



## The Irish Message Banking Toolkit



### The Voice Banking Process

Voice banking is the process of creating a personal computerised voice that is representative of your own voice. If you create a customised 'text-to-speech' computerised voice, anything you type on an electronic communication device can be spoken out using this computerised version of your voice rather than the device's built-in one. The quality can vary between people. For the best result, you need to do *voice banking* when your speech quality is very clear.

A computerised voice created using *voice banking* will never sound exactly like your own speech because it is electronic. It will sound:

- More robotic than natural speech and with less intonation.
- 'Choppier' than the built-in voice on an electronic communication device.

Voice banking computerised voices are compatible with some, but not all, electronic communication devices. Before starting the process it is a good idea to discuss your specific needs with your speech & language therapist (SLT) and/or assistive technology (AT) service.

#### How is *voice banking* done?

Voice banking is done using a commercial service, which involves payment.

- All *voice banking* services require many recordings of your speech.
- Most *voice banking* services prompt you to read set lines of text so that the software can capture you saying all the speech sounds in different places in a word and in different combinations with other speech sounds.

#### How do I know if *voice banking* is right for me?

Considerations for *voice banking*:

- **Speech Quality:** Your speech needs to be consistently very clear and strong.
  - If your speech has changed a little bit but is mostly clear, record at times of the day when it is at its clearest.
  - If your speech is consistently very slurred, hard to understand, very quiet or becomes unclear by the end of a sentence, voice banking is unlikely to be successful as the computer software will not recognise all of your speech sounds distinctly enough.
  - If your speech has already changed significantly, you could nominate a relative or friend with a similar accent to record on your behalf.
- **Computer Skills:** You need computer skills:
  - To get on the internet.
  - To set up a *voice banking* account with an email address.
  - To follow onscreen commands around sound settings.If you are unsure, you can always ask a relative or friend to help you with the process.
- **Time Commitment:** You need to be willing to work at a computer for periods of time over a number of days or weeks. Depending on the service you use, you will need to commit 3-9 hours in total to complete the process.



## Choosing a service

There are several commercial *voice banking* services available to sign up to over the internet. The main variations between services are cost and the length of recording time to complete the process. Key factors to consider when choosing a service include:

- Recording duration.
- Your stamina and the strength of your voice.

## Some voice banking services

There are a number of voice banking services. They include:

- ModelTalker
- CereVoice Me
- my-own-voice
- Vocal Legacy

For more detailed information about these, please refer to the table on p.4 of this document.

## Recording

Equipment and resources needed to carry out *voice banking* include:

- A computer that can play sound.
- A high quality microphone for use with the computer – the type of microphone may depend on the service you use but usually they advise a headset microphone with a USB connector.
- A reliable internet connection.
- Funds to pay for the service (unfortunately there is currently no public funding available).

## The best way to record

It is recommended to make recordings in short bursts, being aware of any changes in voice quality and to minimise the impact of fatigue, slurring of speech and other effects. A typical pattern would be to record for about 30 minutes a day over a couple of weeks. It is recommended that you record:

- In the same place every time, using the same equipment.
- In a room with a low ceiling, soft furnishings (e.g. cushions, curtains, carpet/rug) because this helps to minimise the echo effect.
- In a room where the surrounding environment is quiet so as not to interfere with the quality of the recordings.

Check the clarity of your recording at regular intervals. Remember, it is vital to pronounce your speech sounds clearly. Follow the prompts of the *voice banking* service you are using. Typically, you will get feedback on screen to let you know if your pronunciation, speed and volume are of an acceptable quality.

## Storing

If you carry out *voice banking*, you will receive a downloadable computerised voice at the end of the process. You do not need to do anything with this immediately but it will be available should you need to use an electronic communication device in the future.

This computerised voice can be used:

- As *text-to-speech* voice output on a laptop or computer.
- Within a specialised communication app or software.
- On its own or alongside phrases from message banking.

Your AT service and/or SLT will advise you on compatible electronic communication devices and can help you to incorporate your computerised voice into the system. To help with this process, they will need your *username* and *password* for the voice banking service you used.






*The following page provides information about some voice banking services*



## Some voice banking services

This selection of services is not exhaustive and is for guidance only. All have sample voices on their websites for you and the people close to you to listen to.

Service Name	 <b>ModelTalker</b> (by Nemours Speech Research Laboratory)	<b>CereVoice Me</b> by 	<b>my-own-voice</b> (by Acapela Group)	<b>Vocal Legacy</b> by 
Website	<a href="http://www.modeltalker.org">www.modeltalker.org</a>	<a href="http://www.cereproc.com/cerevoice-me">www.cereproc.com/cerevoice-me</a>	<a href="https://mov.acapela-group.com/">https://mov.acapela-group.com/</a>	<a href="http://www.vocalid.ai/individual/vocal-legacy">www.vocalid.ai/individual/vocal-legacy</a>
Based in	Delaware, USA	Edinburgh, Scotland	Belgium/France/Sweden	Massachusetts, USA
Price	\$100 (~€85)	£499 (~€560)	€99 per year (or once off purchase €999)	\$1,499 (~€1,350)
Additional Equipment needed	Own computer Chrome internet access A high quality headset microphone with USB connection ( <i>model recommended on their website</i> )	Own computer running Windows 7 or newer, or a Mac running Leopard or newer Firefox, Chrome or Opera internet access Microphone posted out by company after registration	Own computer Internet access A high quality headset microphone, or can use previously recorded messages in .wav format	Own computer Internet access A high quality headset microphone
Average recording time	7 hours (the full inventory is 3,155 phrases, approx. 16 hours, but you can build a usable voice from 1,200 phrases on)	3-4 hours	1.5-2 hours (Record 350 sentences of text or message bank recordings covering all sound combinations)	6-7 hours
Languages available	English	English, French, Spanish, Italian, Swedish and Romanian	English, Arabic, Danish, Dutch, French, German, Italian, Spanish, Norwegian, Swedish	English
Assistance available	FAQs & problem solving suggestions in the <i>Help Center</i> section of website Email support	Instruction kit sent by post UK telephone support line	A general contact form available on website	Facebook page where users post comments & questions
Partnered with (though not exclusive to)	PredictAble app (iOS & Android)	SmartBox AT GridPad tablets & Grid 3 software	SmartBox AT GridPad tablets & Grid 3 Software, Tobii Dynavox Proloquo4text/ Proloquo2Go iPad apps PredictAble app (iOS & Android)	Tobii i-series for Windows TouchChat for iOS MyVocaliD for iOS/Android
Refund policy	Free to register, record phrases & listen to voice created. Once off payment required to download & use completed voice	Pay in advance. Test phrases reviewed by company who will refund if a good result is unlikely. No refund once full recording phase begins	Free to register & record phrases. Payment required to download & use the completed voice	Preview for \$29.99. Full payment required before recording if decide to proceed (preview fee deducted from full cost). No refund given