

# Zen and the Art of Speech Recognition



Acquainting yourself with Speech Recognition technology will deliver significant rewards on many levels, yet the path towards becoming a master of the art of speech-enabled applications is not always easy.

If you are a developer or a system integrator, you have to get your head around the technology, and then you have to persuade it to deliver according to your customers' needs.

Do not be afraid, help is at hand! The long practiced art of Zen teaches us how to pursue our personal growth in the face of difficulty! Allow us, then, to talk you through the seven stages on the road to speech-enabled enlightenment!

'The First Level of Consciousness' is about reaching an understanding of the value of what you're trying to achieve: a high quality ASR is vital for any self-service application, because it's the key to creating an effective and intuitive interface with your callers. After all, your IVR, just like your website, is the face your company presents to its customers and to the world. Remember also that the intelligence, or lack of it, demonstrated by your self-service

system is perceived as a reflection of the intelligence to be found within your company.

'The Second Level of Consciousness' involves freeing yourself from self-imposed limitations and prejudices: do not be held back by technology, choose the best regardless of what the crowd says! Find robust, accurate and high performing speech recognition capable of dealing with large vocabularies, trained for the field of use. Choose an ASR which does not lock you into proprietary technologies or interfaces, but which facilitates brand-independent upgrades by means of comprehensive standards-support combined with availability on all major platforms. Currently in 24 languages, Loquendo ASR supports the widest choice of operating systems, including embedded ones, and is compatible with all W3C speech standards. It also supports several acoustic models specialized for the different application fields (telephony, in-car), giving you maximum flexibility and choice.

'The Third Level of Consciousness' is about being in control: don't hand over the reins to outside forces, but ensure you stay firmly in the driving seat. There are those who understand the workings of their applications and the enabling technologies which support them - such people are in charge of their own evolution and development. There are others who blindly give the controls to the speech vendor's professional services, and then wonder why they no longer seem to be in charge of their own destiny. Make sure you have complete access to the knowledge and tools necessary for personalizing your speech technologies, with Customer Support always available if and when you need it.

'The Fourth Level of Consciousness' requires you to know yourself, for you will only attain wisdom when you understand how little you know: develop a speech-enabled application which corresponds to your level of technological awareness. Reaching a profound understanding of speech recognition technology is a journey that can not be rushed - so create an application in keeping with your current position on that journey. Beginners can build a good quality service based on simple grammars, while more advanced followers of the art will use their skills to develop their own statistical language models trained for the field.

Loquendo's 'Garbage Clearance' feature, which excludes irrelevant utterances from the recognition process ("um, er, dunno," etc), will accelerate your journey towards a superior technological awareness, by introducing a degree of natural language understanding into your speech dialogs.

'The Fifth Level of Consciousness' asks you, quite simply, to listen: don't close your ears to what your customers are telling you. Each failed call is a gift, because it helps you understand how to grow and move forward. Design your dialogs carefully and continually tune and refine your system based on a thorough analysis of call data, utterances, failed recognition events, etc. If an enterprise is genuinely resolving more caller issues on the first call, with limited intervention from live agents, it can save millions per annum. Loquendo ASR provides a range of tools for logging calls, recording pronunciation variants not covered by the speech grammars, acoustic model adaptation - everything you need to ensure your IVR learns and improves with each call.

'The Sixth Level of Consciousness' involves being open: open to change, open to starting again, open to whatever your customers are telling you. Be prepared to re-think your application based on user feed-back. Test your application, tune it, remodel it, and, if that is not sufficient, take it apart and start all over again. Be sufficiently humble in order to attain greatness.

'The Seventh Level of Consciousness' is peace of mind! When you have created a killer self-service application or a high quality IVR service, when your First Call Resolution rate is rising and call-routing to agents is going down, then you can sit back and relax in the knowledge of a job well done. You've earned it! ■

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