Smart Speakers

An overview of an up-and-coming category

Jeferson Valadares
Co-founder/CEO, Doppio

@valadaj

We are the world's leading voice game developer

The complete voice games stack
- World-class team
- Cutting-edge technology
- Voice-tailored tools
- Growing player network

GROUNDBREAKING VOICE GAMES

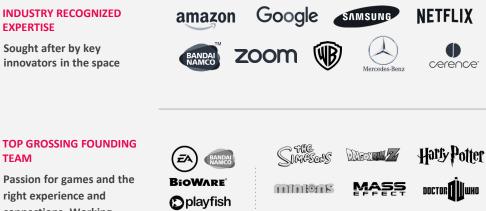Always pushing the envelope and challenging the status quo.

The Vortex

The 3% Challenge

PAC-MAN™ Waka Waka

Voice Quest

INDUSTRY RECOGNIZED EXPERTISE

Sought after by key innovators in the space

amazon

Google

SAMSUNG

NETFLIX

BANDAI NAMCO™

zoom

WB

Mercedes-Benz

cerence™

TOP GROSSING FOUNDING TEAM

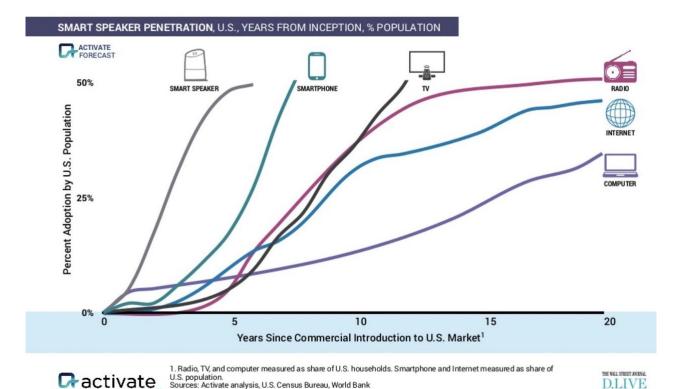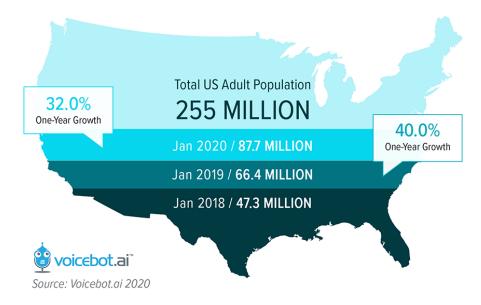Passion for games and the right experience and connections. Working together since 2012.

EA

BANDAI NAMCO

BioWare®

playfish

DIGITAL CHOCOLATE

The Simpsons

Dragonball Z

Harry Potter

minions

MASS EFFECT

DOCTOR WHO

NEED FOR SPEED

Dragon Age

FIFA

Voice

is the new touch

Intents   Entities   **Dialog**

Welcome
welcome
1 Response / 0 Context set

#StartCallWithOfficer
0 Responses / 1 Context set / Skip user input

Skip user input. The first child node will be eva

Start a call
$person == null
1 Response / 1 Context set / 1 Slot

#GoToRoom
0 Responses / 2 Context set / Skip user input

Skip user input. The first child node will be eva

go to room
($person == null) and ($spaceShipRoom == null)
1 Response / 2 Context set / 2 Slots

#Repair
0 Responses / 1 Context set / Skip user input

End call
#EndCall
1 Response / 0 Context set

---

go to room   Custo

If bot recognizes:

($person == null)   ⊖   and ⌄   ($spaceShipRoom == null)   ⊖   ⊕

Then check for: 0 Manag

	Check for	Save it as	If not present, ask	Type
1	@sys-person	$person	Who do you want to c	Required
2	@spaceShipRoom	$spaceShipRoom	Where should the off	Required

⊕ Add slot

Then respond with:

1. Ok, $person is going to $spaceShipRoom

Add a variation to this response

And finally

Wait for user input ⌄

Crew   Ship

EquipmentName   99%

Bridge
Mei Yuan
99%
Malik

EquipmentName

99%   99%

Quarters
Malik   Malik
Fethawi
99%
Biermann Generator
Room

99%

99% Outside

99%

Life Support

99%   99%

Smart Speaker Penetration

SMART SPEAKER PENETRATION, U.S., YEARS FROM INCEPTION, % POPULATION

ACTIVATE FORECAST

SMART SPEAKER · SMARTPHONE · TV · RADIO · INTERNET · COMPUTER

Percent Adoption by U.S. Population — 50%, 25%, 0%

Years Since Commercial Introduction to U.S. Market[1] — 0, 5, 10, 15, 20

1. Radio, TV, and computer measured as share of U.S. households. Smartphone and Internet measured as share of U.S. population.
Sources: Activate analysis, U.S. Census Bureau, World Bank

activate

THE WALL STREET JOURNAL
D.LIVE

Smart Speaker Penetration

U.S. Adult Smart Speaker Installed Base January 2020

32.0%
One-Year Growth

40.0%
One-Year Growth

Total US Adult Population
255 MILLION

Jan 2020 / 87.7 MILLION

Jan 2019 / 66.4 MILLION

Jan 2018 / 47.3 MILLION

voicebot.ai™

Source: Voicebot.ai 2020

How do people use these things?

Where Consumers Have Smart Speakers in 2020

2.9% Work Office

5.5% Garage

11.6% Home Office

5.8% Dining Room

45.5% Bedroom

41.5% Kitchen

43.2% Living Room

13.3% Bathroom

Source: Voicebot.ai 2020

voicebot.ai™

U.S. Adult Voice Assistant Use by Surface – September 2018

7.3% Smart Watch

4.7% Multimedia Player

6.7% Cable / Satellite TV Provider

11.3% Headphones

11.4% Desktop / Laptop Computer

58.2% Smartphone

7.4% Television

22.9% Smart speaker

45.3% In-Car

5.3% Game Console

0.5% Appliance

1.6% Home Theater System

Source: Voicebot.ai

voicebot.ai™

Voice Assistants are More Prevalent on Smartphones

88.5%
Own a smartphone
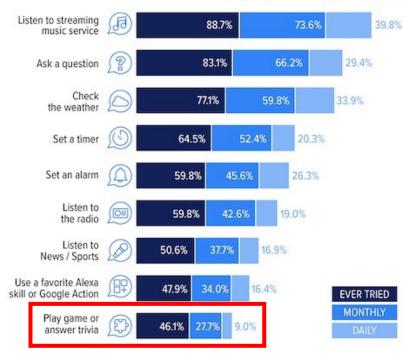
11.5%
Do not own smartphone

58.2%
Have tried a voice assistant on a smart phone

22.9%
Own a smart speaker

Monthly Active Voice Assistant U.S. Adult Users

45.7 MILLION
On smart speakers

90.1 MILLION
On smartphones

252 MILLION
U.S. Adult Population

voicebot.ai

Source: Voicebot Voice Assistant Consumer Adoption Report 2018

Smart Speaker Use Case Frequency January 2020

Use Case	Ever Tried	Monthly	Daily
Listen to streaming music service	88.7%	73.6%	39.8%
Ask a question	83.1%	66.2%	29.4%
Check the weather	77.1%	59.8%	33.9%
Set a timer	64.5%	52.4%	20.3%
Set an alarm	59.8%	45.6%	26.3%
Listen to the radio	59.8%	42.6%	19.0%
Listen to News / Sports	50.6%	37.7%	16.9%
Use a favorite Alexa skill or Google Action	47.9%	34.0%	16.4%
Play game or answer trivia	46.1%	27.7%	9.0%
Listen to Podcast or other talk formats	44.9%	32.0%	11.4%
Control smart home devices	43.4%	31.9%	24.5%
Find a recipe or cooking instructions	42.3%	26.0%	5.4%
Call someone	40.2%	21.2%	9.5%
Search for product information	38.2%	27.9%	7.3%
Check traffic / directions	35.1%	23.7%	11.1%
Access my calendar	32.1%	19.0%	9.5%
Send a text message	27.8%	14.0%	6.7%
Make a purchase	25.2%	14.3%	4.9%

Legend:
EVER TRIED
MONTHLY
DAILY

voicebot.ai

Source: Voicebot.ai 2020

What kind of games are out there?

Knowledge / Trivia / Quiz

Jeopardy (2016)
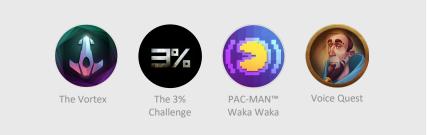
Companion Experiences

Destiny Ghost (2017)

When in Rome (2018)
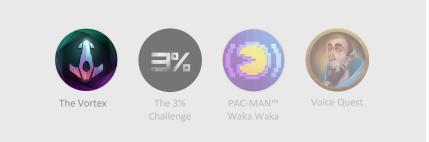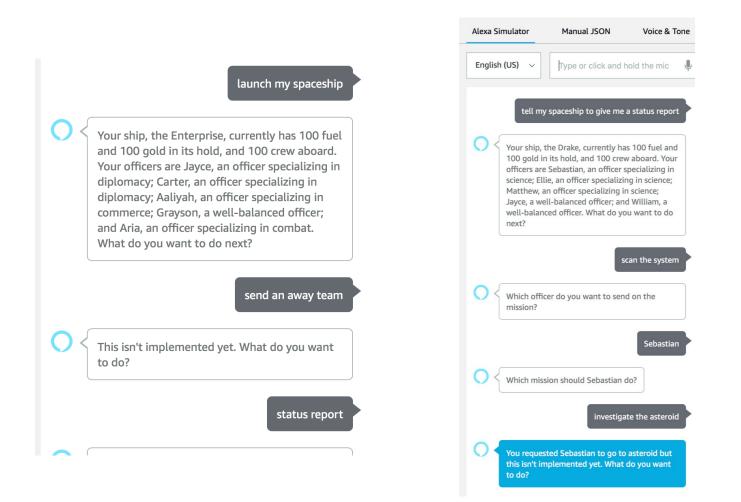
Kids

The SpongeBob Challenge (2017)

The Vortex The 3% Challenge PAC-MAN™ Waka Waka Voice Quest

Our Games

The Vortex   The 3% Challenge   PAC-MAN™ Waka Waka   Voice Quest

First Iteration:
Design for the Limitations

launch my spaceship

Your ship, the Enterprise, currently has 100 fuel and 100 gold in its hold, and 100 crew aboard. Your officers are Jayce, an officer specializing in diplomacy; Carter, an officer specializing in diplomacy; Aaliyah, an officer specializing in commerce; Grayson, a well-balanced officer; and Aria, an officer specializing in combat. What do you want to do next?

send an away team

This isn't implemented yet. What do you want to do?

status report

---

tell my spaceship to give me a status report

Your ship, the Drake, currently has 100 fuel and 100 gold in its hold, and 100 crew aboard. Your officers are Sebastian, an officer specializing in science; Ellie, an officer specializing in science; Matthew, an officer specializing in science; Jayce, a well-balanced officer; and William, a well-balanced officer. What do you want to do next?

scan the system

Which officer do you want to send on the mission?

Sebastian

Which mission should Sebastian do?

investigate the asteroid

You requested Sebastian to go to asteroid but this isn't implemented yet. What do you want to do?

Tools Overview (c. 2020)

	Interaction Model	VUI content management	State management	Persistence	Voice over	Localization support	Multimodal support	Monetization	Analytics	Notifications	Identity	GUI editing tools?	Cross platform?	Cost?	Well maintained?
SFB	Yes	Yes	Yes	Yes (ASK)	Limited	Limited	Limited (APL)	Limited (ASK ISP)	No	No	No	No	No	Free	No
Jargon	Yes	Yes	No	No	No	Yes	Limited (Cards)	No	No	No	No	Yes	Yes	$87/mo (3 seats)	Yes (proprietary)
Jovo	Yes	No	Yes	Yes	No	No	Limited (APL + Rich Responses)	Yes	Yes	Yes	No	No	Yes	Free	Yes (open source)
Dialogflow	Yes	Yes	No	No	No	Yes	No	No	No	No	No	Limited	Yes	Free for AoG	No
Actions Builder	Yes	Yes	No	No	No	Yes	No	No	No	No	No	Yes	No	Free	Yes? (1st party)
Voiceflow	Yes	Yes	No	No	No	No	Limited (cards)	Limited (Alexa only)	No	Limited (Alexa only)	No	Yes	Yes	$40/seat/mo	??? (proprietary)
Alexa Conversations	Yes	Yes	Yes	No	No	No (coming later)	Limited (APL only)	No	No	No	No	Yes	No	Free	Yes? (1st party)

Explore worlds and mysteries.
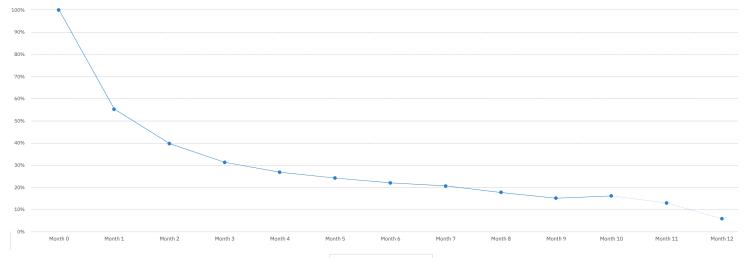
"Alexa, open The Vortex."
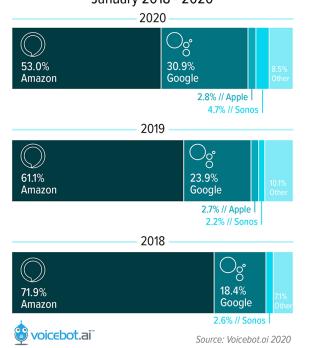
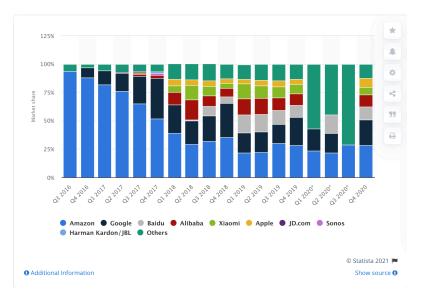Get started ▶

Adventure / Story / RPG

🔊

The Vortex (2018)

Vortex Power Users

Metric	Session time	Sessions per day	Conversion rate	Gross ARPPU
The Vortex Power Users	17m	3.5	4%	$42
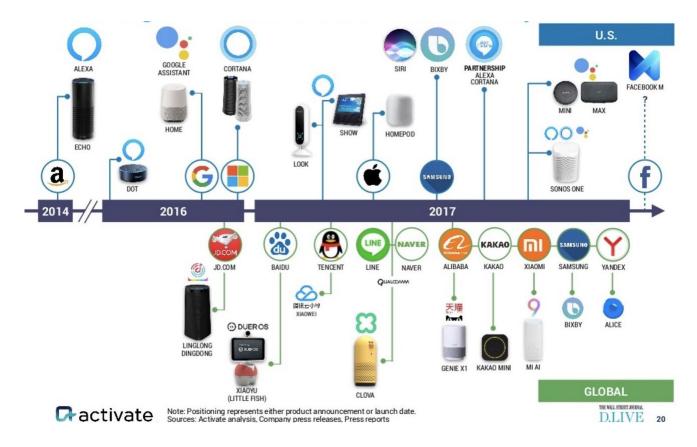
Not Just Alexa

U.S. Smart Speaker Market Share by Brand
January 2018 - 2020

2020
53.0% Amazon
30.9% Google
8.5% Other
2.8% // Apple
4.7% // Sonos

2019
61.1% Amazon
23.9% Google
10.1% Other
2.7% // Apple
2.2% // Sonos

2018
71.9% Amazon
18.4% Google
7.1% Other
2.6% // Sonos

Source: Voicebot.ai 2020

Market share legend: Amazon, Google, Baidu, Alibaba, Xiaomi, Apple, JD.com, Sonos, Harman Kardon/JBL, Others

© Statista 2021
Additional Information
Show source

Global, Multiplatform

Note: Positioning represents either product announcement or launch date.
Sources: Activate analysis, Company press releases, Press reports

Installed Base

Voice Assistant Installed Base – 2019

Amazon Alexa Devices — 100+ MILLION
Microsoft Cortana Devices — 400+ MILLION
Apple Siri Devices — 500+ MILLION
Google Assistant Devices — 1+ BILLION

Source: Canalys, Amazon, Microsoft, Google, Apple

voicebot.ai

Lessons Learned

- Pick the right platform for your goals

- The right game can engage and monetize fans

- Challenges: general user retention and volume

Google, Amazon invests in voice-controlled games studio Doppio

Portuguese developer secures €1m in seed funding

James Batchelor
Editor-in-Chief
Tuesday 23rd July 2019

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Doppio has completed a round of seed funding to the tune of €1 million.

The round includes investments from the Amazon Alexa Fund, the Google Assistant Investment Program, Sisu Game Ventures and other known game and tech investors.

Several angel investors from the world of games also contributed, including Unity founder David Helgason and Supercell game lead Lasse Seppänen.

The Vortex   The 3% Challenge   PAC-MAN™ Waka Waka   Voice Quest

Next Iteration:
IP, multiplayer

THE

3%

CHALLENGE

DOPPIO   RIO GAMES

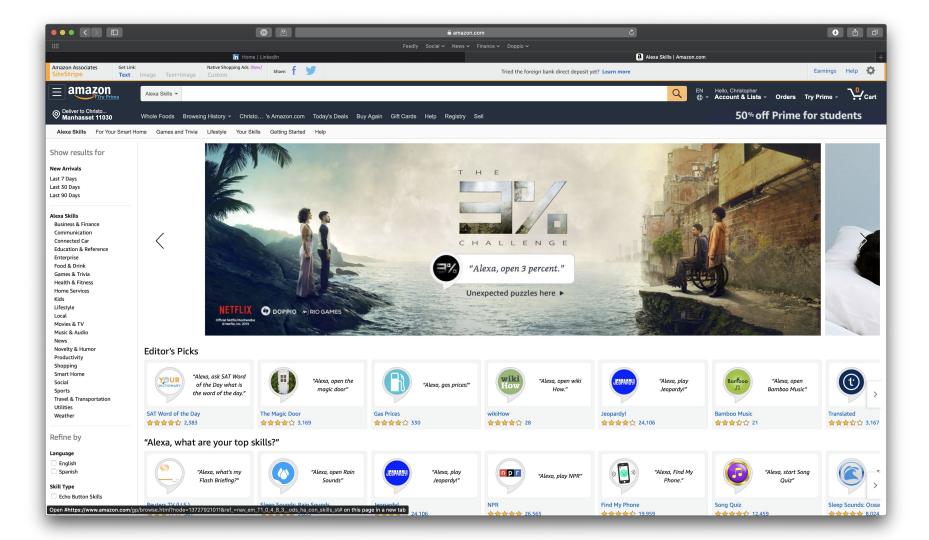# The 3% Challenge
Based on the Netflix Hit Thriller

Original prequel storyline written in collaboration with the TV show writers

The lead actress of the series, Bianca Comparato, lends her voice to the game

Several custom-made voice-based challenges to test your skills

Compete with other players across the globe in weekly tournaments

amazon
Try Prime

Alexa Skills ▾

EN
Hello, Christopher
Account & Lists ▾ Orders Try Prime ▾

0
Cart

Deliver to Christo...
Manhasset 11030

Whole Foods Browsing History ▾ Christo... 's Amazon.com Today's Deals Buy Again Gift Cards Help Registry Sell

50% off Prime for students

Alexa Skills For Your Smart Home Games and Trivia Lifestyle Your Skills Getting Started Help

Show results for

New Arrivals
Last 7 Days
Last 30 Days
Last 90 Days

Alexa Skills
Business & Finance
Communication
Connected Car
Education & Reference
Enterprise
Food & Drink
Games & Trivia
Health & Fitness
Home Services
Kids
Lifestyle
Local
Movies & TV
Music & Audio
News
Novelty & Humor
Productivity
Shopping
Smart Home
Social
Sports
Travel & Transportation
Utilities
Weather

Refine by

Language
☐ English
☐ Spanish

Skill Type
☐ Echo Button Skills

THE 3% CHALLENGE

3% "Alexa, open 3 percent."

Unexpected puzzles here ▸

NETFLIX DOPPIO RIO GAMES
Official Netflix Merchandise
© Netflix, Inc. 2019

Editor's Picks

YOUR DICTIONARY — "Alexa, ask SAT Word of the Day what is the word of the day."
SAT Word of the Day
★★★★☆ 2,383

The Magic Door — "Alexa, open the magic door"
The Magic Door
★★★★☆ 3,169

Gas Prices — "Alexa, gas prices!"
Gas Prices
★★★★☆ 330

wikiHow — "Alexa, open wiki How."
wikiHow
★★★★☆ 28

JEOPARDY! — "Alexa, play Jeopardy!"
Jeopardy!
★★★★☆ 24,106

Bamboo Music — "Alexa, open Bamboo Music"
Bamboo Music
★★★☆☆ 21

Translated
★★★☆☆ 3,167

"Alexa, what are your top skills?"

— "Alexa, what's my Flash Briefing?"
Reuters TV (U.S.)

— "Alexa, open Rain Sounds"
Sleep Sounds: Rain Sounds

JEOPARDY! — "Alexa, play Jeopardy!"
Jeopardy!
★★★★☆ 24,106

npr — "Alexa, play NPR"
NPR
★★★★☆ 26,565

— "Alexa, Find My Phone."
Find My Phone
★★★★☆ 19,959

— "Alexa, start Song Quiz!"
Song Quiz
★★★★☆ 12,459

Sleep Sounds: Ocean
★★★★☆ 8,024

O DESAFIO 3%

"Alexa, abra 3 porcento."

Desafios inusitados por aqui ▸

DOPPIO ▸ RIO GAMES

Official Netflix Merchandise © Netflix, Inc. 2020

NETFLIX

Alexa, vamos jogar!

"Alexa, abra três porcento"

O Desafio 3%
★★★★½ 92

Explore mundos e mistérios.

"Alexa, abra o Vortex."

Comece aqui ▸

"Alexa, ¿cuáles son tus skills de juegos?"

"Alexa, abre Akinator."

Akinator
★★★★☆ 21,041

"Alexa, abre Escape Room"

Escape Room
★★★★☆ 2,966

"Alexa, jugar Juego de animales"

Juego de animales
★★★★☆ 9,848

"Alexa, abre el vortex"

El Vortex
★★★★☆ 4,963

Lessons Learned

- The right IP can get you fans and platform support

- Localization can pay off

- Challenges: games can't be too complex/hard to communicate

The Vortex The 3% Challenge PAC-MAN™ Waka Waka Voice Quest

Next Iteration:
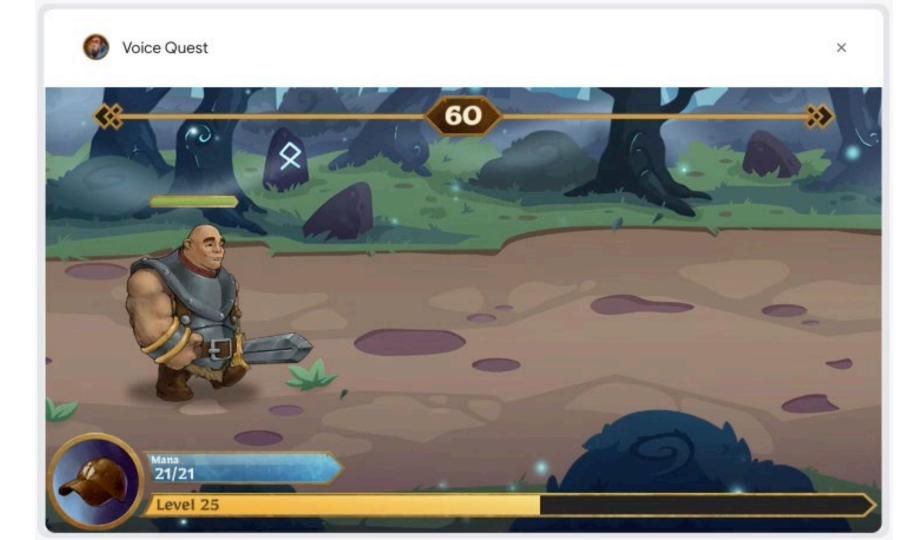# Multimodal, Subscriptions

PAC-MAN™

([WAKA]) WAKA

Lessons Learned

- Screens lead to more engagement

- Visuals help with marketing

- Challenges: Subscriptions can be hard to pull off

The Vortex   The 3% Challenge   PAC-MAN™ Waka Waka   Voice Quest

Next Iteration:
More control over the mic

60

Mana
21/21

Level 25

Lessons Learned

- Our best game in user satisfaction so far

- You can do quite a lot these days!

- Challenge: platform basics still matter

Final Thoughts

Summary

- Big platform with potential, but many challenges remain

- Understand your goals and choose wisely

- You can do quite a lot these days, and things keeps on getting better!