

Das Auto

Group D

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Long commutes are a waste of
time

Predispositions

Make the most of your commute

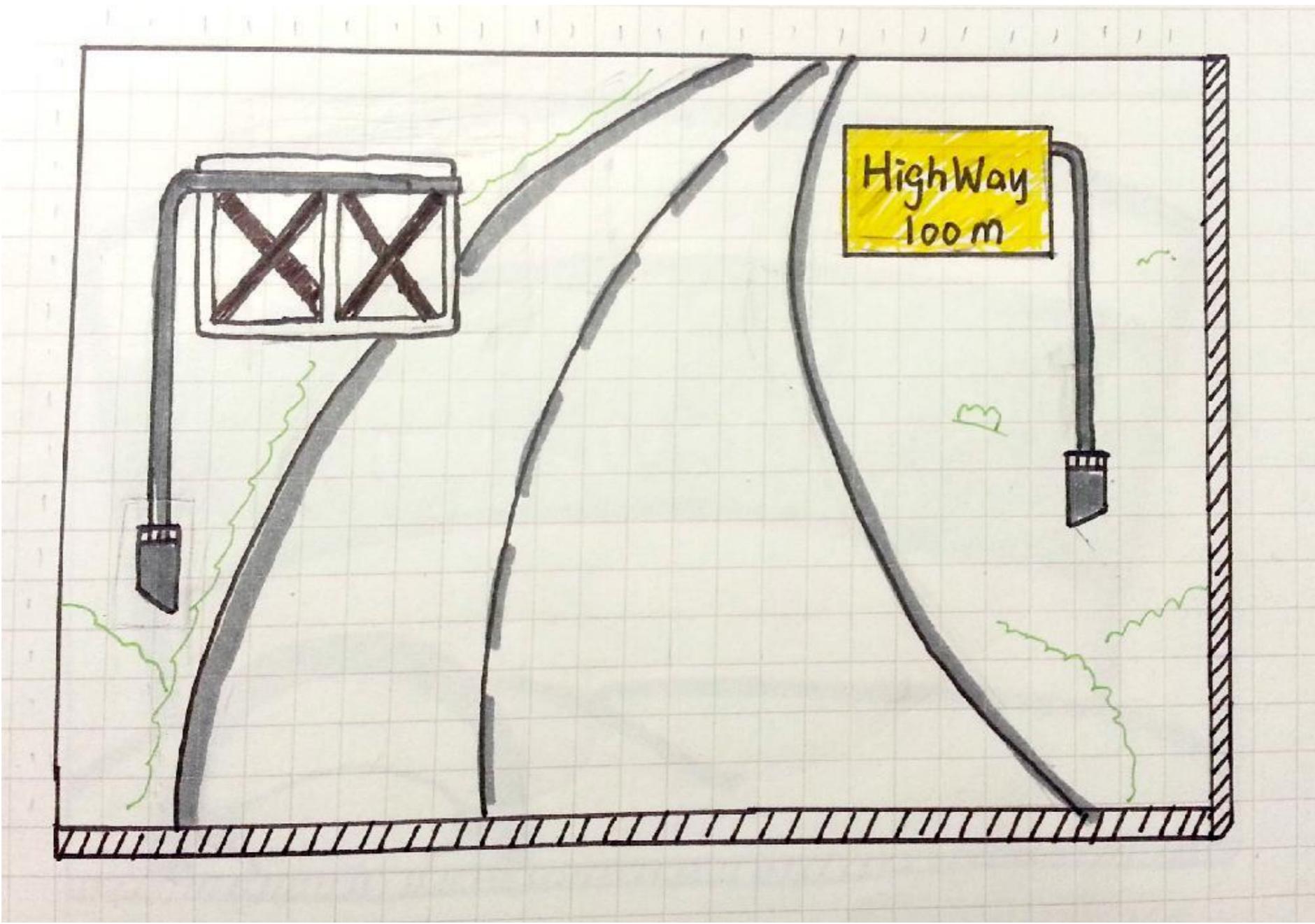


Core and Target Group

“A Tesla car next year will be 90% capable of autopilot [on highways].”
- Elon Musk, 2014

“If possible I’d schedule all conference calls in my travel time, so that I can schedule more important meetings that require my physical presence once I reach work”
- Interviewee, 2014

Workstation on the highway



Insights

Level of Autonomy: 3.0

Time frame: 15 years

Safety system

Virtual Machine

Assumptions

Workstation



Email



Skype



Browser



My Files

Traffic

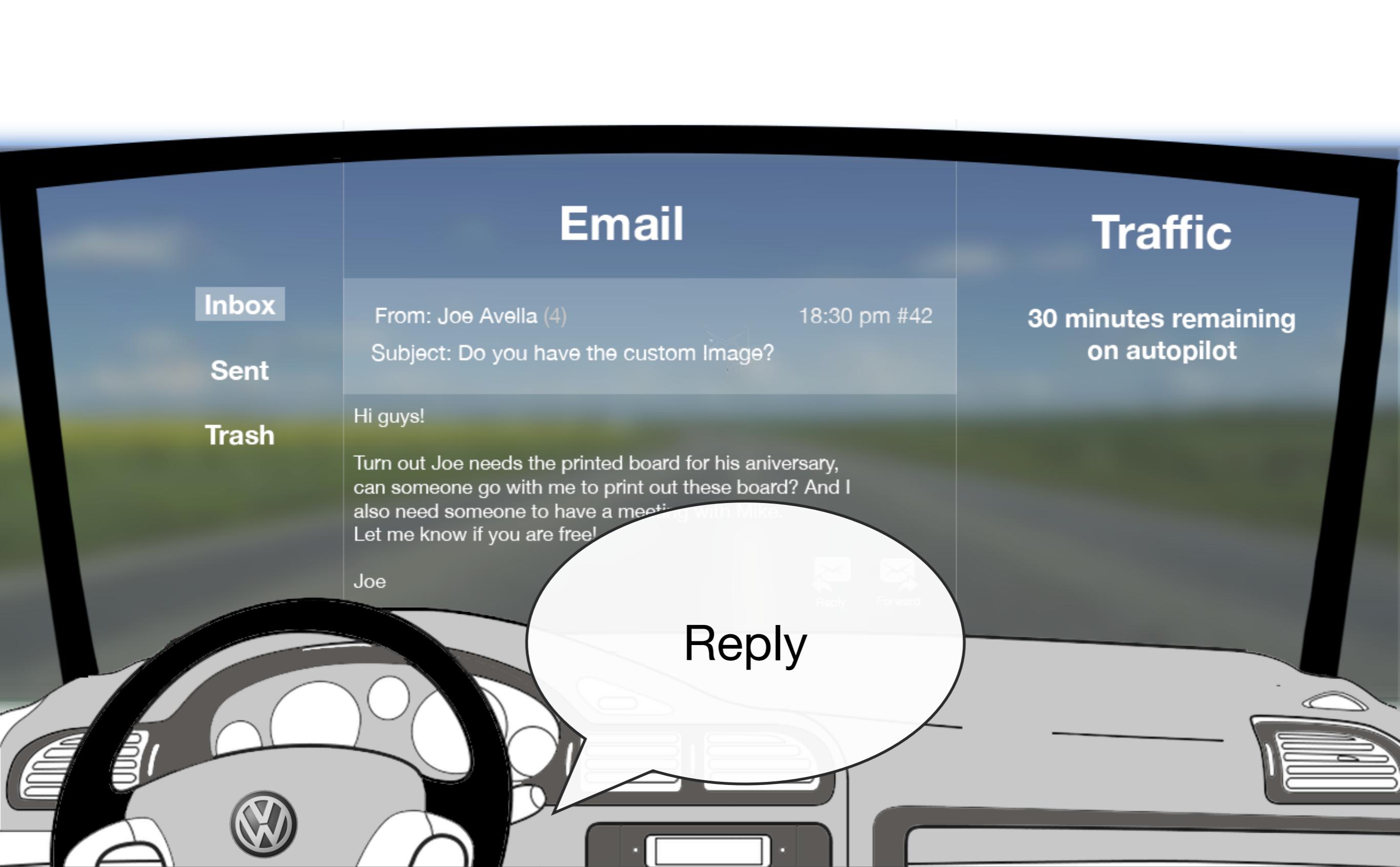
30 minutes remaining
on autopilot

Email

Final Design



Final Design



Final Design

Email

Inbox

To: Joe Avella (4) 18:30 pm #42

Subject:RE: Do you have the custom Image?

Sent

Trash

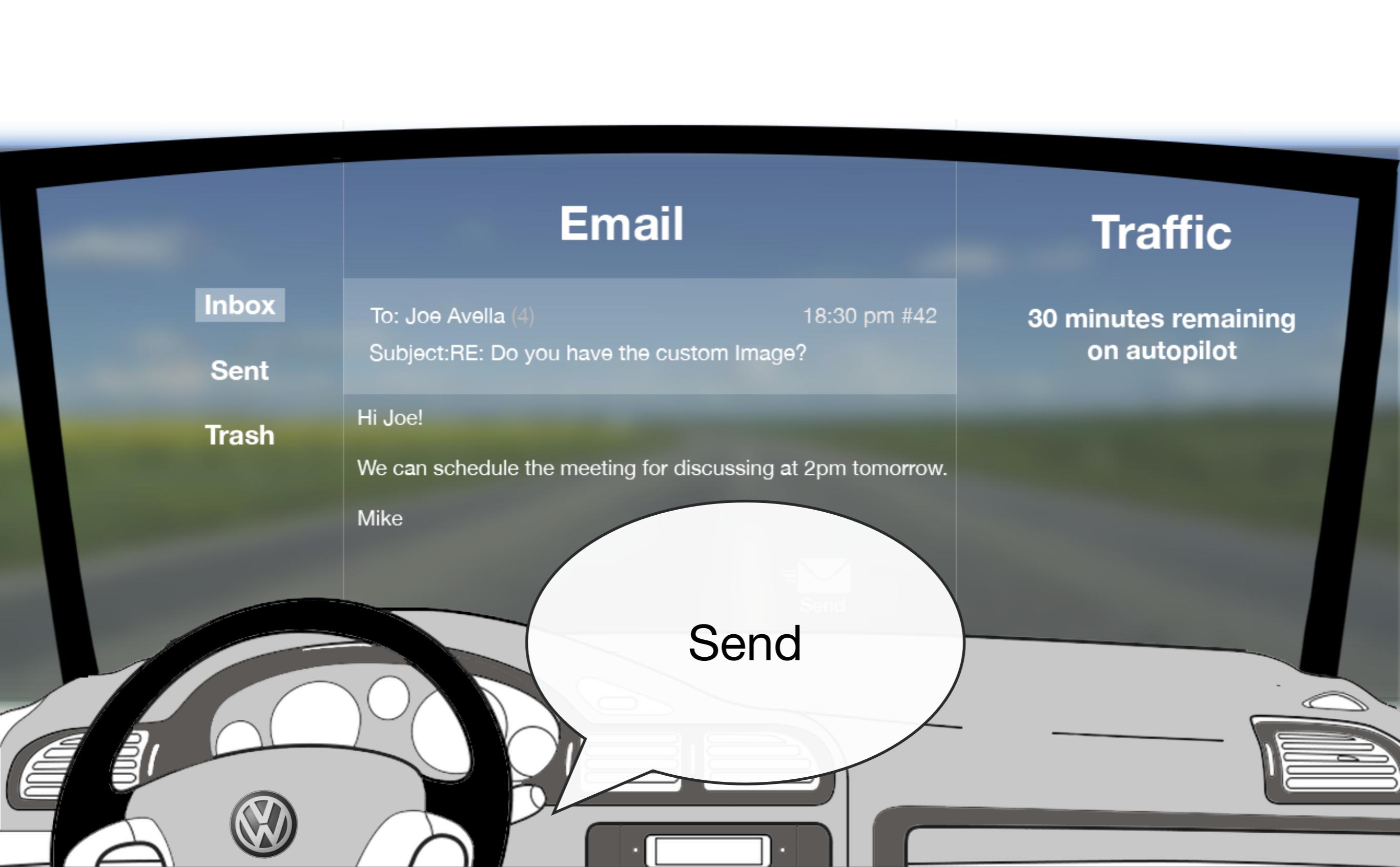
RE:

Traffic

30 minutes remaining
on autopilot

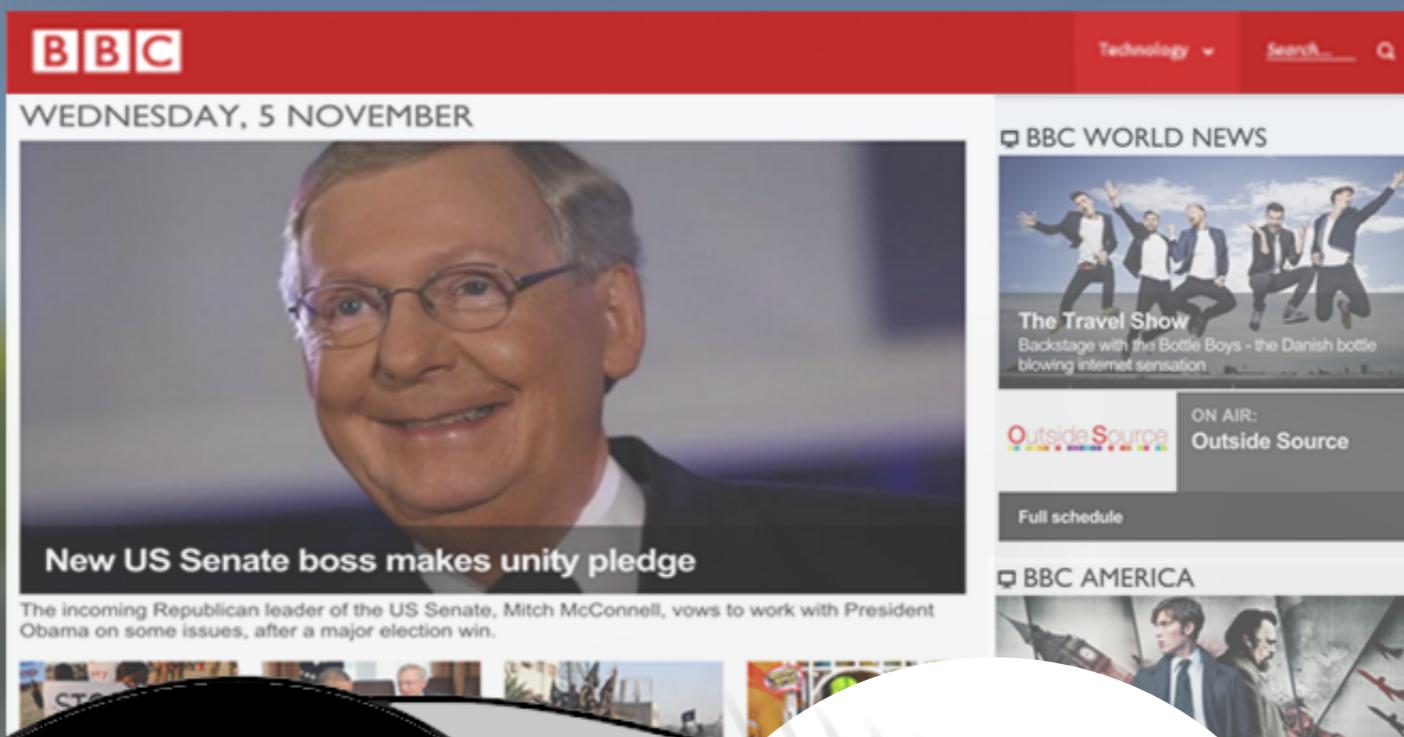
Hi Joe!

Final Design



Final Design

Browser

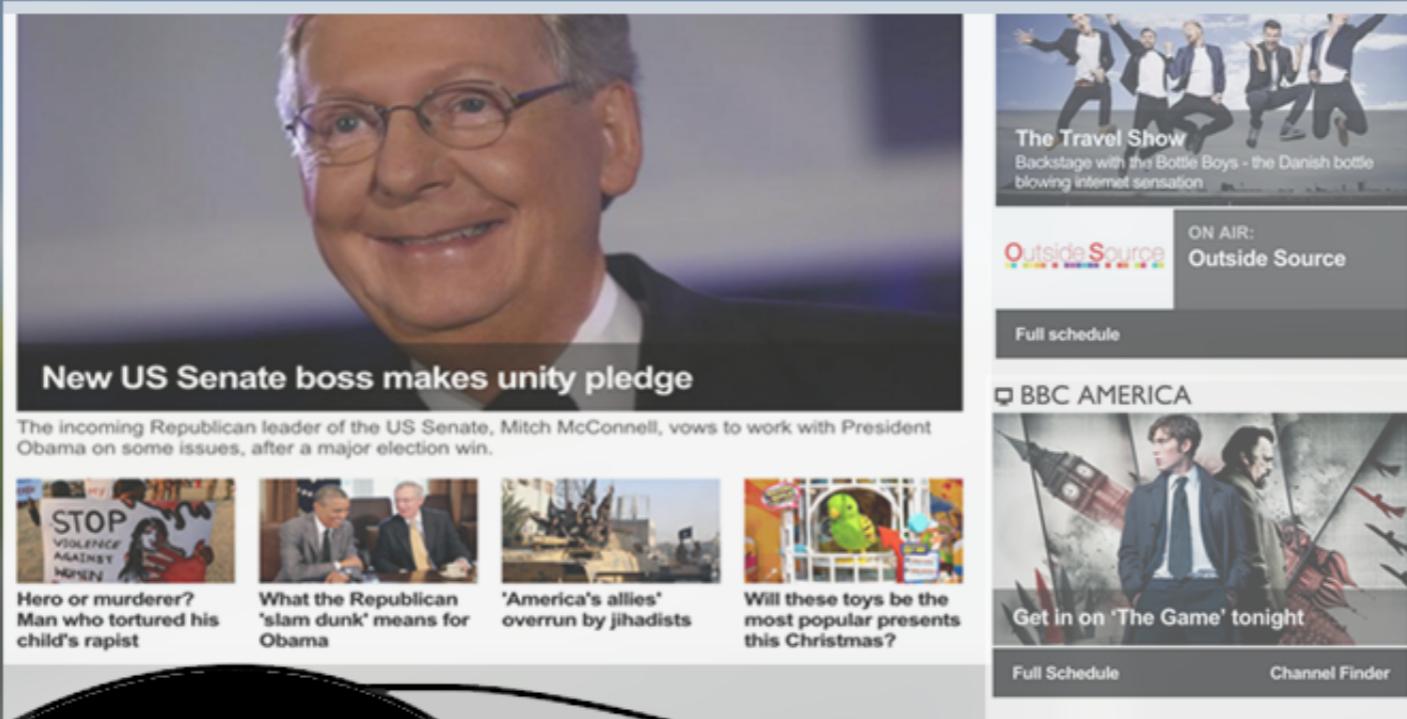


Traffic

25 minutes remaining
on autopilot

Final Design

Browser

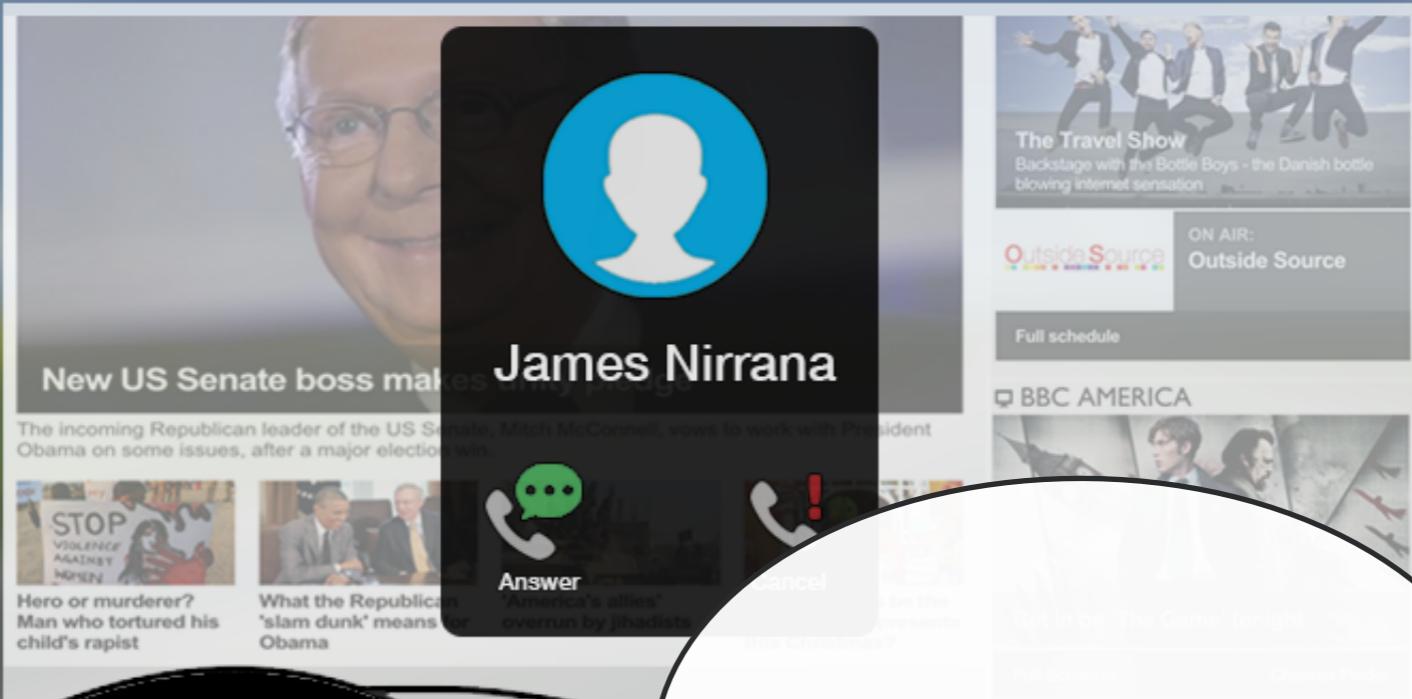


Traffic

25 minutes remaining
on autopilot

Final Design

Browser



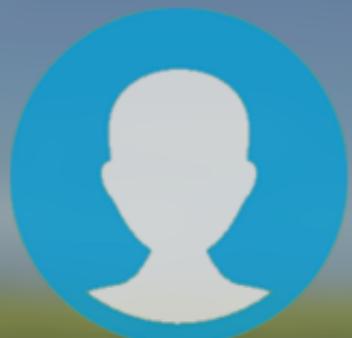
Traffic

25 minutes remaining
on autopilot

Answer call

Final Design

Skype



James Nirrana
02:13

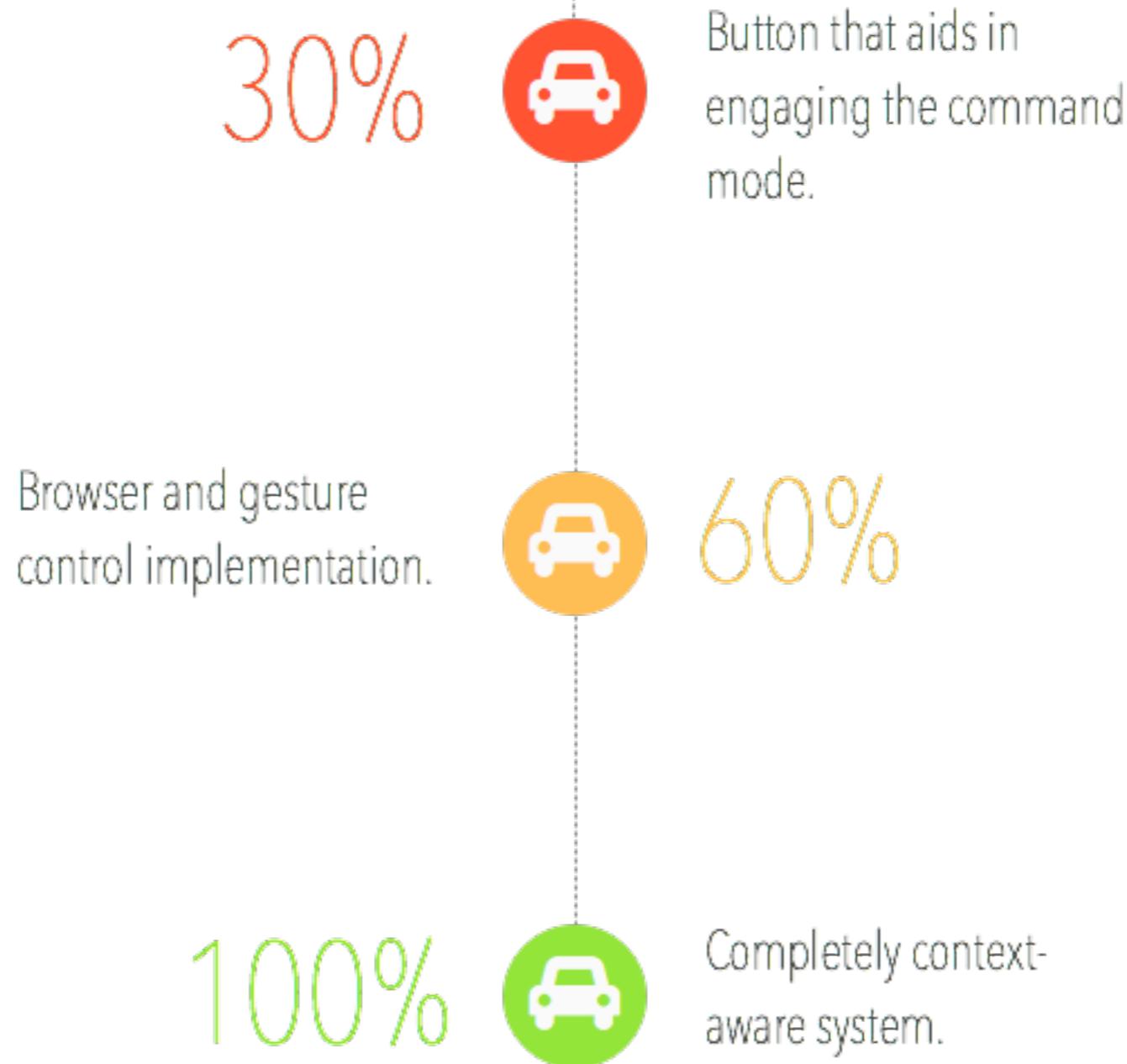
End Call

Traffic

22 minutes remaining
on autopilot

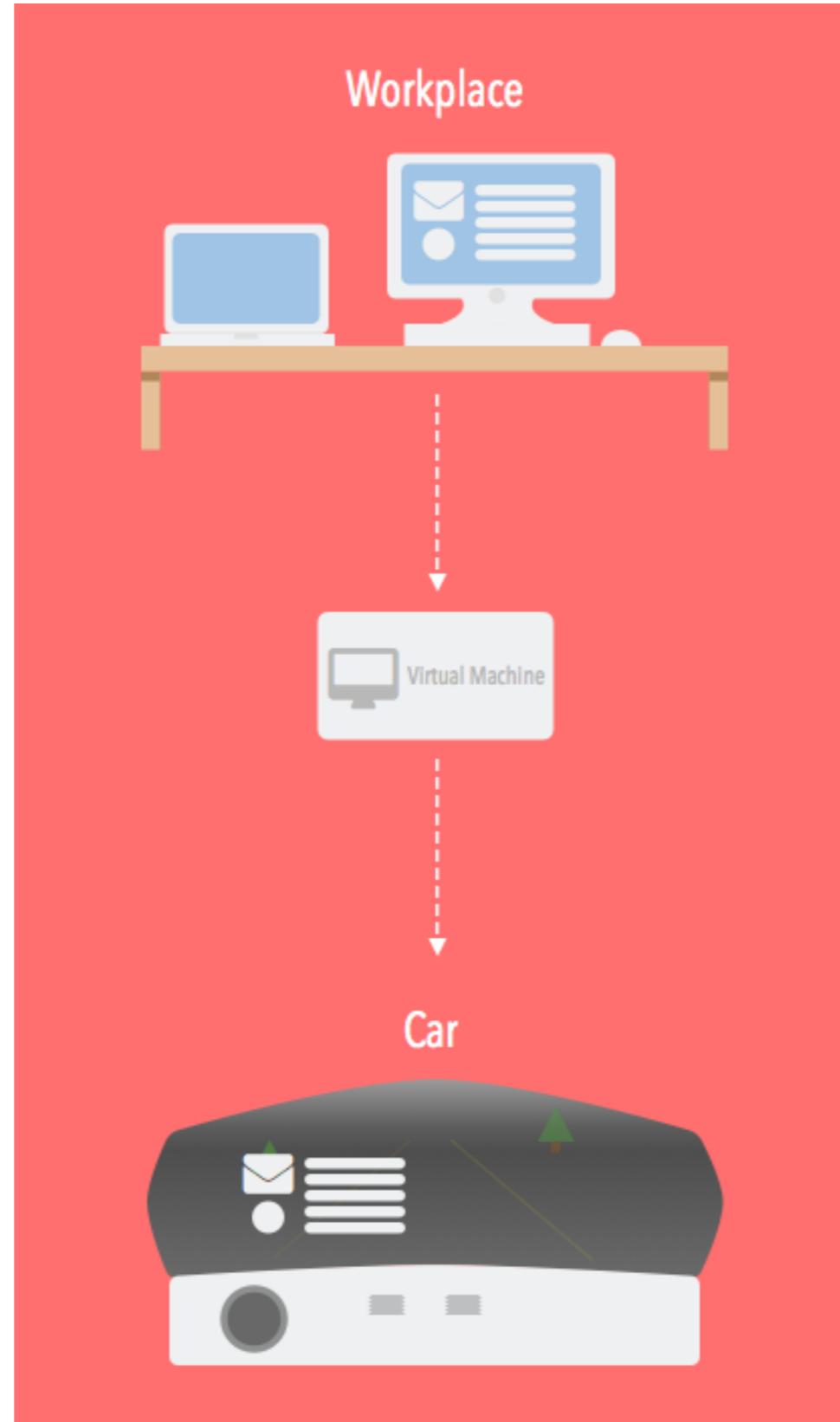
End Call

Final Design



Strategies

Thank you!
Questions?



Appendix - Virtual Machine System

Table 1: U.S. Crash Motor Vehicle Scope and Selected Human and Environmental Factor Involvement

Total Crashes per year in U.S. ¹¹	5.5 million
% human cause as primary factor ¹²	93%
Economic Costs of U.S. Crashes ¹³	\$300 billion
% of U.S. GDP ¹⁴	2%
Total Fatal & Inurious Crashes per Year in U.S.	2.22 million
Fatal Crashes per Year in U.S. ¹⁵	32,367
% of fatal crashes involving alcohol	31%
% involving speeding	30%
% involving distracted driver	21%
% involving failure to keep in proper lane	14%
% involving failure to yield right-of-way	11%
% involving wet road surface	11%
% involving erratic vehicle operation	9%
% involving inexperience or overcorrecting	8%
% involving drugs	7%
% involving ice, snow, debris, or other slippery surface	3.7%
% involving fatigued or sleeping driver	2.5%
% involving other prohibited driver errors (e.g. improper following, driving on shoulder, wrong side of road, improper turn, improper passing, etc.)	21%

“Autonomous vehicles have the potential to dramatically reduce crashes. Table 1 highlights the magnitude of automobile crashes in the United States, and indicates sources of driver error that may disappear as vehicles become increasingly automated.”

Source: ENO - Center for Transportation

Workstation



Email



Skype



Browser



My File

Traffic

5 minutes remaining
on autopilot

5 minutes until control is required!

GOOGLE'S SELF-DRIVING CAR CAN'T NAVIGATE HEAVY RAIN OR MOST ROADS

Source: MIT Technology
Review

Appendix - Time frame

“Limited Self-Driving Automation (Level 3): Vehicles at this level of automation enable the driver to cede full control of all safety-critical functions **under certain traffic or environmental conditions** and in those conditions to rely heavily on the vehicle to monitor for changes in those conditions requiring **transition back to driver control**. The driver is expected to be available for occasional control, but with sufficiently comfortable transition time. The Google car is an example of limited self-driving automation.”

Source: NHTSA (National Highway Traffic Safety Administration

Appendix - Level of Autonomy

- Volkswagen logo: http://upload.wikimedia.org/wikipedia/commons/1/1a/Volkswagen_Logo.png
- <http://cleantechica.com/2014/10/07/elon-musk-tesla-capable-90-autopilot-next-year/>
- <https://3d-car-shows.com/wp-content/uploads/2013/01/Volkswagen-Car-Sales.jpg>
- <http://findicons.com/>
- <http://www.computerworld.com/article/2486635/emerging-technology/self-driving-cars-could-save-more-than-21-700-lives-450b-a-year.html>

References