

#Tech4GoodBTN



The hitch-hiker's guide to human-centred design

Tech4Good, Brighton
3 December 2018

Richard Rutter
Cofounder, Clearleft



THE
HITCHHIKERS
GUIDE TO THE
GALAXY

By DOUGLAS ADAMS



WIKIPEDIA
The Free Encyclopedia

navigation

- [Main page](#)
- [Contents](#)
- [Featured content](#)
- [Current events](#)
- [Random article](#)
- [Donate to Wikipedia](#)
- [Wikipedia store](#)

search

interaction

- [Help](#)
- [About Wikipedia](#)
- [Community portal](#)
- [Recent changes](#)
- [Contact page](#)

tools

[article](#)[talk](#)[edit this page](#)[history](#)[watch](#)[Clagnut](#)[talk](#)[sandbox](#)[preferences](#)[beta](#)[watchlist](#)[contributions](#)[log out](#)

Earth

From Wikipedia, the free encyclopedia

This article is about the planet itself. For its human aspects, see [World](#). For other uses, see [Earth \(disambiguation\)](#) and [Planet Earth \(disambiguation\)](#).

Earth is the third [planet](#) from the [Sun](#) and the only [astronomical object](#) known to harbor [life](#). According to [radiometric dating](#) and other sources of evidence, Earth [formed](#) over 4.5 [billion years ago](#).^{[24][25][26]} Earth's [gravity](#) interacts with other objects in space, especially the Sun and the [Moon](#), Earth's only [natural satellite](#). Earth [revolves around the Sun](#) in 365.26 days, a period known as an Earth [year](#). During this time, Earth [rotates about its axis](#) about 366.26 times.^[n 5]

Earth's [axis of rotation](#) is tilted with respect to its orbital plane, producing [seasons](#) on Earth.^[27] The [gravitational interaction](#) between Earth and the Moon causes [ocean tides](#), stabilizes Earth's orientation on its axis, and gradually slows its rotation.^[28] Earth is the densest planet in the [Solar System](#) and the largest of the four [terrestrial planets](#).

Earth's [lithosphere](#) is divided into several rigid [tectonic plates](#) that migrate across the surface over periods of many millions of years. About 71% of Earth's surface is [covered with water](#), mostly by [oceans](#).^[29] The remaining 29% is [land](#) consisting of [continents](#) and [islands](#) that together have many lakes, rivers and other sources of water that contribute to the [hydrosphere](#). The majority of [Earth's polar regions](#) are covered in ice, including the [Antarctic ice sheet](#) and the sea

Earth ⊕



The Blue Marble photograph of Earth, taken during the [Apollo 17](#) lunar mission in 1972

Orbital characteristics

Epoch J2000^[n 1]

Aphelion

152 100 000 km^[n 2]

(94 500 000 mi; 1.017 AU)



WIKIPEDIA
The Free Encyclopedia

navigation

- [Main page](#)
- [Contents](#)
- [Featured content](#)
- [Current events](#)
- [Random article](#)
- [Donate to Wikipedia](#)
- [Wikipedia store](#)

search

interaction

- [Help](#)
- [About Wikipedia](#)
- [Community portal](#)
- [Recent changes](#)
- [Contact page](#)

tools

[Clagnut](#)



[talk](#)

[sandbox](#)

[preferences](#)

[beta](#)

[watchlist](#)

[contributions](#)

[log out](#)

[article](#)

[talk](#)

[edit this page](#)

[history](#)

[watch](#)

Earth

From Wikipedia, the free encyclopedia

This is an **old revision** of this page, as edited by [lboughttoomanygames](#) ([talk](#) | [contribs](#)) at 02:29, 14 May 2017 (*← Replaced content with 'Mostly harmless. Also a miserable little rock that's now a concrete parking lot.'*). The present address (URL) is a **permanent link** to this revision, which may differ significantly from the **current revision**.

[\(diff\)](#) | [Previous revision](#) | [Latest revision](#) ([diff](#)) | [Newer revision](#) → ([diff](#))

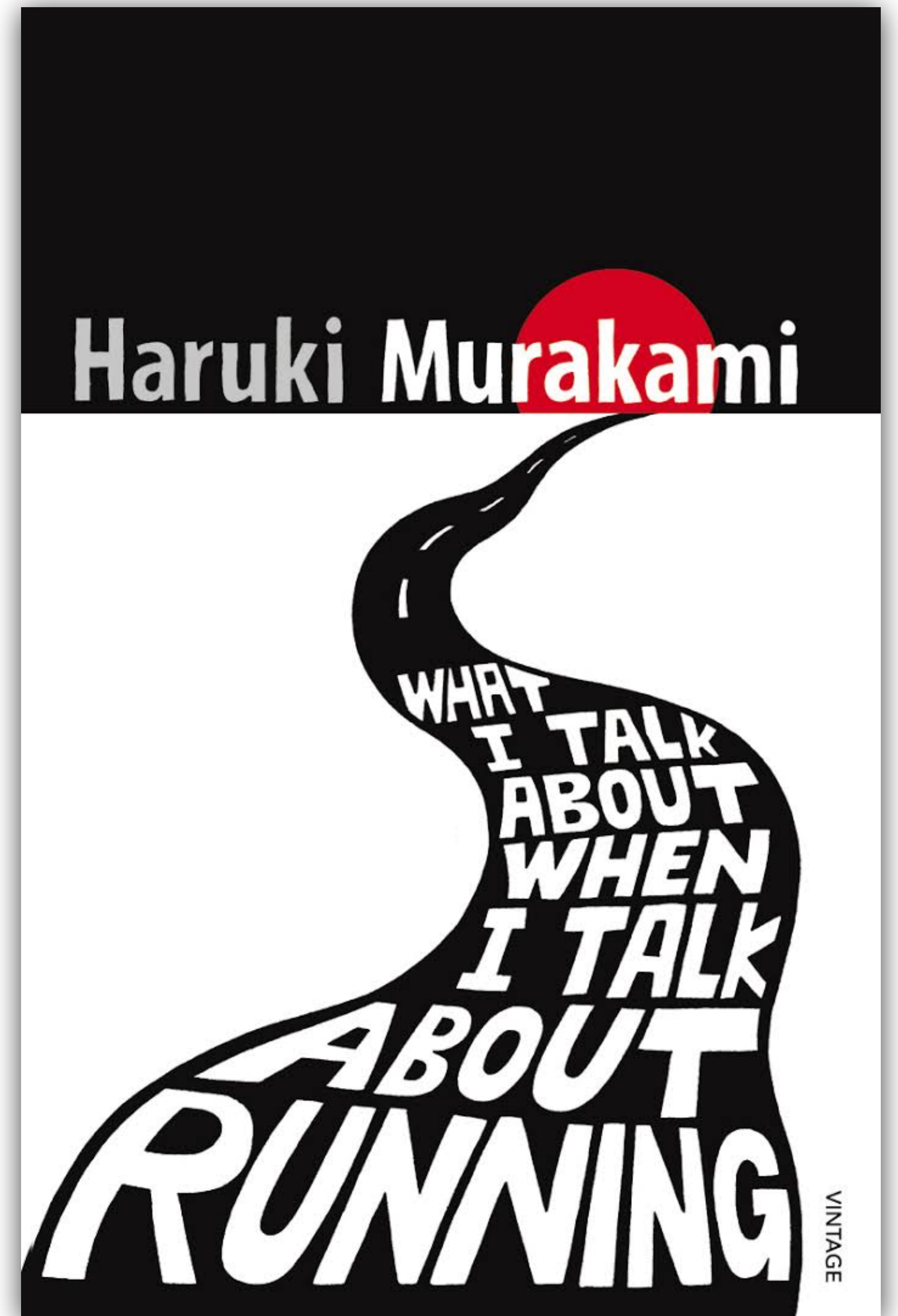
Mostly harmless.

Haruki Murakami

WHAT
I TALK
ABOUT
WHEN
I TALK
ABOUT
RUNNING

VINTAGE

***"Pain is inevitable.
Suffering is optional."***



Bigbelly

80% of litter
in the **Sea** comes
from **land**

Brighton & Hove
#StreetsAhead



 Brighton & Hove
City Council



Report a problem

Problem type *

- Broken street furniture
- Cleaning / fly-tipping
- Dead animal
- Graffiti or fly-posting
- Problem with gully or drain
- Street lamp

Please tick all that apply:

Priority statements

- There is a serious risk to public safety
- There is an obstruction to traffic
- This is a health hazard near a school or playground

Other statements

- The animal is a badger
- The animal is a cat
- The animal is a deer
- The animal is a dog
- The animal is a fox
- The animal is a reptile
- The animal is a rodent
- The animal is a seagull
- The animal is a sheep
- The animal is an other bird
- The animal is an other farm animal
- The animal is an other mammal

Next

Cancel



Nearest street *

Please give us the street, or the nearest street, to where the problem is.

Previous

Next

Cancel



Please select a point on the map

Nearest street *

You must enter a value for this field


Please give us the street, or the nearest street, to where the problem is.



Please complete the form below to register your request, enquiry, praise or feedback. This information will be used to process your report and will not be used for any other purpose.

Your details

Title

First name *

Last name *

Postcode or building and street

Search

Email address *

Mobile phone number



Report a problem

Problem type *

- Broken street furniture
- Cleaning / fly-tipping
- Dead animal
- Graffiti or fly-posting
- Problem with gully or drain
- Street lamp

Please tick all that apply:

Priority statements

- There is a serious risk to public safety
- There is an obstruction to traffic
- This is a health hazard near a school or playground

Other statements

- The animal is a badger
- The animal is a cat
- The animal is a deer
- The animal is a dog
- The animal is a fox
- The animal is a reptile
- The animal is a rodent
- The animal is a seagull
- The animal is a sheep
- The animal is an other bird
- The animal is an other farm animal
- The animal is an other mammal

Next

Cancel

The question protocol

The Question Protocol

1. Why do you need this information?
2. Who will use the information, and what decision will be made or action taken based on the information collected?
3. How will you validate the information that is submitted?
4. What happens if the submitted information is false or made up?
5. What's the impact of the information not being submitted?
6. What happens if the information goes out of date?
7. Can a customer update their submitted information? Should they be able to?
8. Are you allowed (legally and ethically) to collect this information?
9. How is it shared? With whom? What are the privacy implications?
10. How securely does it need to be stored?

The Question Protocol

Is the question really *necessary*?

The Question Protocol: costs

1. An impairment to accurate completion of the process
2. Collecting, storing and processing any additional information
3. Handling situations where the information is missing, false or inconsistent.



Champions grease the wheels of change.

**They are obstacle clearers, problem
insulators and praise singers.**

Help your champion:
Get the design message across
Tell a convincing story
Look good





Report a problem

Problem type *

- Broken street furniture
- Cleaning / fly-tipping
- Dead animal
- Graffiti or fly-posting
- Problem with gully or drain
- Street lamp

Next

Cancel



Report a problem

Problem type *

- Broken street furniture
- Cleaning / fly-tipping
- Dead animal
- Graffiti or fly-posting
- Problem with gully or drain
- Street lamp

Please tick all that apply:

Priority statements

- There is a serious risk to public safety
- There is an obstruction to traffic
- This is a health hazard near a school or playground

Next

Cancel



Report a problem

Problem type *

- Broken street furniture
- Cleaning / fly-tipping
- Dead animal
- Graffiti or fly-posting
- Problem with gully or drain
- Street lamp

Please tick all that apply:

Priority statements

- There is a serious risk to public safety
- There is an obstruction to traffic
- This is a health hazard near a school or playground

Other statements

- The animal is a badger
- The animal is a cat
- The animal is a deer
- The animal is a dog
- The animal is a fox
- The animal is a reptile
- The animal is a rodent
- The animal is a seagull
- The animal is a sheep
- The animal is an other bird
- The animal is an other farm animal
- The animal is an other mammal

Next

Cancel



Please select a point on the map

Nearest street *

You must enter a value for this field


Please give us the street, or the nearest street, to where the problem is.



Please complete the form below to register your request, enquiry, praise or feedback. This information will be used to process your report and will not be used for any other purpose.

Your details

Title

First name *

Last name *

Postcode or building and street

Email address *

Mobile phone number

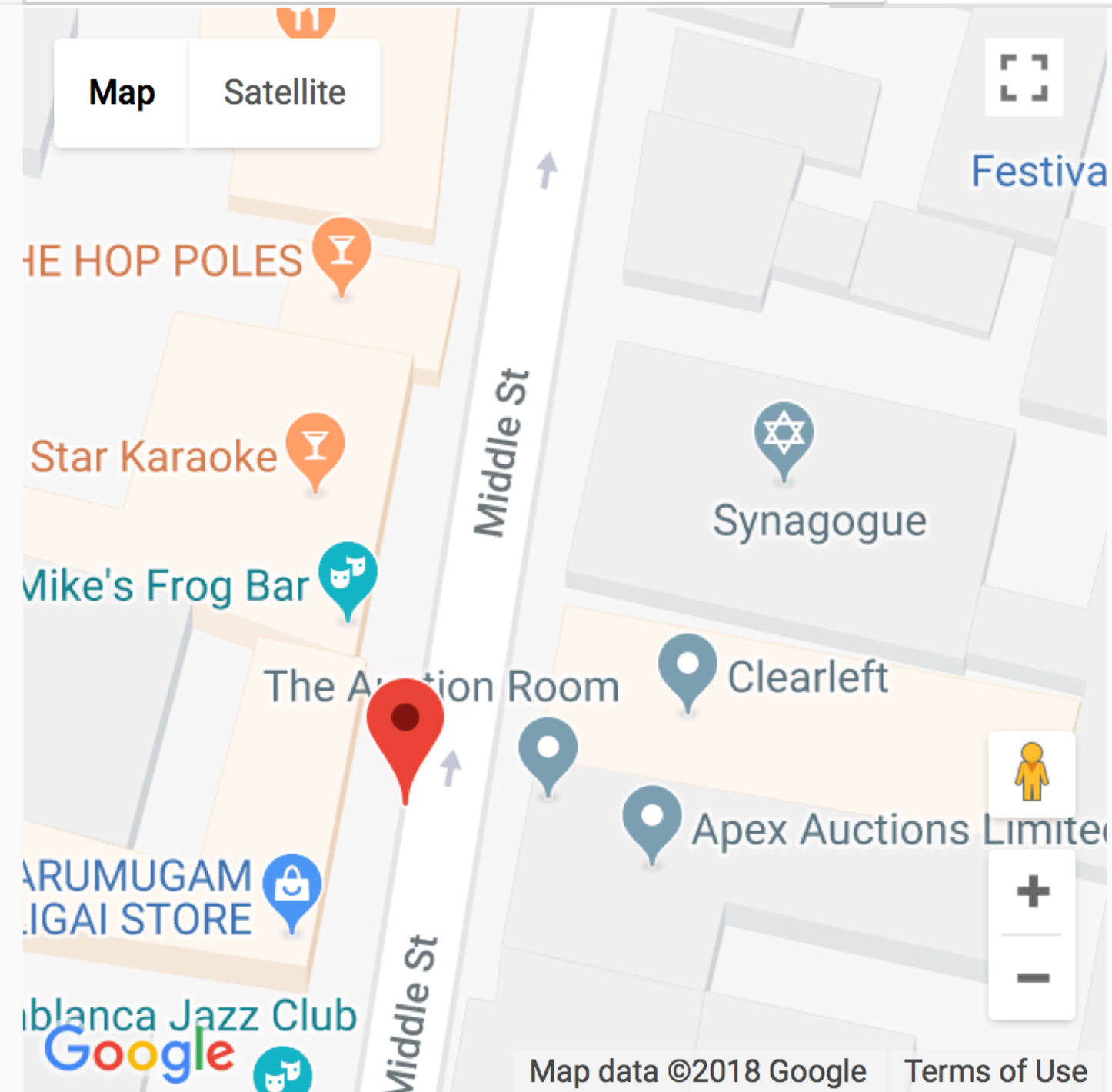
Locate on map

Yes No

Use the search box below to find an address or landmark. Please help us out by dragging the marker to the location where the problem is.

Search address

Search



Use current location

Do you think the problem is hazardous or an emergency? *

- Yes No

What is the problem?

- Needles and/or drugs litter
- Asbestos
- Spilled blood
- Broken glass
- Spilled oil or fuel
- Dead animal
- Offensive Graffiti
- Other

NEW [What's this?](#)

Report a problem and request a clean-up

Contact details

You do not have to provide your contact details. However, if you do we can:

- let you know when we have fixed the problem
- contact you if we need to find out more about the problem

Full name

Email



Upper Hollingdean Rd

Brighton & Hove City Clean

Malpass Market

Davey Dr

Upper Hollingdean Rd

Wigmore




Brighton & Hove
City Council

✓ Please do not
load more than
the weight limit
indicated on the
load capacity
plate
✓ Do not use the
trailer for
carrying
flammable
liquids
X Do not
use the
trailer for
carrying
hazardous
materials
KMR
01473 820000





Hollingdean Rd

Upper Hollingdean Rd

Brighton & Hove City Clean

Reedle

Upper Hollingdean Rd

Malpass Market

Davey Dr

Upper Hollingdean Rd

Wigmore









Cityclean system blueprint

CITIZEN



Report
Citizen reports a problem in the street, eg. fly tipping or offensive graffiti.



Progress notification
Citizen receives notification that their case has been assigned (or can't be fixed)



Resolution notification
Citizen receives notification that their case has been fixed (or reasons for transferring or not fixing).

SUPERVISOR



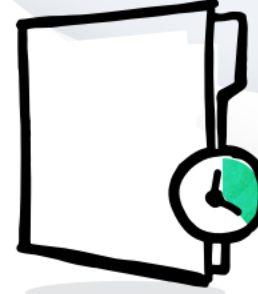
Dashboard
Report added to backlog of cases on a digital dashboard.



Clarification
Supervisor is notified of issues and confirms whether further should be taken.



Case resolved
Supervisor marks case as fixed (or can't fix).



Case assignment
Case is prioritised and assigned to a street team (or transferred to another dept).

STREET TEAM



Case received
Team receive the case details on a mobile device in their truck.



Problem addressed
Crew go to the case location and fix the problem if they can, sending supervisor details of any issues, and when the problem is fixed.



Dashboard

Report
cases o



Clarification

Supervisor is notified of
and confirms whether
her should be taken.



Problem addressed

the case location and fix the
can, sending supervisor details
and when the problem is fixed

cklog of
ashboard.

Case assignment

Case is prioritised and assigned to a street team (or transferred to another dept).



Case received

Team receive the case details on a mobile device in their truck.



Clarification

Supervisor is notified of issues and confirms whether further should be taken.



Problem addressed

Crew go to the case location and fix the problem if they can, sending supervisor details of any issues, and when the problem is fixed.



Case resolved

Supervisor marks case as fixed (or can't be fixed).

Issue notification

receives notification
that case has been
reported (or can't be fixed)

Resolution notification

Citizen receives notification that
their case has been fixed (or reasons
for transferring or not fixing).



Clarification

Supervisor is notified of
issues and confirms whether
further should be taken.



Case resolved

Supervisor marks case
as fixed (or can't fix).

Cityclean system blueprint

CITIZEN



Report

Citizen reports a problem in the street, eg. fly tipping or offensive graffiti.



Progress notification

Citizen receives notification that their case has been assigned (or can't be fixed)



Resolution notification

Citizen receives notification that their case has been fixed (or reasons for transferring or not fixing).

SUPERVISOR



Dashboard

Report added to backlog of cases on a digital dashboard.



Clarification

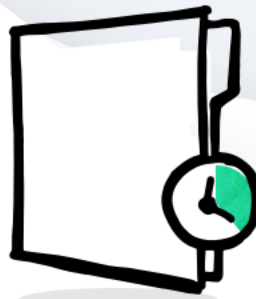
Supervisor is notified of issues and confirms whether further should be taken.



Case resolved

Supervisor marks case as fixed (or can't fix).

STREET TEAM



Case assignment

Case is prioritised and assigned to a street team (or transferred to another dept).



Case received

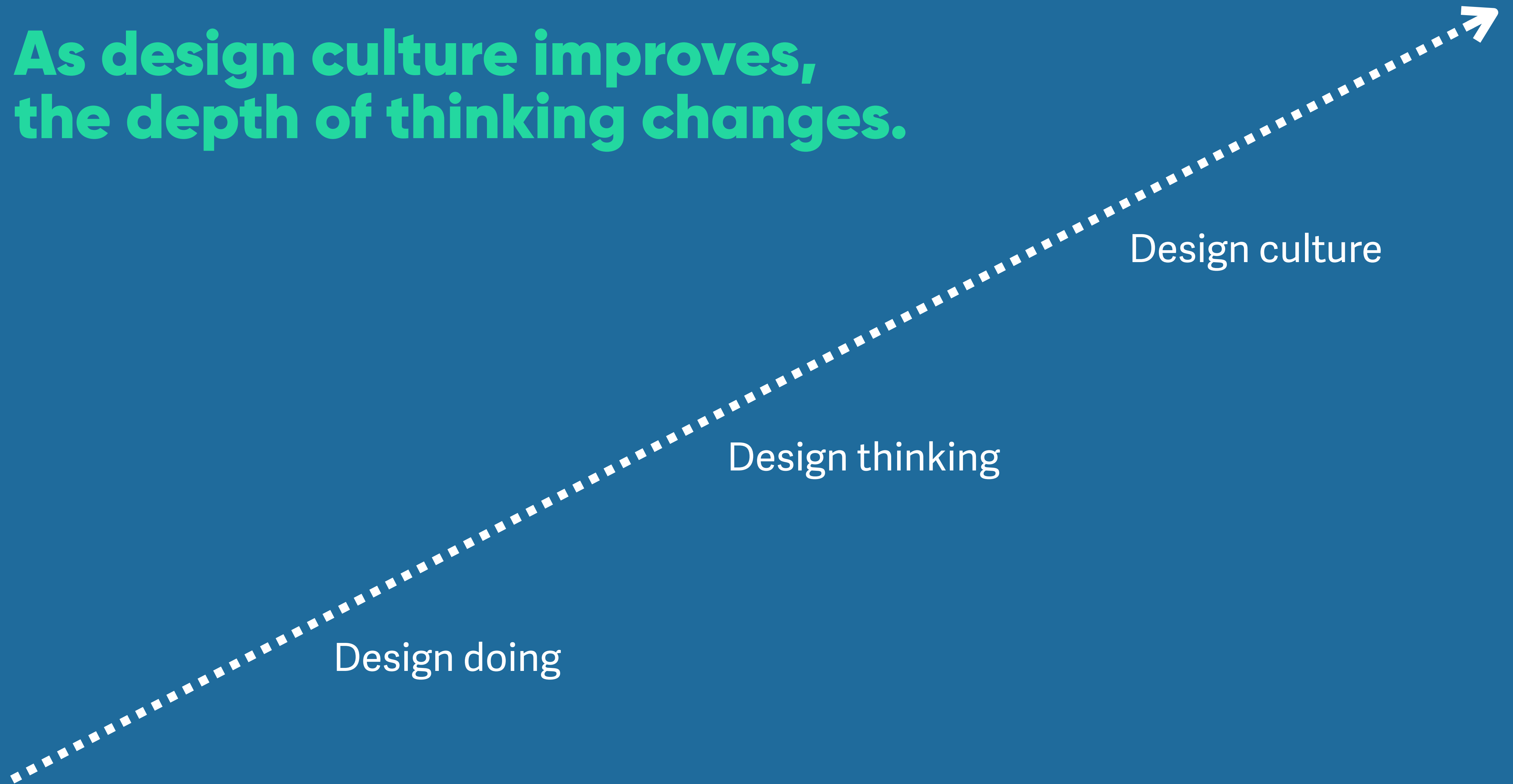
Team receive the case details on a mobile device in their truck.



Problem addressed

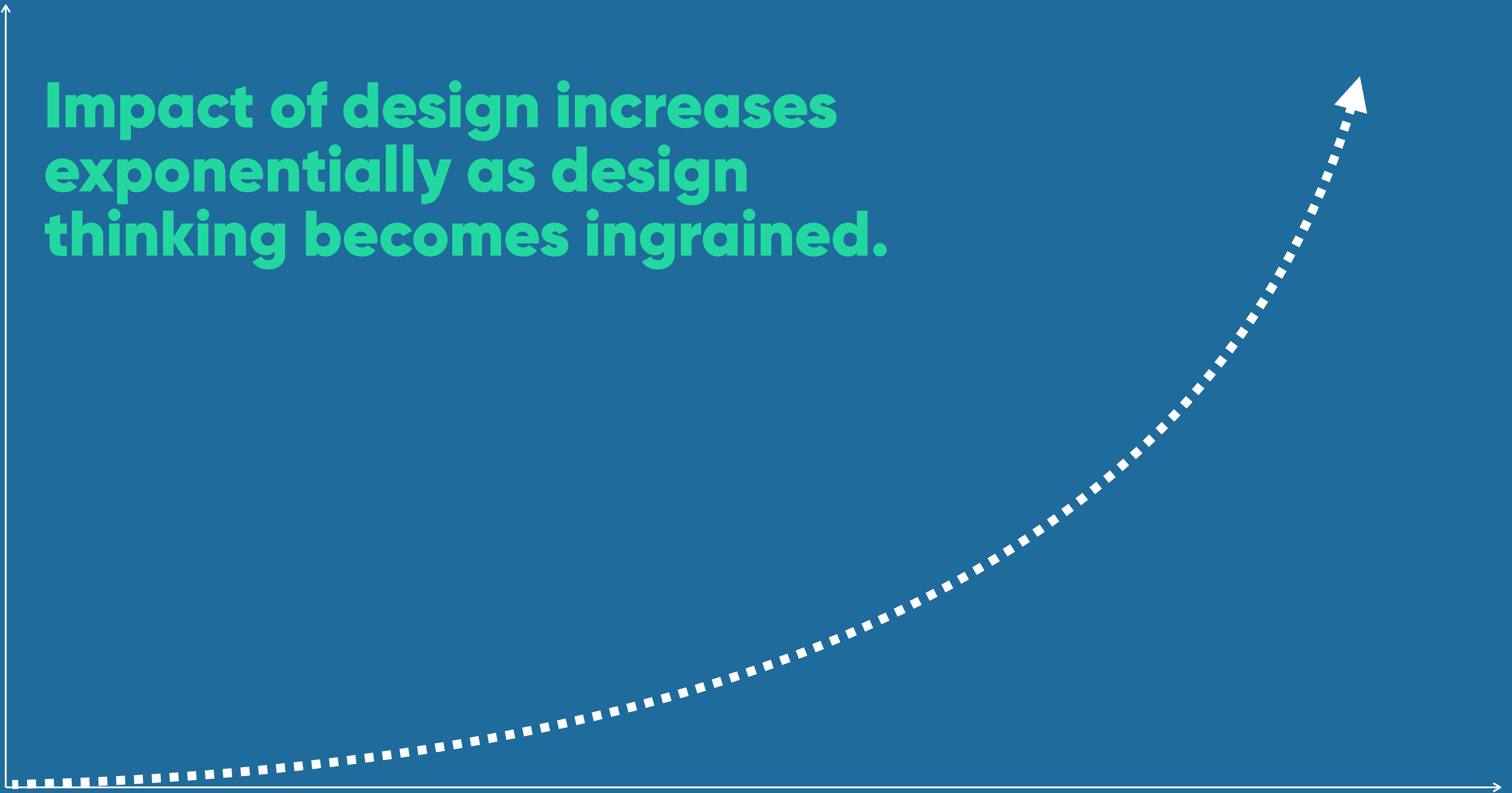
Crew go to the case location and fix the problem if they can, sending supervisor details of any issues, and when the problem is fixed.

**As design culture improves,
the depth of thinking changes.**



Impact of design increases exponentially as design thinking becomes ingrained.

Impact



Design doing

Design thinking

Design culture



19590

12596

20382

17524

21120

16573

19987

2015 BOSTON MARATHON

ATHLETIC ASSOCIATION

STO MARATHON 20

NISHERS

#Tech4GoodBTN



Richard Rutter
rich@clearleft.com
@clearleft

Tech4Good, Brighton
3 December 2018

Richard Rutter
Cofounder, Clearleft