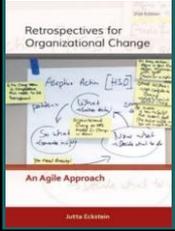
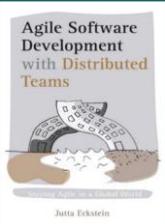
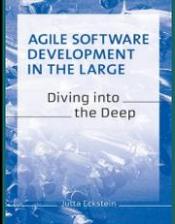
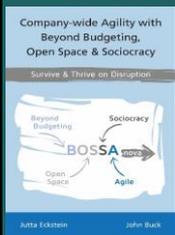


Agile Sustainability:

Let's get more – social, environmental & economic – sustainability based on data!

Jutta Eckstein

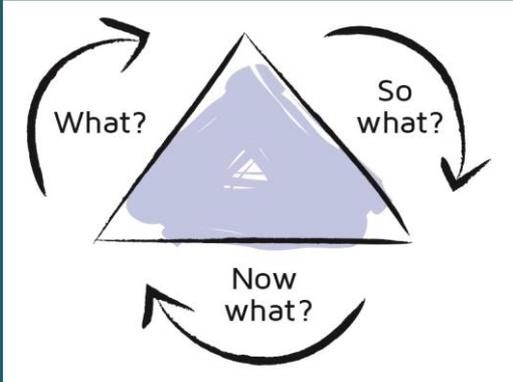
Pollution Control Commissioner on Ecological Environmentalism



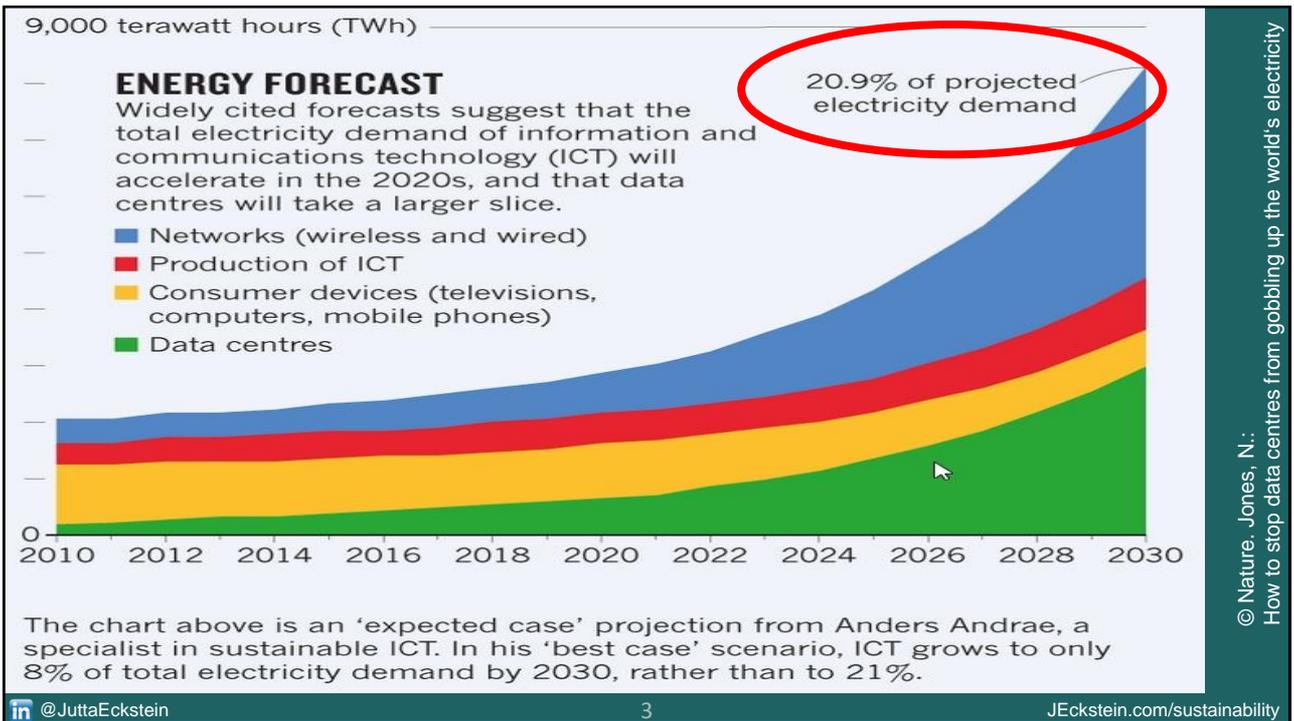
Agenda

What? Facts

So what? Insights



Now what? This is what you can do!



Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

UN Brundtland commission

1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES	THE GLOBAL GOALS For Sustainable Development			12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE AND JUSTICE STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS

in @JuttaEckstein 4 JEckstein.com/sustainability

Social/People
Aiming for equity, health, liveability

Diversity
Safety, Security & Privacy

Economic/Prosperity
Improving the lives & prospects of everyone, everywhere

Sustainable Economies
Responsible products

Environment/Planet
Protecting the Planet

Green software
CO2 reduction

Sustainability

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Social/People

Patient's first name

Patient's last name

Enter a valid last name.

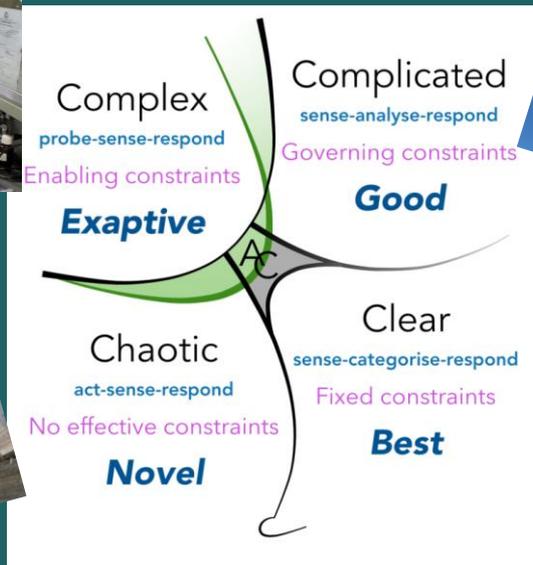
Economic/Prosperity

Environment/Planet

In 2019, **53.6 million metric tonnes** of electronic waste was generated worldwide (that's plus 21% in 5 years.)
This is an equivalent of almost **5,400 Eiffel towers.**

Sustainability

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Agile Sustainability

Use sustainability to guide your actions & outcomes in agile development

Use agile practices & mindset to help solve the climate crisis

Sustainability IN Agile

Sustainability BY Agile

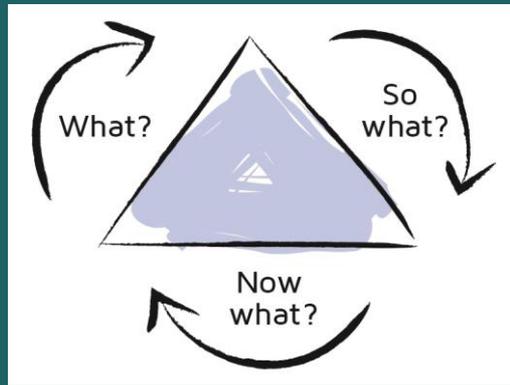
Sustainability as a quality attribute in the DoD & as acceptance criteria!


HACK YOUR FUTURE

Agenda

What? Facts

So what? Insights



Now what? This is what you can do!

Persona Spectrum

- Make your system accessible to everyone!

	Permanent	Temporary	Situational
Touch	 One arm	 Arm injury	 New parent
See	 Blind	 Cataract	 Distracted driver
Hear	 Deaf	 Ear infection	 Bartender
Speak	 Non-verbal	 Laryngitis	 Heavy accent

Source: ©David Dame, Microsoft, <https://bit.ly/3EYNdXk>

Stories

Note: It's not about the form, it's about the content!

As a {insert user},
I want to {insert users' want},
So I can {insert value to the user}

With the impact of {insert impact on environment, social, etc.}

As a designer,
I want to reduce the amount of font types,
So the page performance will increase for users and pages will be more digestible,

With the impact of reduced CO2 emissions because of less data transfer.

Source: Michael Fearer: <https://bit.ly/impactStories>

Fonts Excursion

Source: <https://siteefy.com/how-many-websites-are-there>

1,106,671,903

Currently, there are around **1.11 billion** websites in the World. **18%** of these websites are active, **82%** are inactive.

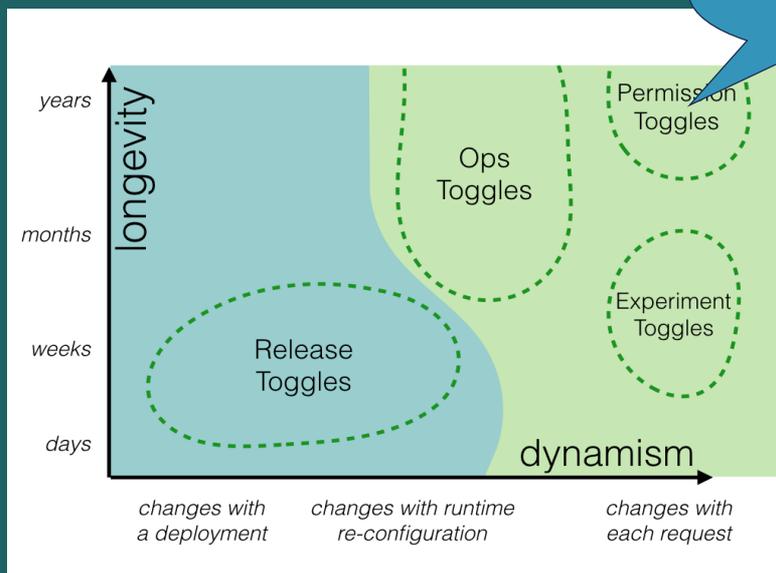
Font	CO2 emission per month (g)	CO2 emission per year (g)
Google fonts	388,06	4656,72
Self-hosted fonts	218,73	2624,76
System fonts	42,89	514,68

Source: Lukasz Jedrasiak: <https://bit.ly/fontsImpactOnCarbonFootprint>

Supporting Older Hardware

- **Sustainability Toggles**
 - Deactivate non-supported features
- **Responsive Design**
 - Recognize supported functionality on actual client

Feature Toggles



Energy Aware Operations

- **Understand when**
 - Low-carbon electricity is available
 - Energy mix is renewable
- **Execute operations asynchronously at environmentally friendly times, like**
 - Tests
 - Non critical jobs



Data Centre / Cloud Provider

Google Cloud Region Picker

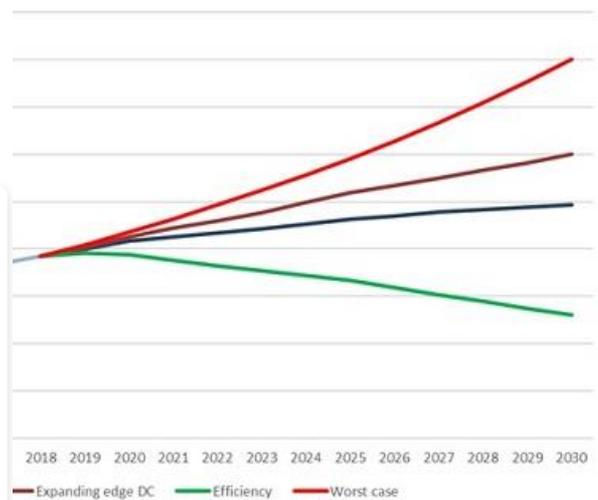
This tool helps you pick a Google Cloud region considering approximated carbon footprint, price and latency.

This is not an officially supported Google product and does not cover all Google Cloud locations.

Optimize for

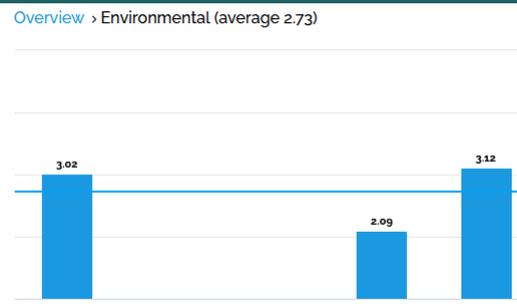
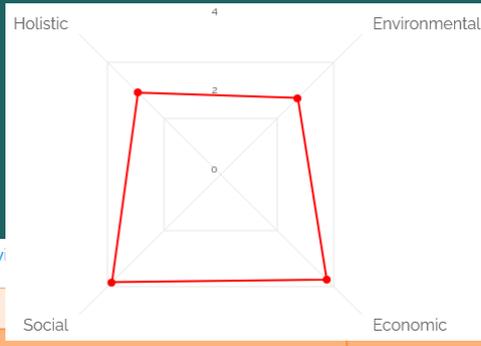
- Lower carbon footprint [Ⓜ]
Not important Important
- Lower price [Ⓜ]
Not important Important
- Lower latency [Ⓜ]
Not important Important

Prognosis of the energy demand of data centres in the
iO (Source: Borderstep Institute)



Where do we stand? Let's gather data!

Full assessment under (cc): <https://bit.ly/agile-sustainability>



Change your Conversations for Increasing Sustainability!

Many Thanks!

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-  <https://www.linkedin.com/in/juttaeckstein>
- <https://bit.ly/agile-sustainability>
- <https://jeckstein.com/sustainability>
- <https://agilebossanova.com>
- **And join:**
 -  LinkedIn group: <https://bit.ly/Agilists4Sustainability>
 -  <https://bit.ly/AA-sustainability-initiative>

