Go Data Races Explained

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Concurrency in Go

Goroutines provide for easy access to concurrency in Go

Given example is a case of how Go Data Races happen

```
func race() {
       wait := make(chan struct{})
       n := 0
        go func() {
                n++ // read, increment, write
                close(wait)
        }()
        n++ // conflicting access
        <-wait
        fmt.Println(n) // Output: ?
```

Why are we talking about this now and why is this important?

AWS S3 Downloader Bug for History Service:

MR Link



1. By Reference

This section deals with Go's ability to capture variables by reference in Goroutines

- → Loop Index variable capture

 Highlight what's new, unusual, or

 surprising.
- → Idiomatic 'err' variable capture
 Give people a reason to care.
- → Named return variable capture

 Provide a simple unifying message for what is to come

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2. Examples

By the end of this section, your audience should be able to visualize:

→ What

What is the pain you cure with your solution?

→ Who

Show them a specific person who would benefit from your solution.

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Just one! Your own.

(With a little help from your smart phone)



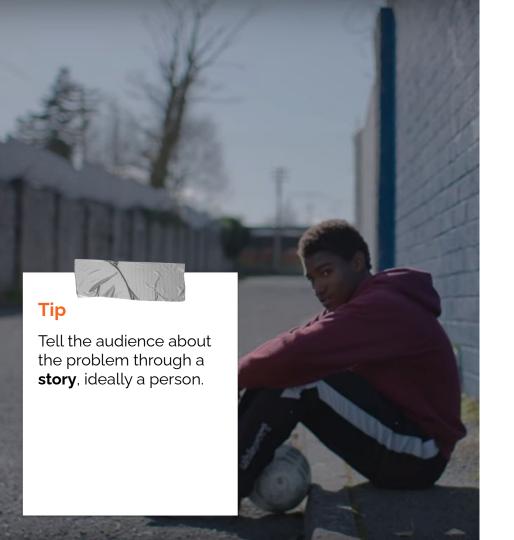
Tip

Remember. If something sounds like common sense, people will ignore it.

Highlight what is unexpected about your topic.

The Google Translate app can repeat anything you say in up to **NINETY LANGUAGES** from German and Japanese to Czech and Zulu





Meet Alberto.

He recently moved from Spain to a small town in Northern Ireland.

He loved soccer, but feared he had no way to talk to a coach or teammates.

Meet Marcos.

He recently opened a camera shop near the Louvre in Paris.

Visitors to his store, mostly tourists, speak many different languages making anything beyond a simple transaction a challenge.



A translation barrier left Alberto feeling lonely and hurt Marco's business.



Tip

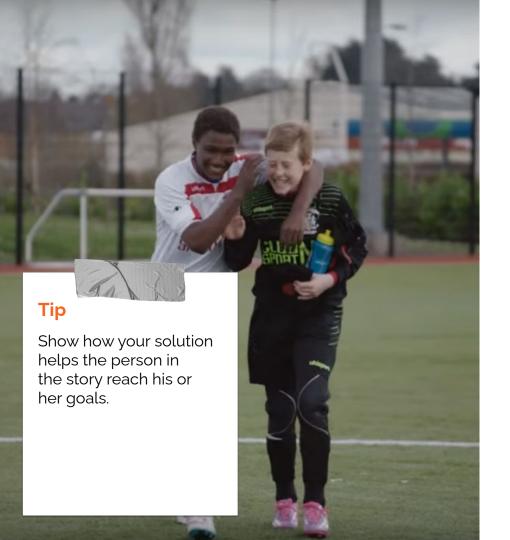
Ideally, speak of people in very different situations, but where each could benefit from your solution.

Then, Marcos discovered Google Translate

He has his visiting customers speak their camera issues into the app.

He's able to give them a friendly, personalized experience by understanding exactly what they need.





A simple gesture

Coaches Gary and Glen knew no Spanish.

They used Google Translate to invite Alberto to join in... "Do you want to play?"... "Can you defend the left side?"

From outsider to star

Alberto scored 30 goals in 21 games. He is now being scouted by several professional clubs in the Premier League. And he's a favorite of the other boys on the team.

See a short video on Alberto's story



Stories become more credible when they use concrete details such as the specific complex moves Alberto learned through Translate and his 30 goals in 21 games performance stats.



3. Examples

People need to understand how rare or frequent your examples are.

Pick 1 or 2 statistics and make them as concrete as possible. Stats are generally not sticky, but here are a few tactics:

→ Relate

Deliver data within the context of a story you've already told

→ Compare

Make big numbers digestible by putting them in the context of something familiar _

It's no surprise Marcos uses Google Translate in his shop regularly.

There are 23 officially recognized languages in the EU.



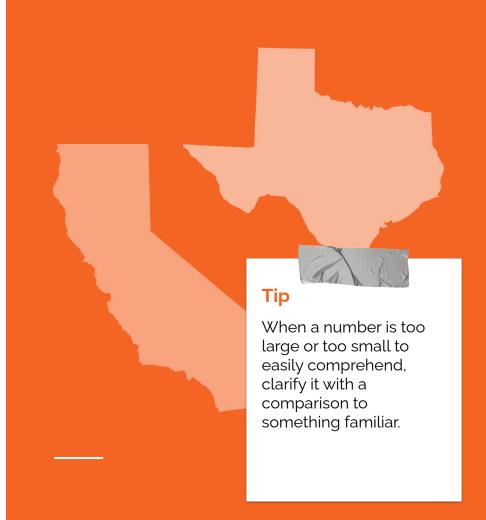
Tip

Don't let data stand alone. Always relate it back to a story you've already told, in this case, Marco's shop.

Source: theguardian.com

More than 50 million Americans travelled abroad in 2015

POPULATION OF CALIFORNIA AND TEXAS COMBINED



Source: travel.trade.gov



4. Closing

Build confidence around your product or idea by including at least one of the these slides:

→ Milestones

What has been accomplished and what might be left to tackle?

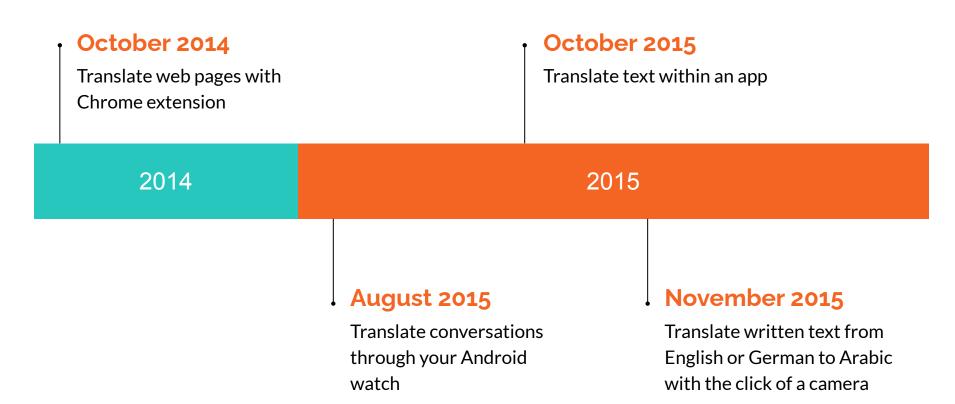
→ Testimonials

Who supports your idea (or doesn't)?

→ What's next?

How can the audience get involved or find out more?

Milestones



What people are saying

With this app, I'm confident to plan a trip to rural Vietnam

Wendy Writer, CA

Visual translation feels like magic

Ronny Reader, NYC

Translate has officially inspired me to learn French

Abby Author, NYC

Know a 2nd language? Make Google Translate even better by joining qiT the community. Inspire your audience to

act on the information they just learned.

Depending on your idea, this can be anything from downloading an app to joining an organization.



Good luck!

We hope you'll use these tips to go out and deliver a memorable pitch for your product or service!

For more (free) presentation tips relevant to other types of messages, go to heathbrothers.com/presentations

For more about making your ideas stick with others, check out our book!

