature, how valuable do you think this would be for you?
- very valuable
- valuable
- somewhat valuable
- slightly valuable
- not at all valuable

If SpeechPhone offered this service for 25 cents per voicemail message, would you be likely to subscribe?
- yes  no

Other comments (if any):

* Indicates Response Required
Signup Survey Results

Average time on phone: 4.5 hours/day.

Average percentage of calls going to voicemail: 36%
  (Range: 5%-100%)

8/19 said they would likely pay $0.25/message.

Correlated with: “valuable.”

Correlated with: Use for business & personal

Uncorrelated with % calls to voicemail.
Dial-in Voicemail Activity

Trial Begins

[Graph showing the percentage distribution of voicemail commands over 14 days, with a notable increase at the trial begins point.]
Interim Feedback

• No willingness to pay for majority
• Great willingness to pay for minority
• No accuracy complaints
• Some issues with unrecognizable speech, Spanish
• Very impressed
• 1500 user sample: 1.8 voicemail messages per day.
  (contradicts perceived voicemail use)
• Traffic appears unaffected by transcription
Voicemail Duration Study

All 35868 messages - 26.3 seconds average

Number of calls

Call duration (seconds)