



# **HOW AI CAN HELP SOLVE THE GLOBAL CABIN CREW & AVIATION TALENT SHORTAGE**

Better English - Better Productivity - Better Business



# MY BACKGROUND

**Launched Singapore Airlines AI English Training with ELSA in 2020:** built a proprietary product & program, covering thousands of employees in multiple countries, both cabin crew and ground staff.

**ELSA for Airlines** is the first entirely AI-led English training program with an airline, consisting of 300+ lessons and an announcement grading system custom-trained for Airlines professionals.

**In 2022, partnered with FlyArystan to launch AI training program with first budget airline.**

Experience working with **12 other global airlines** in 10 countries to pilot & define scope of work for using AI in English training.

**Stanford MBA 2018,** focused on technology & entrepreneurship.



Elsa helps **54+ million learners**  
from **190+** countries around the world  
improve their spoken English



**EdtechX Finalist** for top Global  
Edtech Companies,  
2023



**GSV Edtech 150,**  
**CBInsights AI 100**  
2021



Honorable Mention -  
**Fast Company's World**  
**Changing Ideas Awards, 2020**



**Endeavor Network** of High  
Impact Global Entrepreneurs,  
2020



Winner of **South by**  
**SouthWest Edu Launch, 2016**



Winner of "**Best Digital**  
**Learning App**" by Reimagine  
Education, 2016

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 Seiko Gakuin High School



DOSHISHA INTERNATIONAL  
JUNIOR / SENIOR HIGH SCHOOL

 京都大学  
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KANSAI UNIVERSITY  
ELEMENTARY SCHOOL

 HAFecs  
Nurturing Mind. Enriching Knowledge.

 UNION UNIVERSITY  
OF CALIFORNIA

englishbooster\*  
L'anglais augmenté



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# CABIN CREW TALENT SHORTAGE: THE CURRENT LANDSCAPE



A global talent shortage and  
restricted budgets made it

# difficult

for airlines to hire & train enough  
high-quality cabin crew quickly



# TALENT SHORTAGE: THOUSANDS NEEDED IN AVIATION OVER NEXT 20 YEARS, BOEING REPORTS



CONNECTING YOU

PILOT STAFFING SHORTAGE

6:21  
60° 23

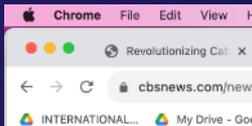
CONNECTING

CURRENTS BURBANK CLEAR 60° HEAT INDEX: 51°

TALENT

ION

# When it comes to staff shortages, don't forget the cabin crew



POLITICS >

## Lingering air demand threatens

BY STEVE DORSEY  
UPDATED ON: SEPTEMBER 13, 2022

22 March 2017



*The industry's pilot shortage is failing to secure top talent candidates, writes Sam*

Shortages of pilots, flight attendants and cabin crew after a turbulent summer since COVID-19 concerns

The unions spoke at a C

Dennis Tajer, an American Airlines pilot and spokesman and pandemic-era furloughs have hamstrung airlines.

"Airlines – including American Airlines – are still suffering from much uncertainty in the fall and winter schedule, that w

As a specialist aviation journalist, I have been discussed at length

## Bloomberg

### Pursuits Travel

## Airline Staff Shortages Threaten to Ruin Millions of Summer Holidays

- Staff let go during Covid don't want another volatile job
- Top airline CEOs will gather to discuss in Doha from Sunday



WATCH: Passengers are facing delays across Europe due to airlines canceling hundreds of flights. Siddharth Philip reports. Source: Bloomberg





Hence the need for airlines to be resourceful and hire in

# emerging markets



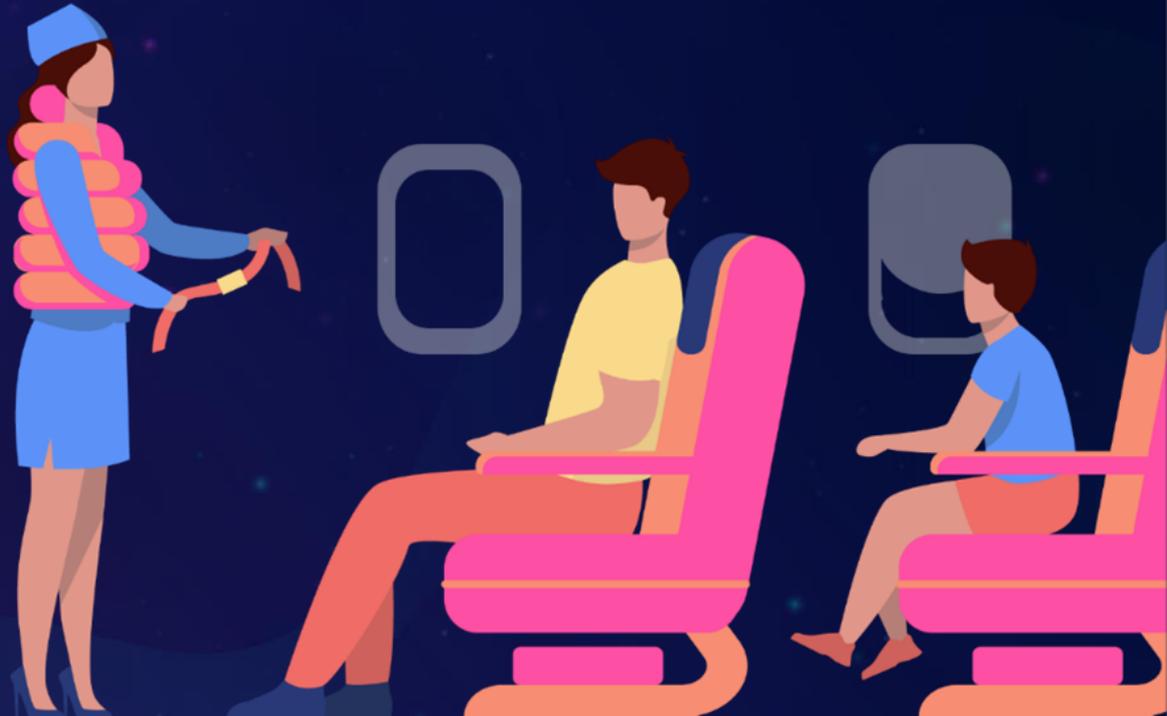
However, new talent in frontier markets may struggle with English skills.



English communication, especially in in-flight announcement, is

# critical

due to passengers' safety and customer satisfaction





English language  
proficiency was a factor for

**75%**

of communication  
problems among foreign  
aircrafts





Long training cycle & poor  
employee retention add up in

# training cost

amidst intense pressure to cut  
costs while maintain training  
quality



**50% of crew leave  
before end of first year.**

**Meanwhile, major airlines spend upwards of \$300,000  
annually on English Testing & Training, with limited  
results**

English Training has to be

**Faster**

**More Effective**

**More Affordable**



# ENGLISH ASSESSMENT & TRAINING IS DIFFICULT TO SCALE UP FAST!



**Accent and pronunciation** is hard to fix.

**Customer satisfaction and safety** highly depend on clear communication from cabin crew & staff.



A large number of employees require **one-on-one** English training and testing, which adds up in **cost**.

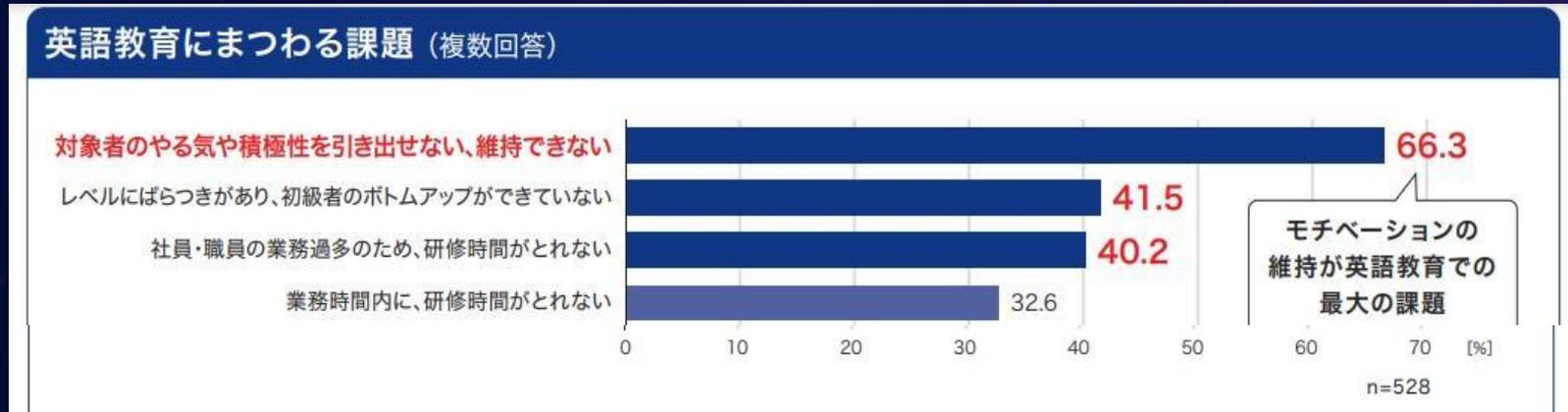


Test score improvements hardly manifest in business KPIs, eg customer satisfaction.

Traditional training doesn't yield positive **ROI**.



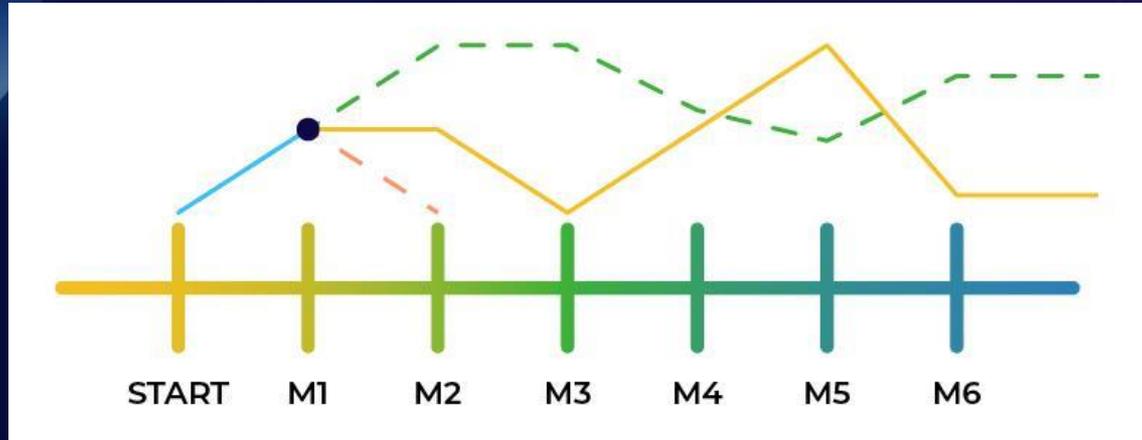
## 2 MAJOR PROBLEMS KEEPING EMPLOYEES FROM IMPROVING ON THEIR ENGLISH: MOTIVATION & TIME



- 2 in 3 employees struggle with motivation to learn English
- 4 in 10 struggle with finding time to practice
- Online and in-person lessons don't keep employees engaged or provide adequate encouragement over time
- Ineffective teaching techniques waste time and leave students discouraged.



## Studying with online or in-person English lessons is an unstable and sporadic learning process



- Employees need continuous and stable instruction with frequent encouragement
- But personalized business coaching is expensive (200,000¥ per session) and not scalable for companies



# ELSA's AI Approach: Pinpointed Personal Feedback & Customized Curriculum at Minimal Cost

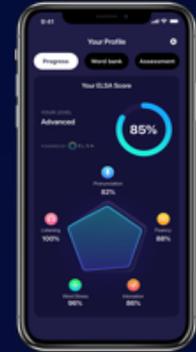


## AI Presentation Coach

Presentation rehearsal practice made possible with AI

## AI Speaking Test

Visualize your current speaking ability with a 10-minute test



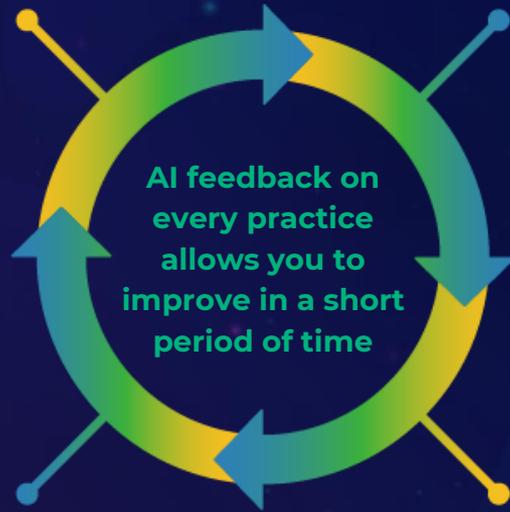
## AI English Conversation

Free English conversation with AI that was previously only possible with a human instructor. **Can study as little or as much as you want.**



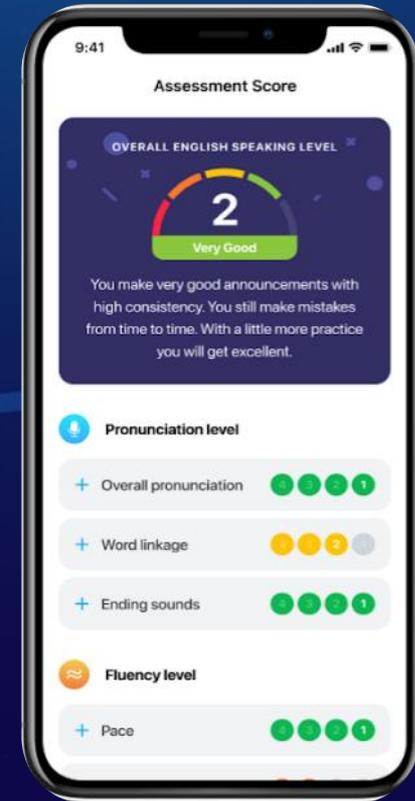
## AI Pronunciation Training

Pronunciation training, the foundation of speaking and listening, is acquired in a short time with the power of AI

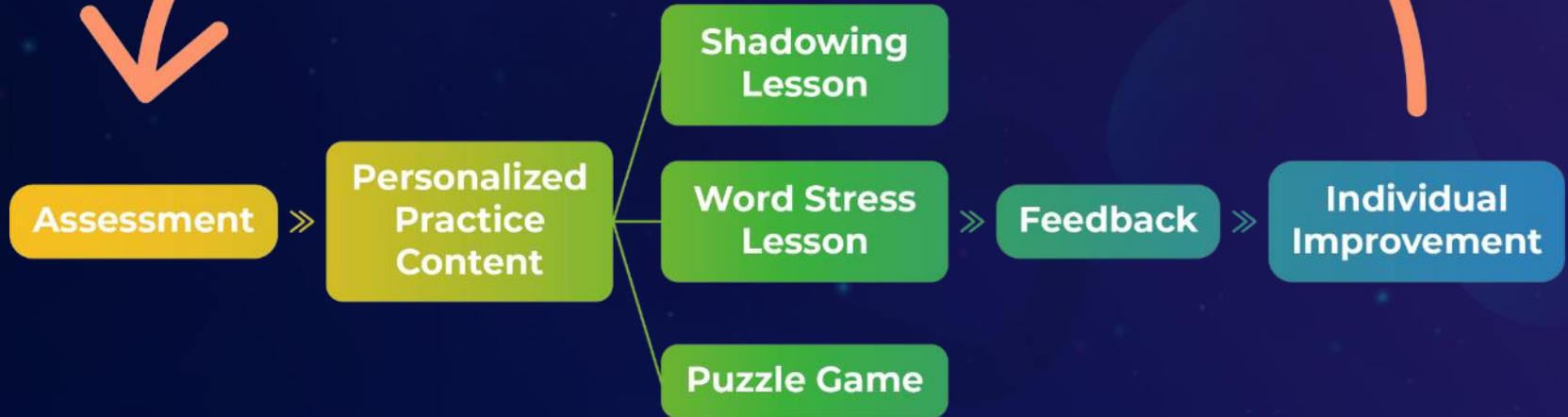


# ELSA AI INTEGRATED IN TESTING & TRAINING

- Using ELSA's A.I to digitize **cabin crew announcement testing and training program.**
- Customized assessment test with customized metrics to test cabin crew's English proficiency, especially the quality of announcement (**pronunciation, fluency, intonation, stress, speed, pitch, and pause, etc.**)
- **Customized airline-focused practice module with commonly used terms & difficult to pronounce terms**
- ELSA Pro access and Dashboard data to measure and keep track of each employee's progress.



# REPEAT



# ELSA's gamification model promotes motivation through attaining goals



Scores at the end of lessons and games push users to improve and gain a higher score



# Addressing Motivation and Confidence Issues

- Practice in the privacy of your own home
- Practice any time you feel comfortable, only 10 minutes a day
- Real work scenario practice with AI, never repeating the same conversation twice, allowing sustained engagement and motivation
- See incremental growth and grow your confidence



# EMPLOYEE ENGAGEMENT AND IMPROVEMENT WITH



## Engagement:

- Top performers (51% of employees) practice **115 minutes/month on average**
- Top performers improve **13% on average (highest improvement: 20%)**
- **54% of employees improved by at least one proficiency level** (scale 1-5) over 6 months

ELSA Levels	English Levels
1-2	Advanced
3	Upper Intermediate
4-5	Lower Intermediate





# EMPLOYEE ENGAGEMENT AND IMPROVEMENT WITH



Learner	First Level	Last Level	Overall Score Improvement	Total Lessons	Total Time (Minutes)
Employee 1	5	2	+3	57	65
Employee 2	4	2	+2	224	420
Employee 3	4	2	+2	19	21
Employee 4	4	2	+2	31	55
Employee 5	5	4	+1	735	840
Employee 6	3	2	+1	720	1480
Employee 7	3	2	+1	195	225
Employee 8	4	3	+1	72	108
Employee 9	3	2	+1	31	45
Employee 10	2	1	+1	2543	3432

## Student CEFR Level Improvement with Only 10 Minutes of Study/ Day

Improvement Range	Average Hours Spent
A1 to B2	40 - 50 hours (10 months)
A2 to B2	20 hours (4 months)
B1 to B2	15 hours (3 months)
A1 to C1	60 - 80 hours (16 months)
A2 to C1	49 hours (10 months)
B1 to C1	41 hours (8 months)
B2 to C1	20 hours (4 months)

*\*Based on average study time of 10 minutes/day on ELSA*



# CONCLUSION



Increasing competition in the industry, coupled with talent shortage, leads to increased pressure to innovate to address the challenges of traditional training methods



Addressing the generational & economic shift is important for the next stage in the aviation business.

Finding creative solutions to source, train and retain staff would be key to ensuring strong service quality & brand image in the age of AI.



AI can help scale and streamline training, while personalizing for each person's strengths and weaknesses. The impact is saving hundreds of 000's in training cost while increasing effectiveness and multiplying the number of trainees in the same amount of time.





**Thank you!**