

The background features a dark teal to black gradient. On the left, there are intricate wireframe patterns of thin teal lines forming various polygons. Scattered throughout are numerous small, glowing teal and red bokeh spots of varying sizes, creating a sense of depth and digital activity. The overall aesthetic is futuristic and tech-oriented.

**Lab Lab AI**

# Eleven Labs AI Hackathon

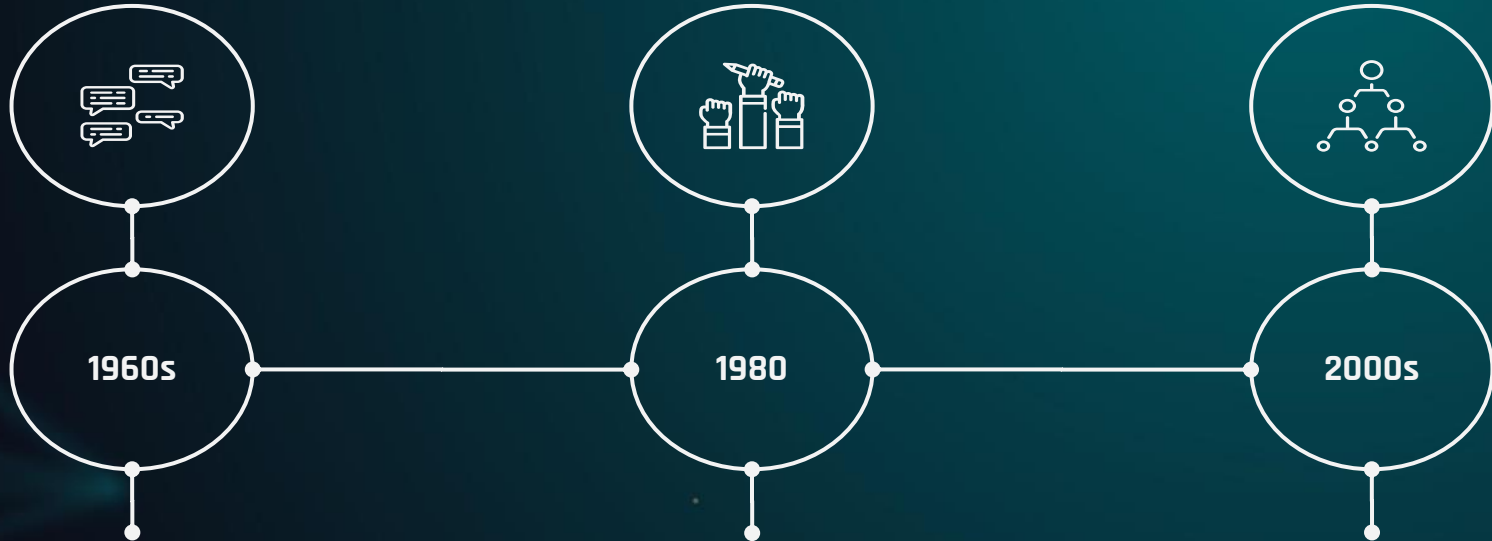
Voice Cloning AI - Experience New Level Human-like Interactions with Mendix

## TEAM



**Karthikeyan Gopalan**

# JOURNEY OF VOICE CLONING



Researchers at Bell Labs develop the first Voice Synthesizer

Speech Generative Device (SGD) a specific technology used as an Equalizer for speech synthetic system which was developed by Speech plus

Statistical parametric synthesis methods, such as Hidden Markov Model (HMM) and Gaussian Mixture Models (GMM) have gained popularity

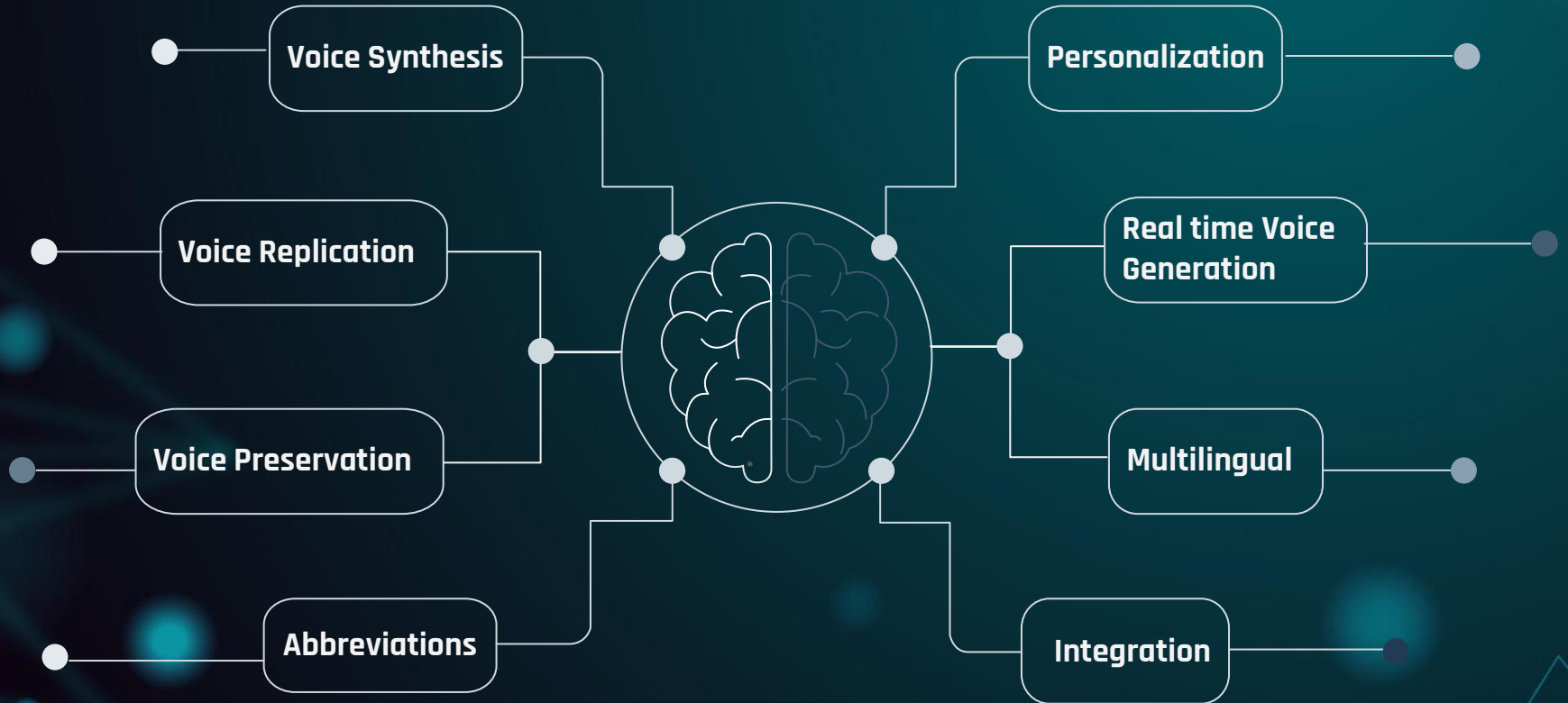
# JOURNEY OF VOICE CLONING



Many organizations like Lyrebird, Wavenet, Polly have created generative deep learning realistic human voices.

Many Companies like ElevenLabs, Speechify, ReSpeecher have created this technology which has highly realistic Voices, low processing time, supports multiple languages and affordable pricing

# FEATURES OF VOICE CLONING



# CHALLENGES AND LIMITATIONS



## PROSODY

Affects naturalness and  
Intelligibility



## AMBIGUITIES

Awareness about the  
process



## DATA REQUIREMENTS

Quality and Quantity



## ETHICAL CONCERNS

Privacy, consent and  
potential misuse

# PROBLEM - VOICE BANKING

- While technology, often brings about, advancements and financial benefits across various industries, there are instances where its impact goes beyond financial gains. Voice Banking, for instance, carries a profound emotional significance.
- Certain conditions like ALS and MND have a profound impact on an individual's voice and physical abilities. Knowing that they may eventually lose their voice, individuals can turn to Voice Banking software as a solution. Voice Banking, allows them to preserve, their unique voice by recording and storing it digitally.

# SOLUTION - VOICE BANKING



Technology is changing the lives of those living with ALS (Amyotrophic lateral sclerosis) and MND (Motor Neurone Disease)

Even after the Disease progress, your digital voice will allow you to retain your identity.

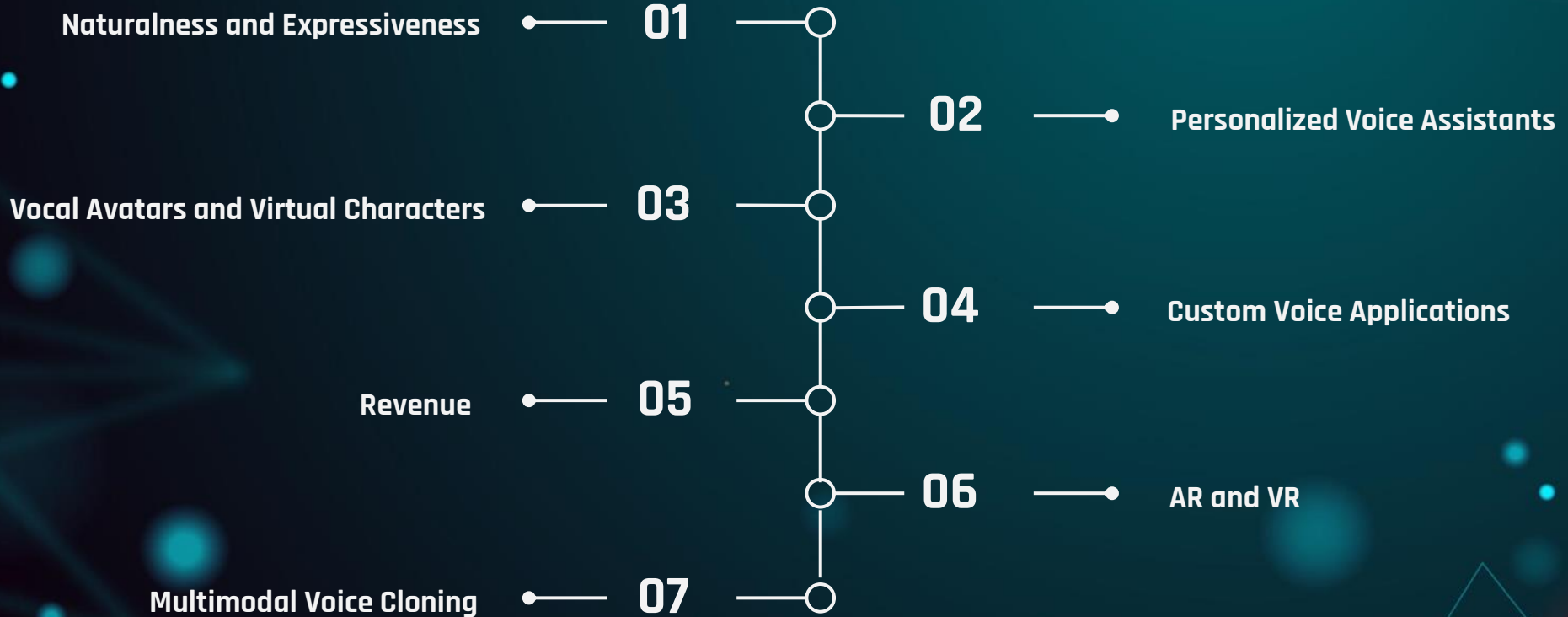
Intelligence is the ability to adapt to change - Stephen Hawking



## MARKET SIZE & REVENUE

- **Voice Cloning Technology, has very bright future financially, The rapid growth of Voice Cloning technology has gained fame in various industries. According to CAGR Reports, the revenue from Voice Cloning Technology in 2022, was approximately \$1.5 billion, and it is projected to reach \$10.8 billion by 2030.**

# FUTURE ADVANCEMENTS



**THANKS!**

