

AppTek

Automatic Dubbing
for Hollywood and Beyond

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What is automatic dubbing?

ENGLISH-TO-FRENCH

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Webb Senior Project Scientist



<https://vimeo.com/800681809>

AppoTek

Under the Hood: Automatic Dubbing at AppTek

Automatic Dubbing at AppTek

Speech Separation ▶

Automatic Speech Recognition

Speaker Diarization

Metadata-Aware MT

Length Control MT

Adaptive Speech Synthesis

Speech Timing and Placement

Final Merge

AppTek



<https://vimeo.com/819560530>

Quality Tiers

DO-IT-YOURSELF
MODELS

Apptek
TIER 1

Apptek
TIER 2

Apptek
TIER 3

Apptek
TIER 4

PROFESSIONAL
DUBBING

OFF-THE-SHELF TTS

OFF-THE-SHELF MT

OFF-THE-SHELF ASR

SPEAKER-ADAPTIVE TTS

CUSTOM-ADAPTED MT

METADATA-AWARE MT

CUSTOM-ADAPTED ASR

BROADCAST ASR

SPEAKER-ADAPTIVE TTS

CUSTOM-ADAPTED MT

METADATA-AWARE MT

PROFESSIONALLY CORRECTED TRANSCRIPT

SPEAKER-ADAPTIVE TTS

PROFESSIONALLY CORRECTED TRANSLATION

EMOTIONAL SPEAKER-ADAPTIVE TTS

PROFESSIONALLY CORRECTED TRANSLATION

IN-STUDIO DUBBING WITH PROFESSIONAL VOICE ACTORS

ACCURACY

GIST UNDERSTANDING

ACCURATE UNDERSTANDING

EMOTIONAL RANGE

NO EMOTION

HIGH CHANGING EMOTION

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- CUSTOM-ADAPTED MT
- METADATA-AWARE MT
- CUSTOM-ADAPTED ASR
- BROADCAST ASR

- SPEAKER-ADAPTIVE TTS
- CUSTOM-ADAPTED MT
- METADATA-AWARE MT
- PROFESSIONALLY CORRECTED TRANSCRIPT

- SPEAKER-ADAPTIVE TTS
- PROFESSIONALLY CORRECTED TRANSLATION

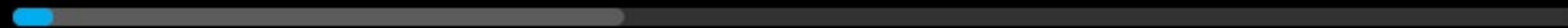
- EMOTIONAL SPEAKER-ADAPTIVE TTS
- PROFESSIONALLY CORRECTED TRANSLATION

IN-STUDIO DUBBING WITH PROFESSIONAL VOICE ACTORS



WHAT'S THE TOPIC?

00:01



DO-IT-YOURSELF
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IN-STUDIO DUBBING WITH PROFESSIONAL VOICE ACTORS

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IN-STUDIO DUBBING WITH PROFESSIONAL VOICE ACTORS

DO-IT-YOURSELF
MODELS

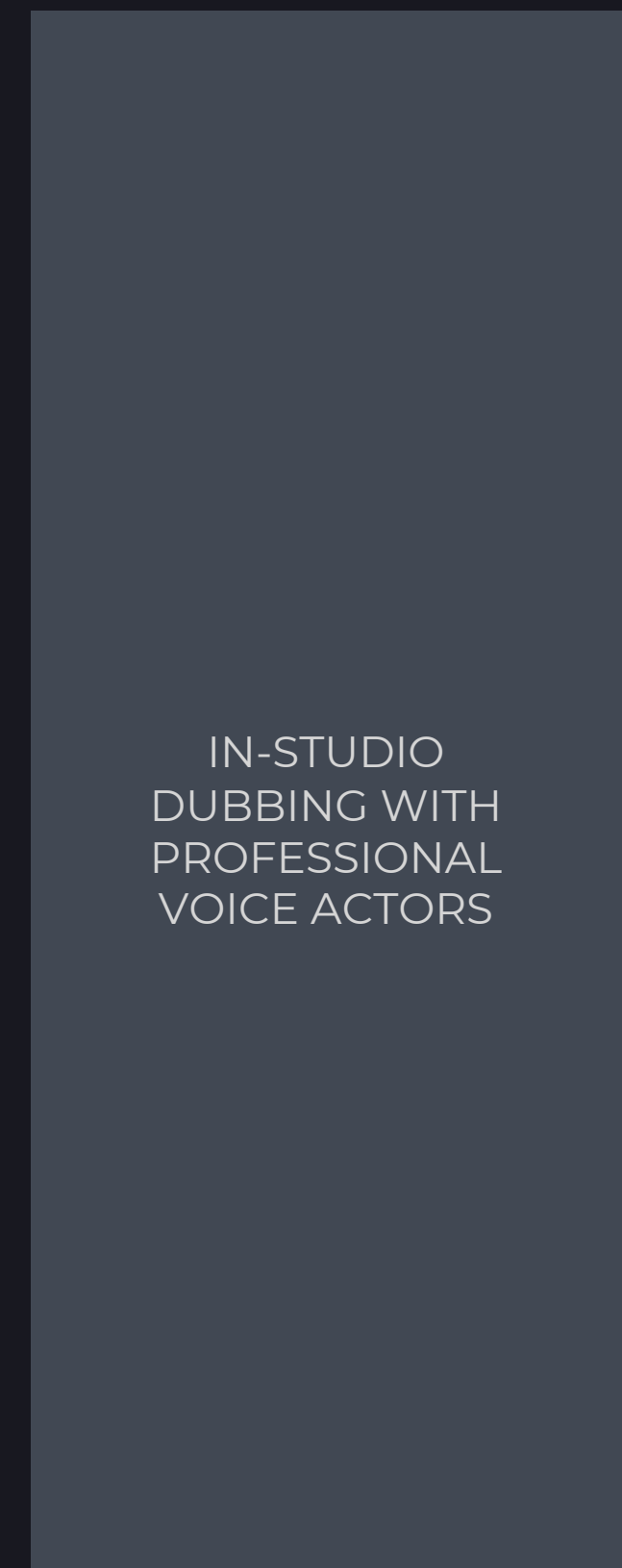
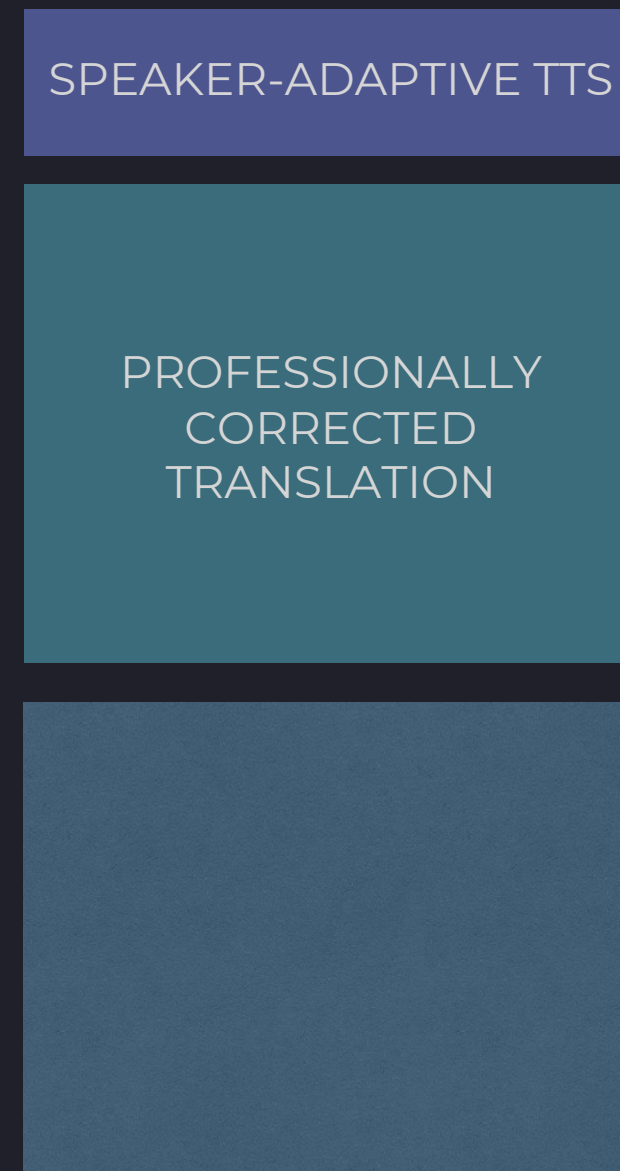
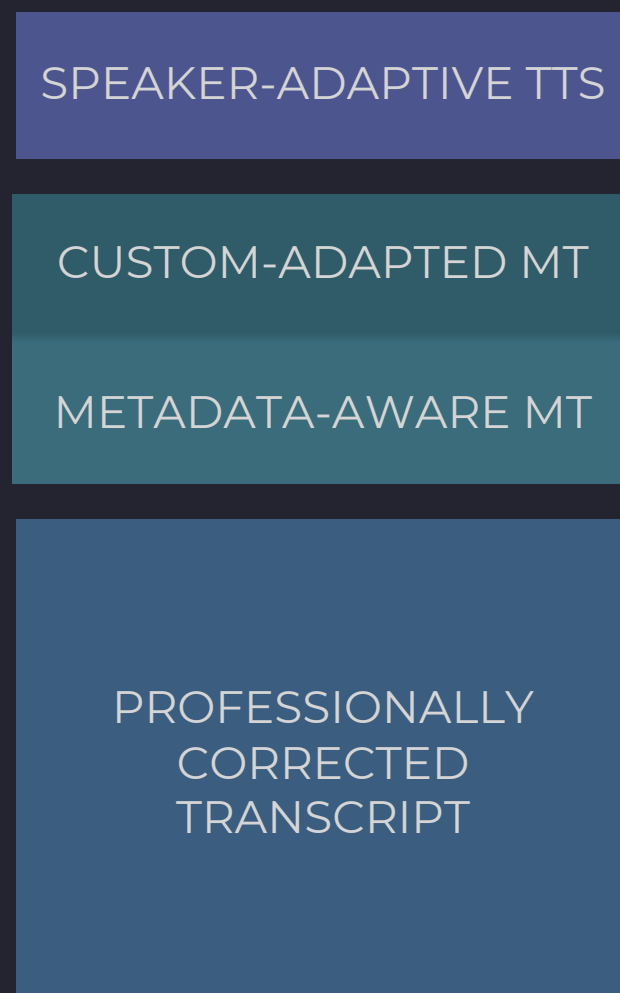
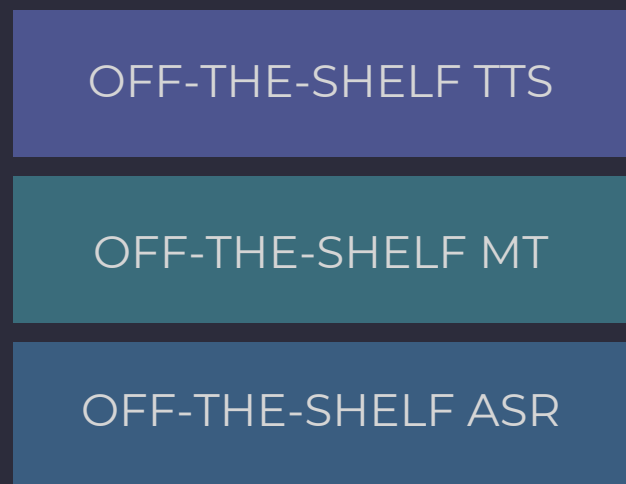
Apptek
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Apptek
TIER 2

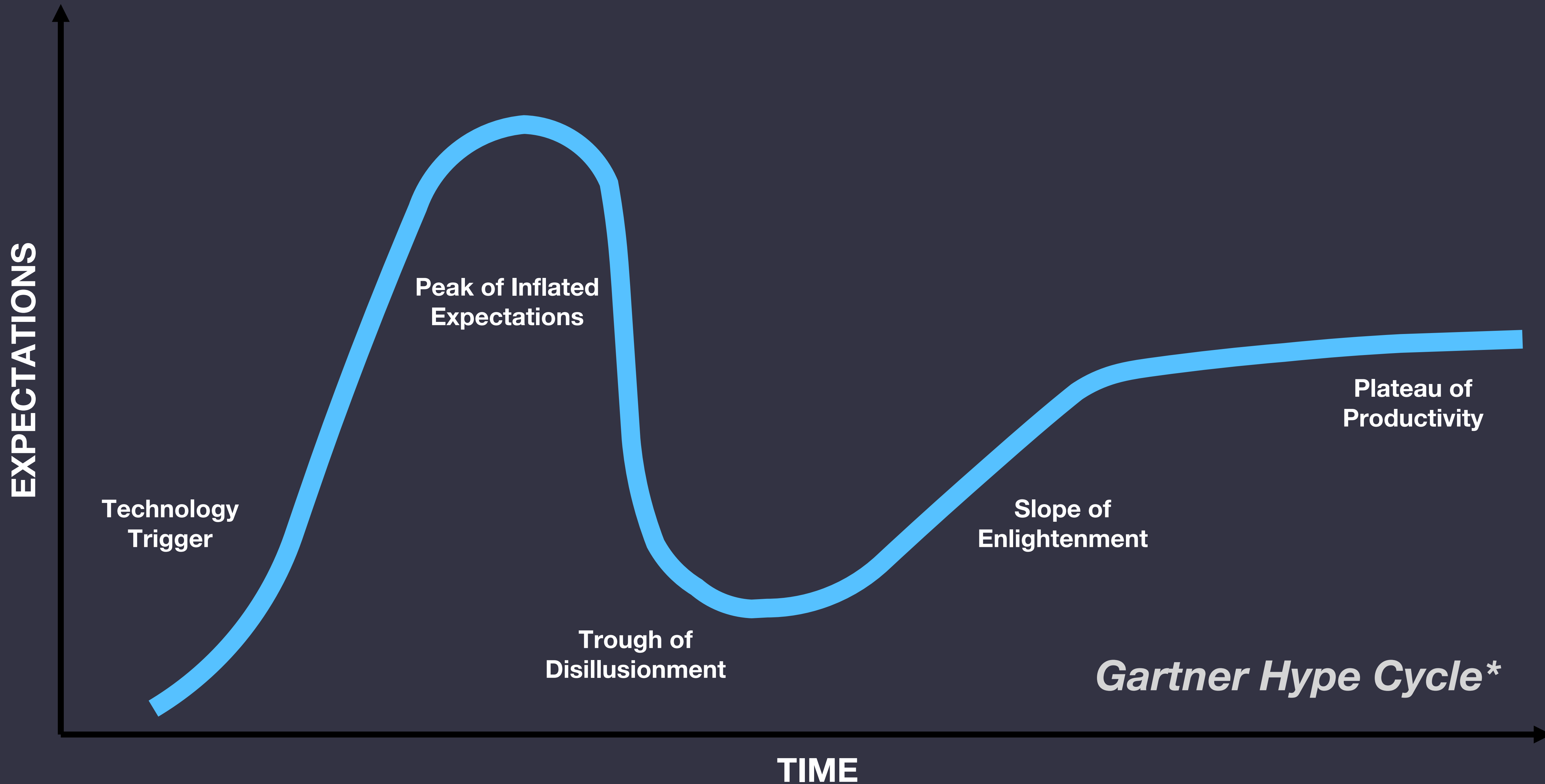
Apptek
TIER 3

Apptek
TIER 4

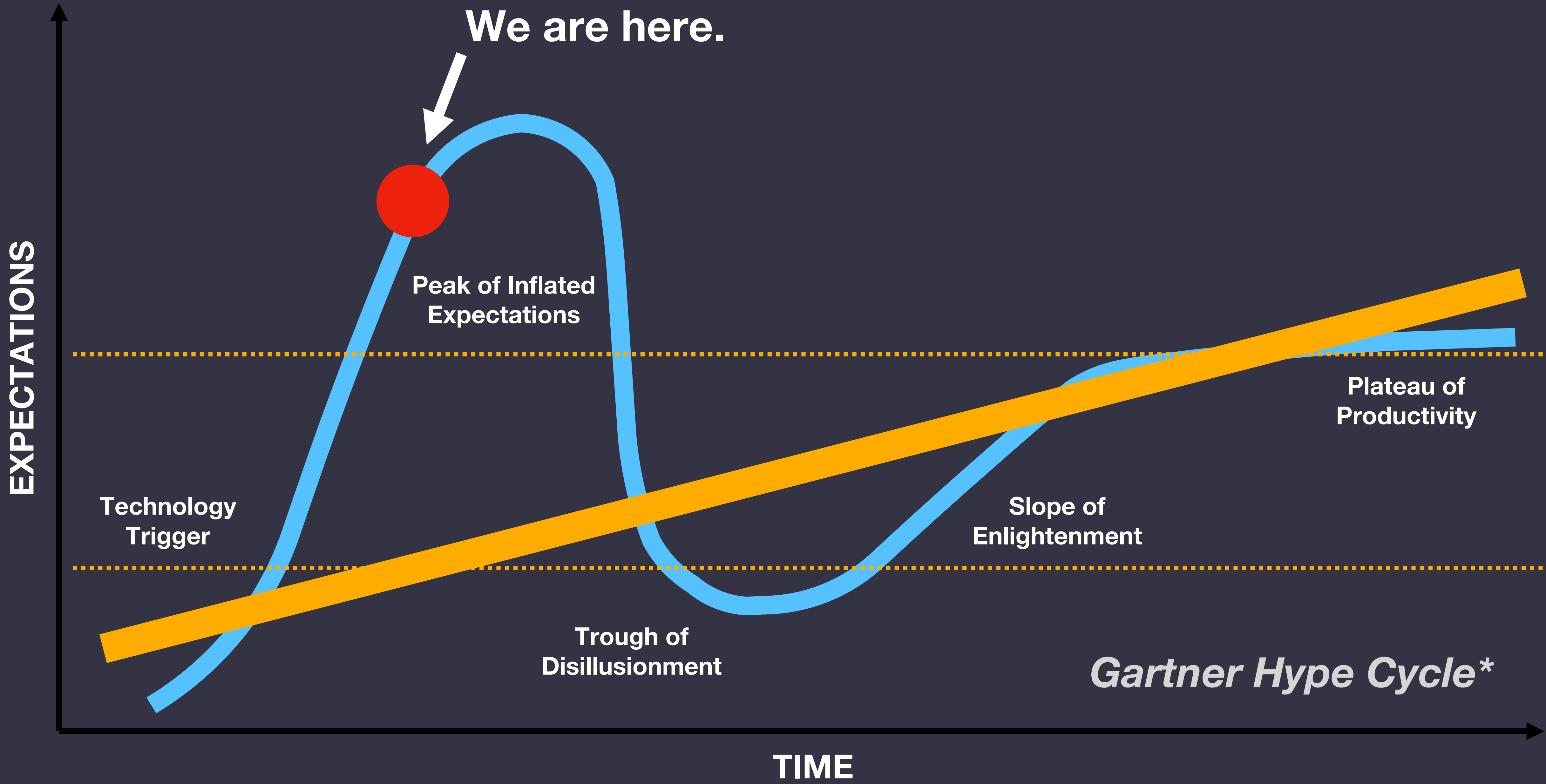
PROFESSIONAL
DUBBING



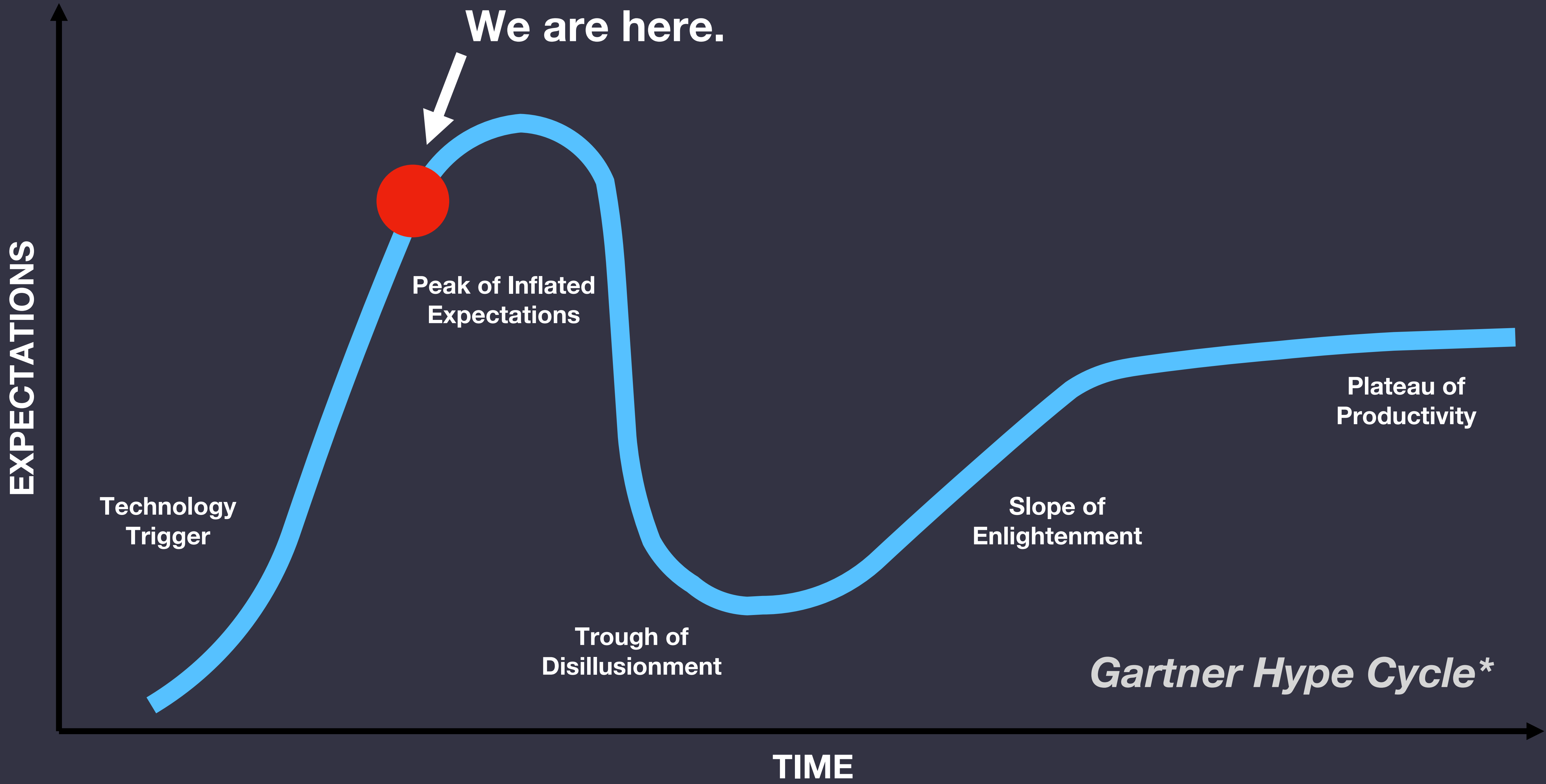
Are you ready to go?



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Tips to Best Embrace Automatic Dubbing Technology

Tips to Best Embrace Automatic Dubbing Technology

1

Categorize

2

Educate

3

Globalize

4

Scale Is Our Friend

And most importantly....

**With Great Power
Comes Great Responsibility**

AppoTek

Apotek

Thank you.