



Creating Infinite Possibilities.

Voice Control of Set-Top Box for Customers with Non-Standard Speech

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Non-standard Speech





What is nonstandard speech?

Photo by alexandre saraiva carniato:

 $\underline{https://www.pexels.com/photo/grayscale-photography-of-man-sitting-on-wheelchair-3044623/}$

Content foraging



"Switch the channel to HBO"

Customer Quotes



"It doesn't understand me. I don't know why." (giggle)

"I have the capabilities of doing streaming if someone else is here pushing the buttons for me. But I can't do it myself. And so, I never do it."

"I used to use voice activation, but now it doesn't understand me any longer. So, I've kinda' lost the use of it."



Independence

Fewer steps

Less mental and physical effort

Speedier navigation

Being valued





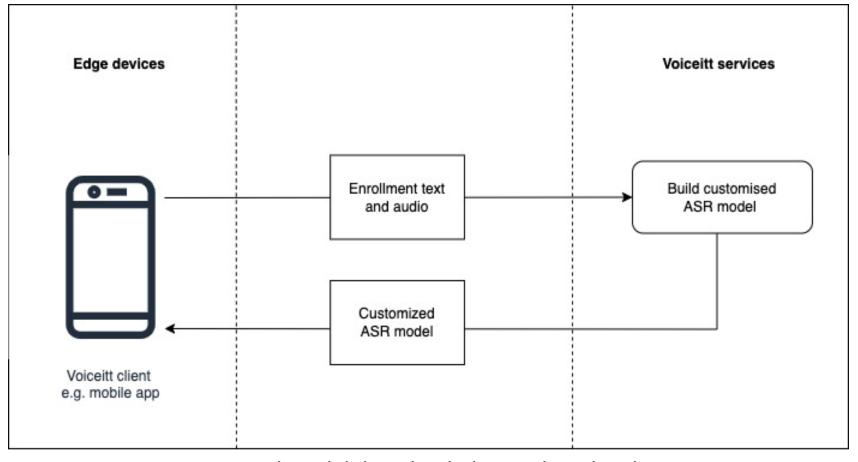
Our Solution

enable customers with speech disabilities to access and control their X1 set-top boxes (and the wider Xfinity home and entertainment platform) by voice.

Understanding Dysthartic Speech



Discreet ASR (Automatic Speech Recognition)

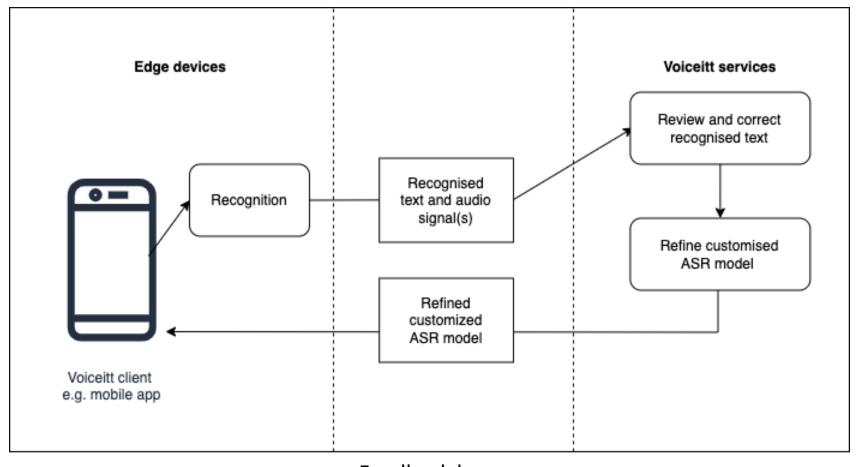


Customized model downloaded onto the edge device

Understanding Dysthartic Speech



Continuous ASR



Feedback loop

Controlling the Set-top Box with Assistive Technology

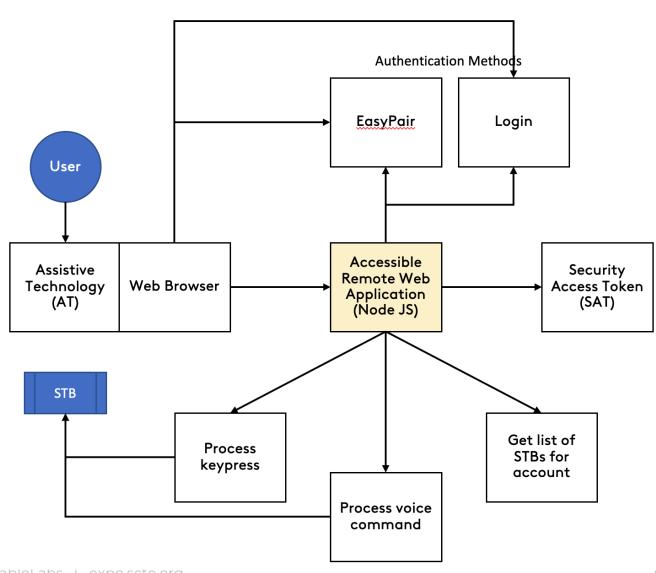


Adaptive Remote





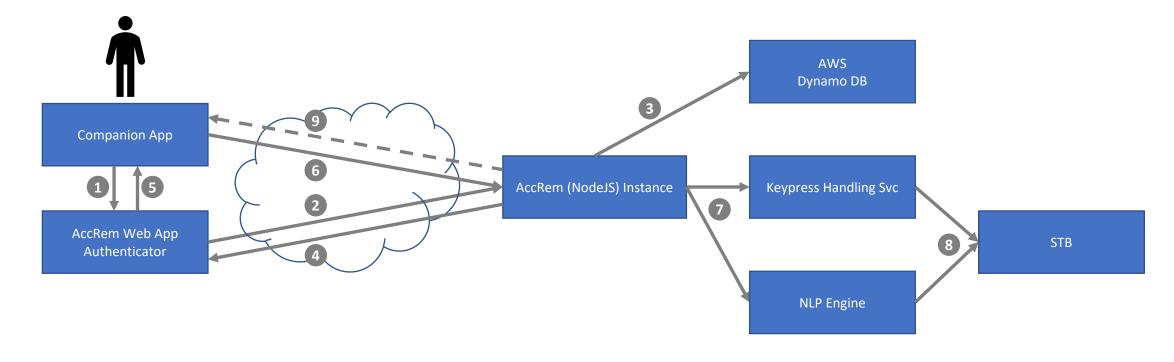
Adaptive Remote on iPad (scrolled top and bottom)



Adaptive Remote Technology in Companion Apps



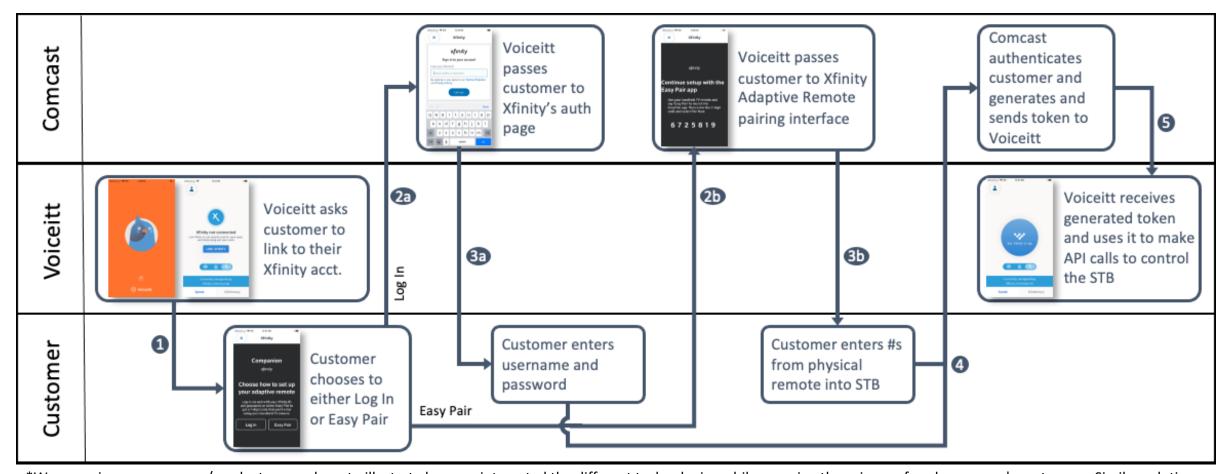
Companion App



Integrating Our Technologies



Customer Authentication

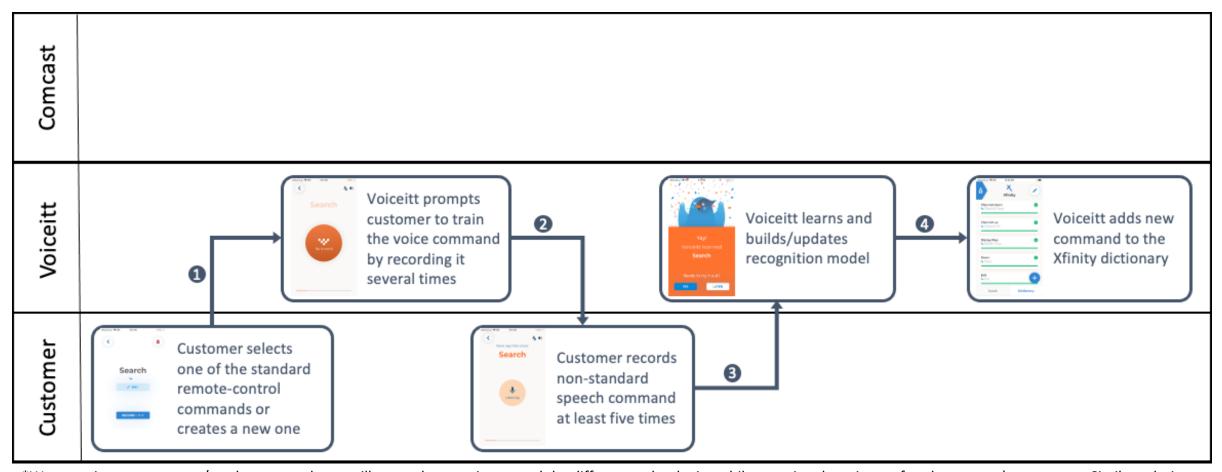


^{*}We are using our company/product names here to illustrate how we integrated the different technologies while ensuring the privacy of each company's customers. Similar solutions can be developed by your organization's product team as well.

Integrating Our Technologies



Voice Imprint

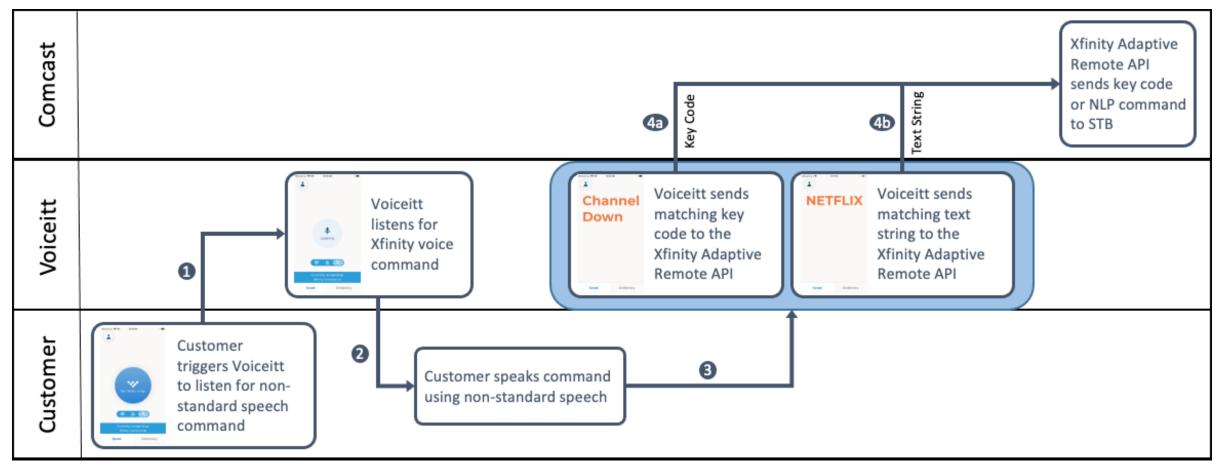


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Integrating Our Technologies



Set-top Box Control



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Thank You!

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