

THANKS TO THE BASELONE SPONSORS!

ENGINEERING & ETHICS: RESPONSIBILITY BY DESIGN

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Former Board Member, ASF (apache.org)
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BaselOne 2026


photo: adobt.to_conference

slides revision 2026-10-14b
photos crediting just a name are from pexels.com

WHAT IS

ETHICS ?

Basel One

IN GENERAL

ETHICS?

Evaluating the impact of our decisions, based on **moral duties**, **virtues**, and **consequences**



WIKIPEDIA 25

25 years of the free encyclopedia

Highly simplified from https://en.wikipedia.org/wiki/Ethics

MY PRAGMATIC VIEW

ETHICS?

Serve customers in a
reliable, **durable**
and **meaningful** way,
and cultivate a **good relationship**
with them.



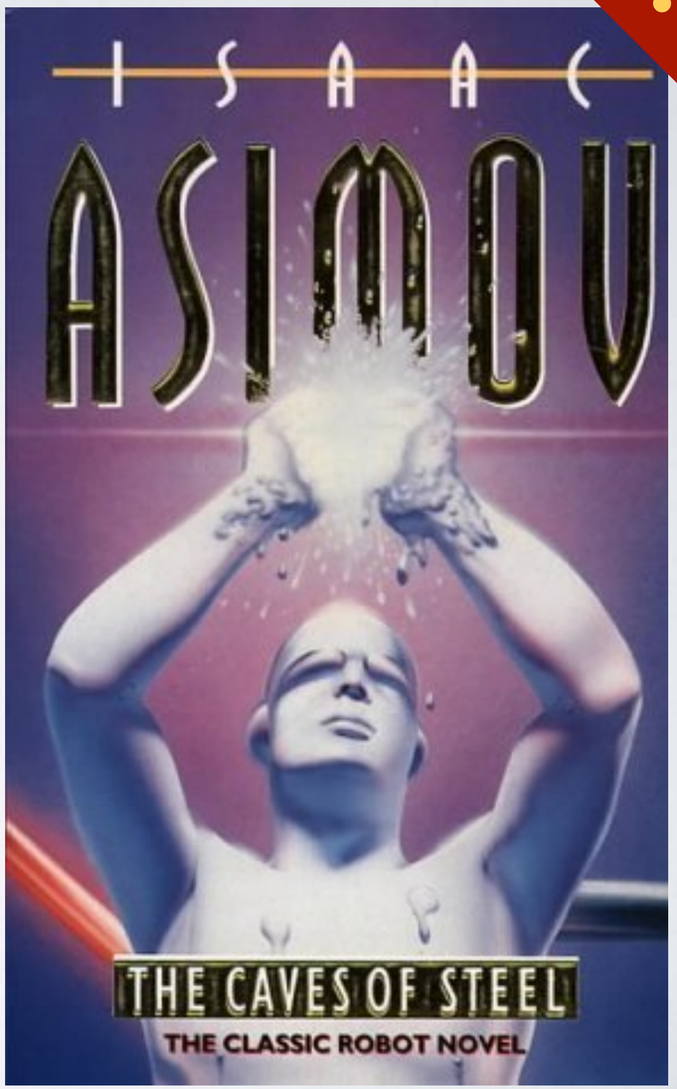
ASIMOV'S 3 LAWS OF ROBOTICS
from 1942

ETHICS?

Dear robots:

- **Do not harm** humans
- **Obey** human orders
- **Protect yourself**

(my own shortened version)



ACM Code of Ethics and Professional Conduct

https://www.acm.org/code-of-ethics

Human well-being

No harm

ETHICS!

High quality

Honest & trustworthy

Fairness

Respect

Privacy

1. GENERAL ETHICAL PRINCIPLES.

A computing professional should...

1.1 Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing.

This principle, which concerns the quality of life of all people, affirms an obligation of computing professionals, both individually and collectively, to use their skills for the benefit of society, its members, and the environment surrounding them. This obligation includes promoting fundamental human rights and protecting each individual's right to autonomy. An essential aim of computing professionals is to minimize negative consequences of computing, including threats to health, safety, personal security, and privacy. When the interests of multiple groups conflict, the needs of those less advantaged should be given increased attention and priority.

1.2 Avoid harm.

In this document, "harm" means negative consequences, especially when those consequences are significant and unjust. Examples of harm include unjustified physical or mental injury, unjustified destruction or disclosure of information, and unjustified damage to property, reputation, and the environment. This list is not exhaustive.

Well-intended actions, including those that accomplish assigned duties, may lead to harm. When that harm is unintended, those responsible are obliged to undo or mitigate the harm as much as possible. Avoiding harm begins with careful consideration of potential impacts on all those affected by decisions. When harm is an intentional part of the system, those responsible are obligated to ensure that the harm is ethically justified. In either case, ensure that all harm is minimized.

To minimize the possibility of indirectly or unintentionally harming others, computing professionals should follow generally accepted best practices unless there is a compelling ethical reason to do otherwise. Additionally, the s of data aggregation and emergent properties of systems refully analyzed. Those involved with pervasive or infrastructure uld also consider Principle 3.7.

professional has an additional obligation to report any signs of that might result in harm. If leaders do not act to curtail or risks, it may be necessary to "blow the whistle" to reduce m. However, capricious or misguided reporting of risks can itself Before reporting risks, a computing professional should carefully ant aspects of the situation.

1.3 Be honest and trustworthy.

Honesty is an essential component of trustworthiness. A computing professional should be transparent and provide full disclosure of all pertinent system capabilities, limitations, and potential problems to the appropriate parties. Making deliberately false or misleading claims, fabricating or falsifying data, offering or accepting bribes, and other dishonest conduct are violations of the Code.

Computing professionals should be honest about their qualifications, and about any limitations in their competence to complete a task. Computing professionals should be forthright about any circumstances that might lead to either real or perceived conflicts of interest or otherwise tend to undermine the independence of their judgment. Furthermore, commitments should be honored.

Computing professionals should not misrepresent an organization's policies or procedures, and should not speak on behalf of an organization unless authorized to do so.

1.4 Be fair and take action not to discriminate.

The values of equality, tolerance, respect for others, and justice govern this principle. Fairness requires that even careful decision processes provide some avenue for redress of grievances.

Computing professionals should foster fair participation of all people, including those of underrepresented groups. Prejudicial discrimination on the basis of age, color, disability, ethnicity, family status, gender identity, labor union membership, military status, nationality, race, religion or belief, sex, sexual orientation, or any other inappropriate factor is an explicit violation of the Code. Harassment, including sexual harassment, bullying, and other abuses of power and authority, is a form of discrimination that, amongst other harms, limits fair access to the virtual and physical spaces where such harassment takes place.

acm

Association for Computing Machinery

ETHICS?

It's Basically

Doing The Right Thing

Based on our Moral Principles

IT'S ABOUT
VALUES



VALUES VARY AND EVOLVE…



photo: Andrea Piacquadio

Adobe

Company Values

VALUES

Create the future.

Creativity is in our DNA. We constantly look around the corner to see what is possible. But we don't wait for the future, we create it.

We are builders, makers, and inventors, driven by a deep empathy for our customers and users.

We are open-minded and celebrate new ideas. We have the courage to disrupt the market and ourselves through bold bets and ideas we turn into reality.

Own the outcome.

We think and operate like owners. We take initiative, have a bias toward action, and assume ownership for end results, not just our part.

We are reliable and have clear points of view. We're decisive and learn from our mistakes.

Raise the bar.

We aim high and we play to win. We relentlessly focus on execution, celebrate excellence and are intellectually honest about where we must do better.

We deliver both speed and quality by doing fewer things better. Our success is measured by the success of our customers and users.

Be genuine.

The ability to be yourself is core to who we are. We embrace and respect diversity.

We support and challenge each other by being honest and direct. We always act with sincerity, integrity and the highest of ethics.

We do this for our employees, partners, customers and communities.

https://blog.adobe.com/en/publish/2023/03/07/evolving-adobes-values-culture

VALUES

SNCF GROUPE

SNCF Group's **purpose:**

Provide everyone with the **freedom to move**, by **connecting territories** and people in a **safe**, **solidaristic**, and **sustainable** manner.

https://www.groupe-sncf.com/fr/groupe/raison-etre

photo: Adrien Olichon

BAD PEOPLE INC.

company values

VALUES

Get in, get rich, get out!

Customers are stupid!

Laws? Really?

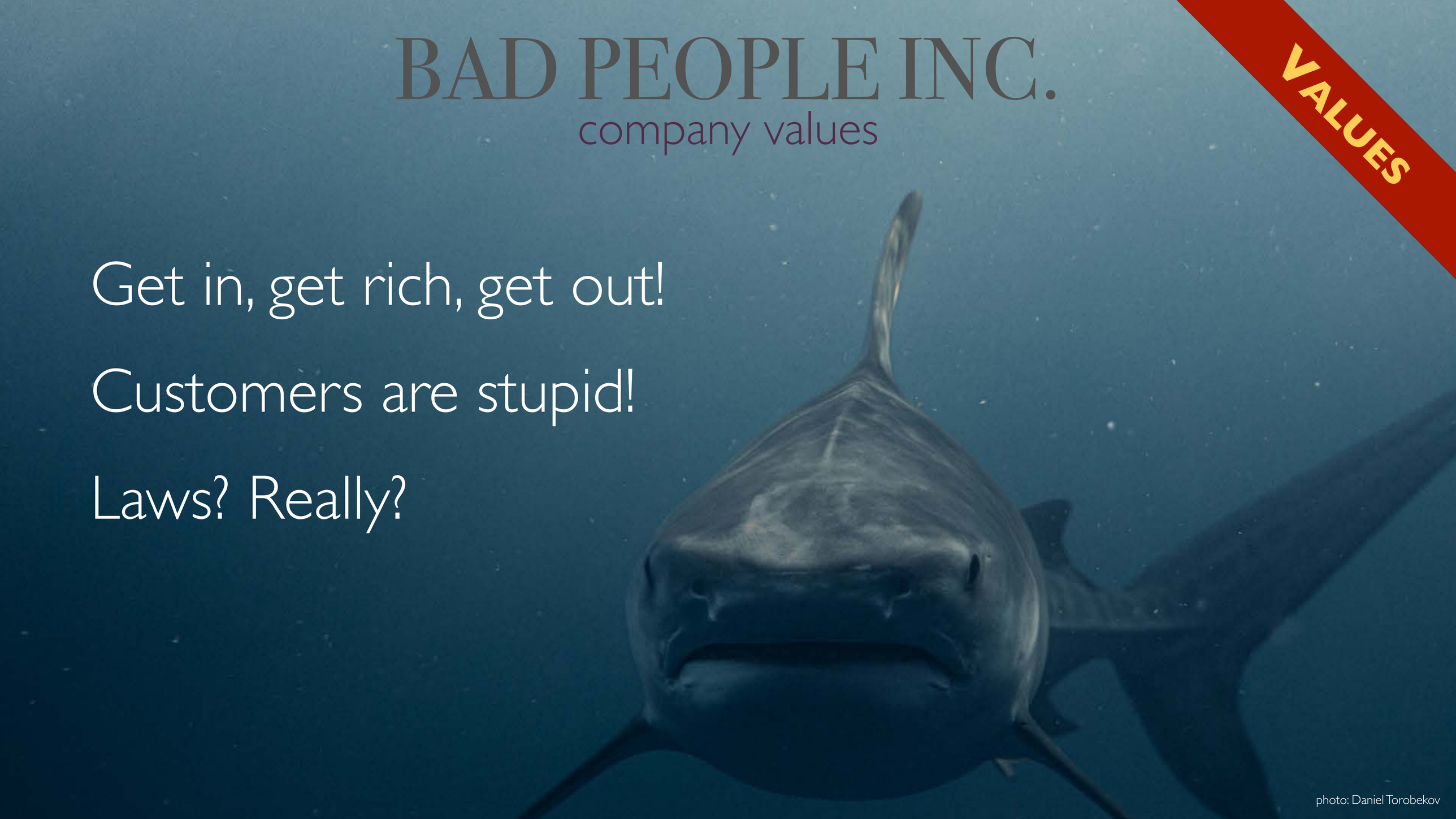


photo: Daniel Torobekov


STORY
Cutting things? Why?
photo: UMUT

Values
MUST
be documented





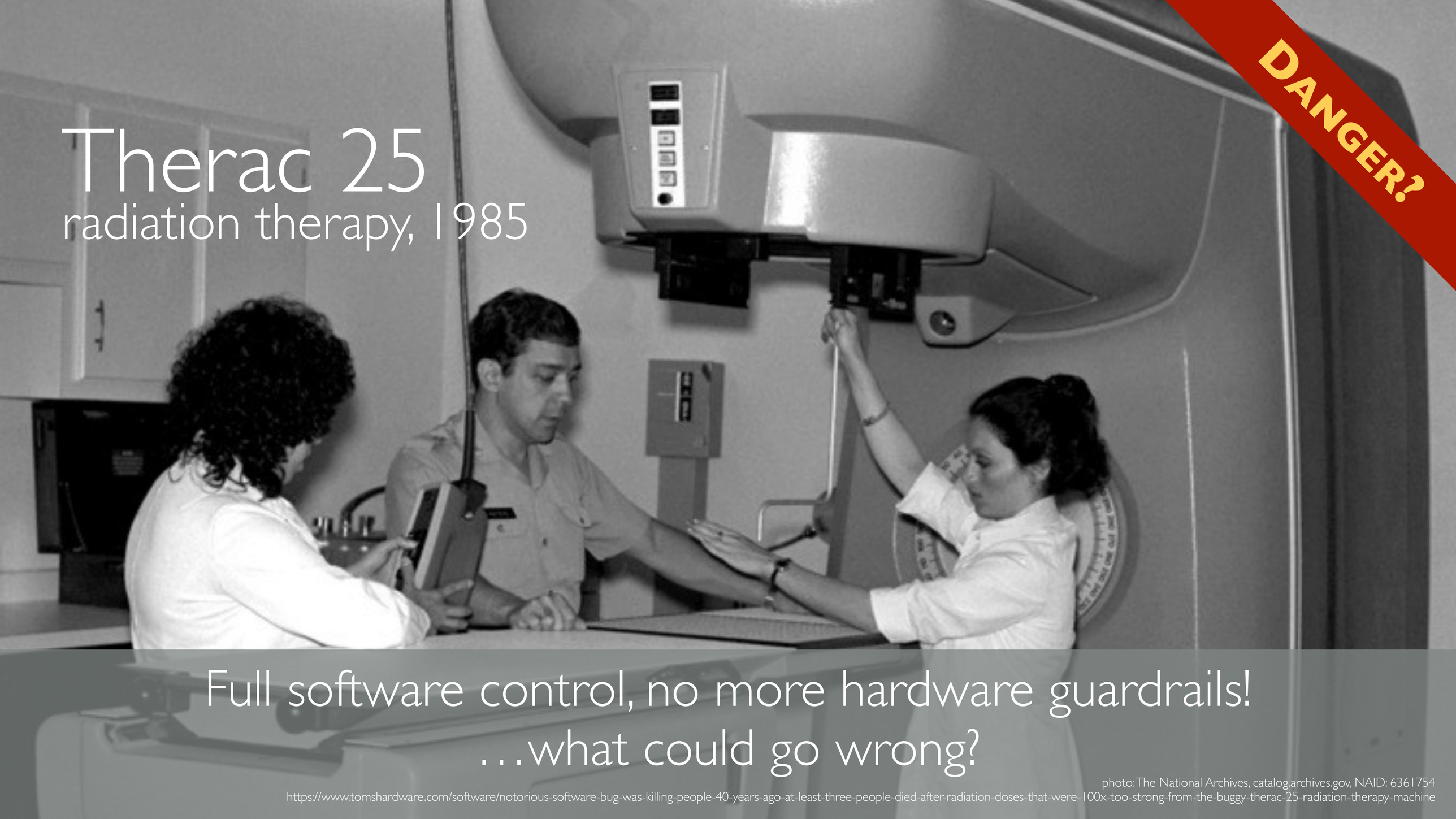


ARE WE CREATING

DANGEROUS

THINGS?





Therac 25
radiation therapy, 1985

Full software control, no more hardware guardrails!

…what could go wrong?

photo: The National Archives, catalog.archives.gov, NAID: 6361754

https://www.tomshardware.com/software/notorious-software-bug-was-killing-people-40-years-ago-at-least-three-people-died-after-radiation-doses-that-were-100x-too-strong-from-the-buggy-therac-25-radiation-therapy-machine



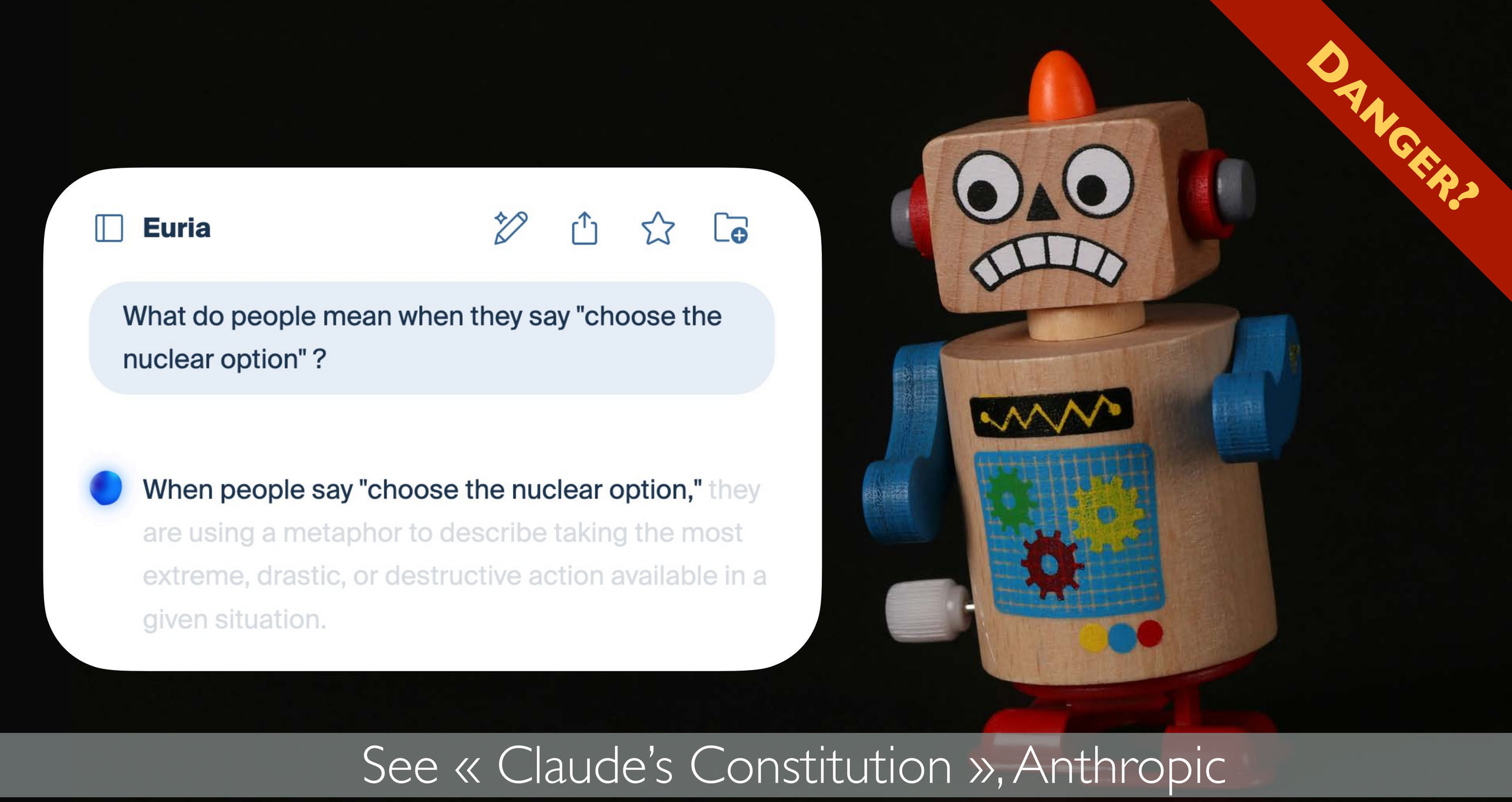
Powerful, very useful, very dangerous !

photo: Tima Miroshnichenko



« smart » phones…

photo: RDNE Stock project



See « Claude's Constitution », Anthropic

photo: Ann H

SO, WE

NEED ETHICS

BASED ON

SHARED VALUES

IT'S GOING

FAST



STORY

Change is not new, But it's **accelerating**!


photo: Ono Kosuki



1947..



photo: Mandiri Abadi

1993!

WE NEED TO GET THE

FUNDAMENTALS

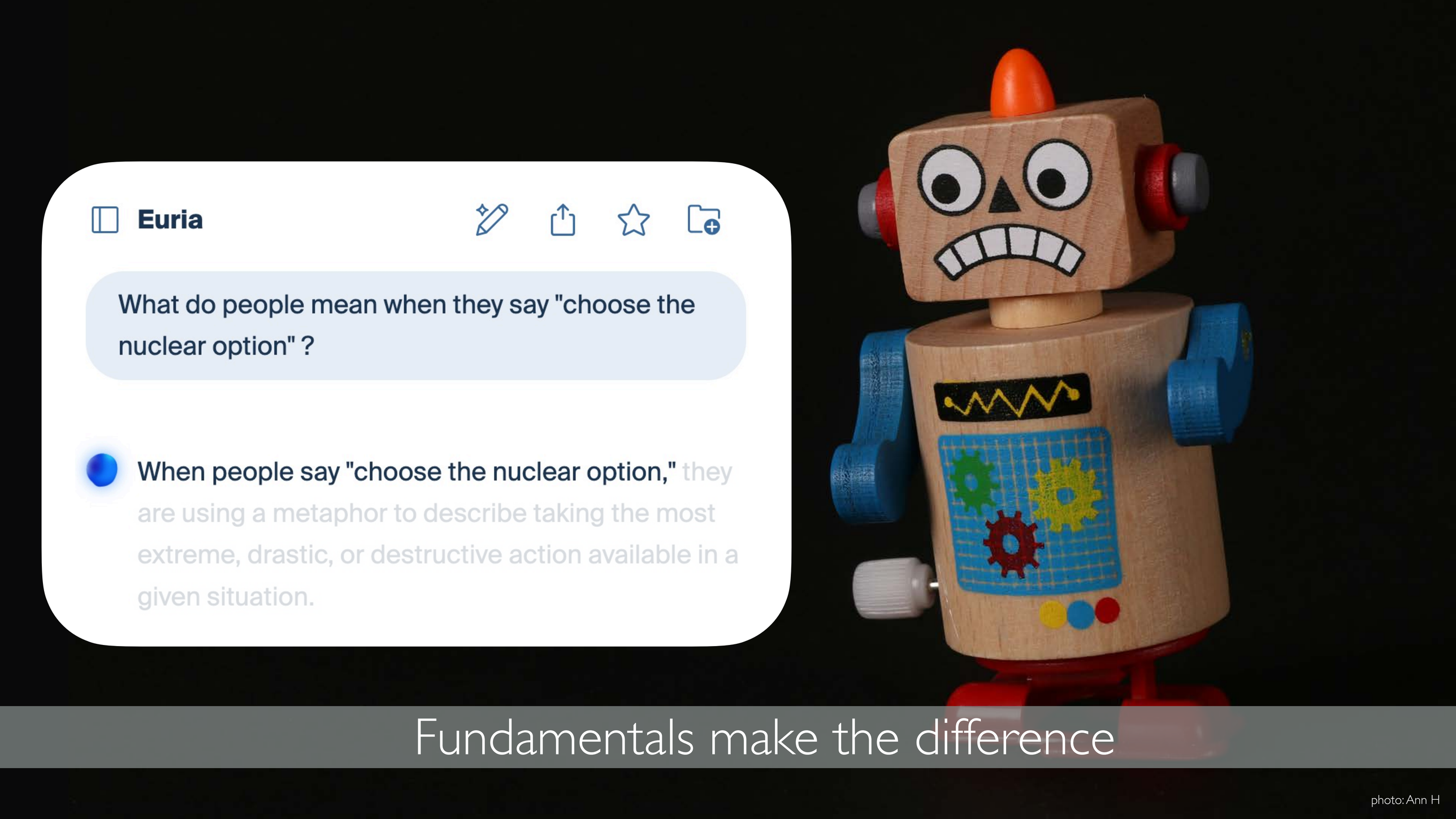
RIGHT





Fundamentals make the difference

photo: ArtHouse Studio



Fundamentals make the difference

photo: Ann H

A FEW

EXAMPLES



infomaniak

D4 DATACENTER

EXAMPLES



100% energy recovered to heat buildings.

Diagram: d4project.org

Can heat **6,000 Minergie-A** households

https://d4project.org/



STORY

Too honest to be invited to sales talks?

photo: Maria-Theodora Andrikopoulou



Photo: Gage Skidmore, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=63344547

EXAMPLES

« If I died and had all this wealth and yachts and all this stuff, would I be as happy as when I laugh? »

https://www.cnbc.com/2018/02/02/apple-co-founder-steve-wozniaks-simple-formula-for-happiness.html

DAY CQ5 RELEASE

CIRCA 2009

STORY



Release Marketing

Serious Security Issue!

Code freeze

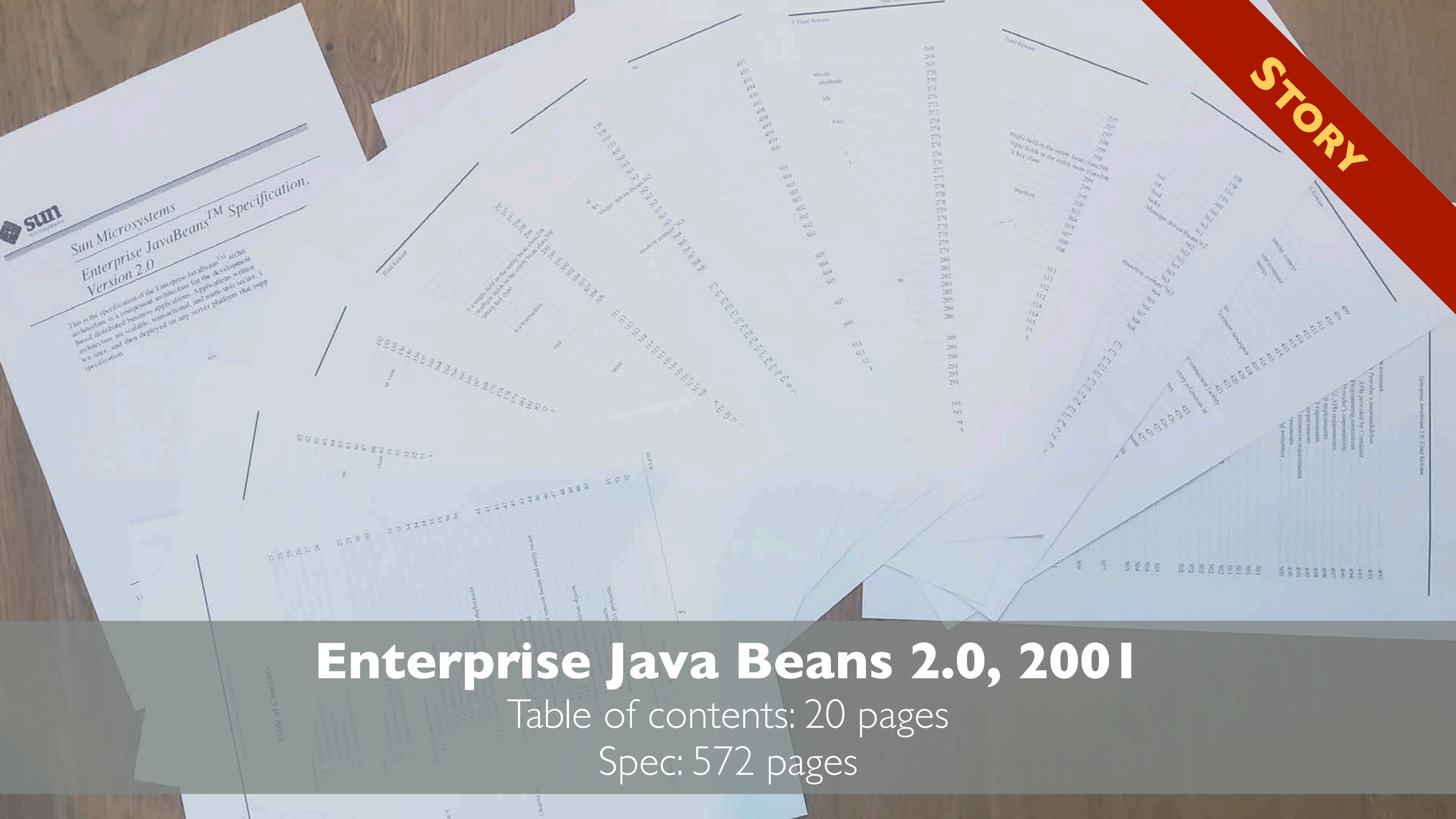
Testing

Release date

Usage date!

NO, NO, NO!

HAPPY CUSTOMERS!



Enterprise Java Beans 2.0, 2001

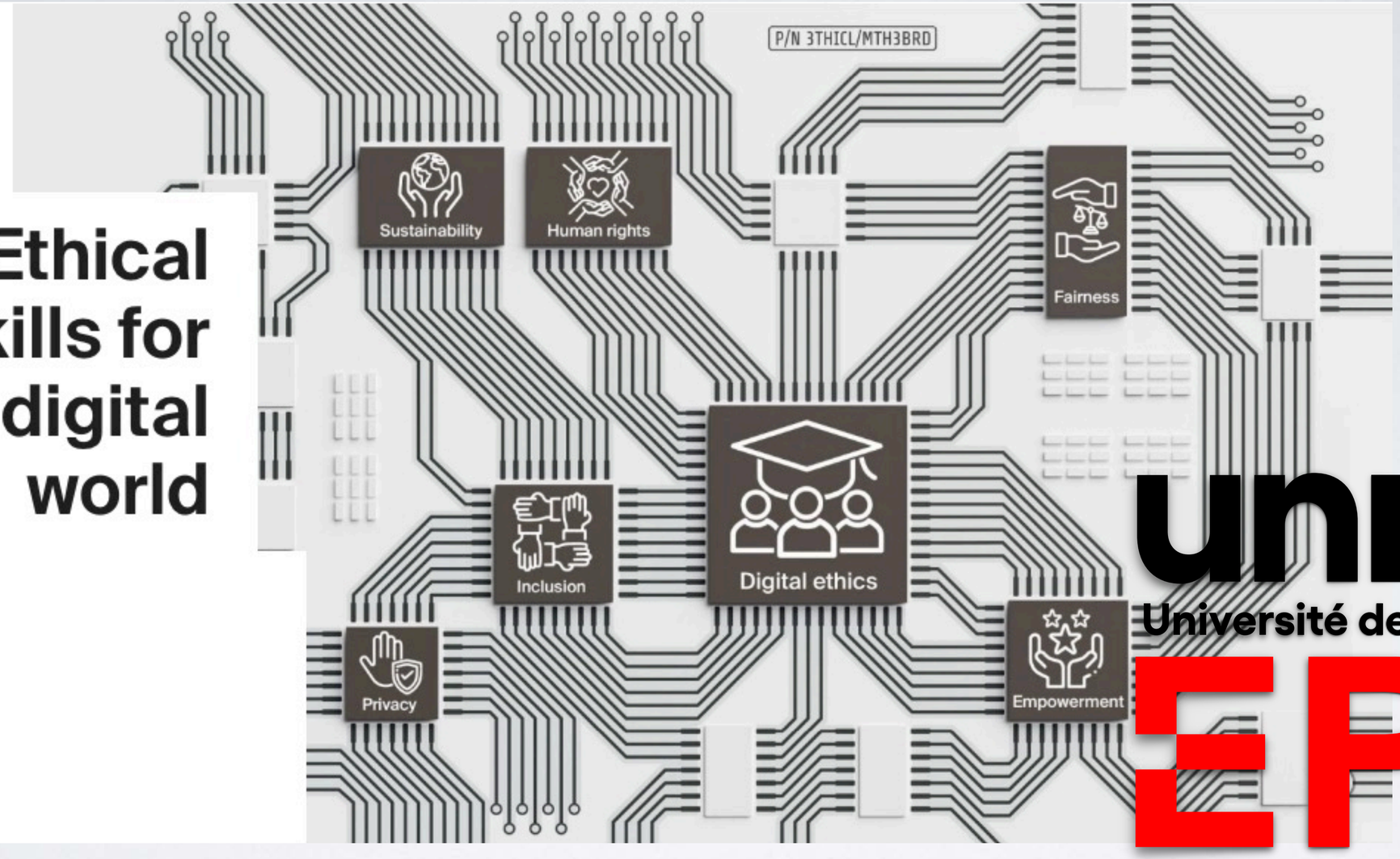
Table of contents: 20 pages

Spec: 572 pages

ETHICAL
BLINDNESS

Basel One

Ethical skills for the digital world



unine
Université de Neuchâtel

EPFL

DIGITAL ETHICS CANVAS

https://www.epfl.ch/education/educational-initiatives/cede/open-and-accessible-education/digital-ethics/

ETHICS-BY-DESIGN CANVAS

Ethical Debt

Ethical Blindness

Ethical Lenses

Risks and Mitigation

Fairness & Accessibility

Ethics-by-Design Canvas: A Visual Inquiry Tool to Reduce Ethical Blindness in Digital Innovation Projects

Completed Research Paper

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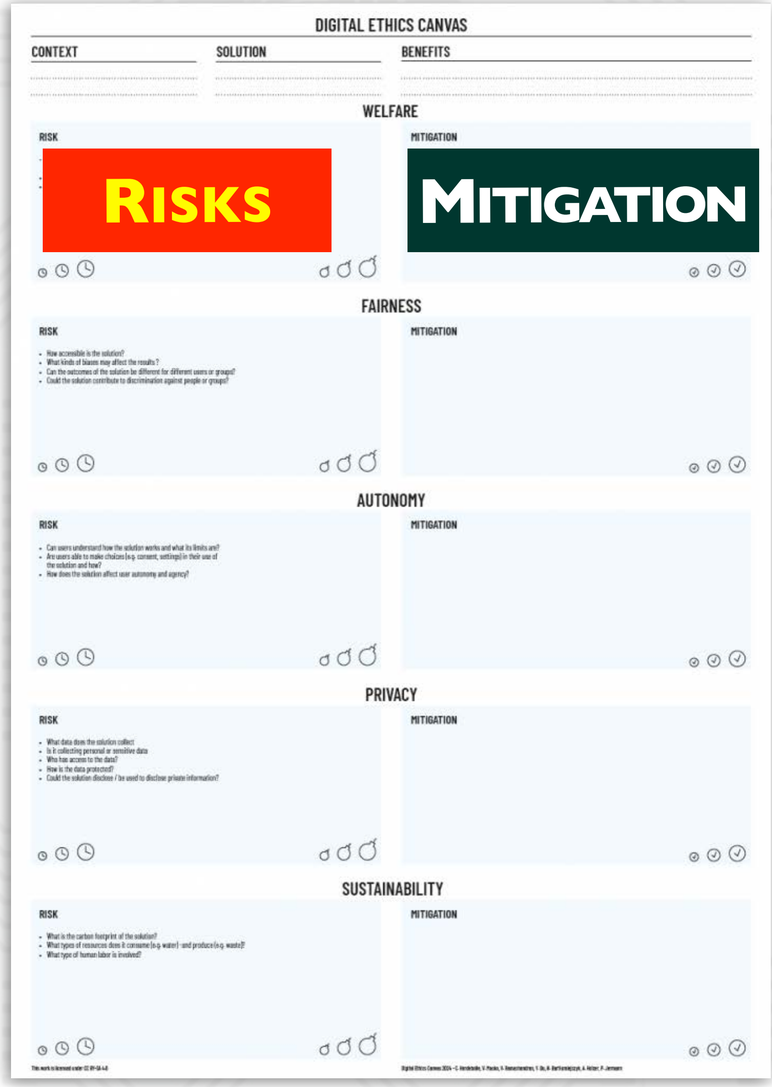
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Digital Ethics Canvas

Ethical lenses

- Welfare
- Fairness to Users
- User Autonomy
- User Privacy
- Sustainability



DIGITAL ETHICS CANVAS

LENSES

Basel One

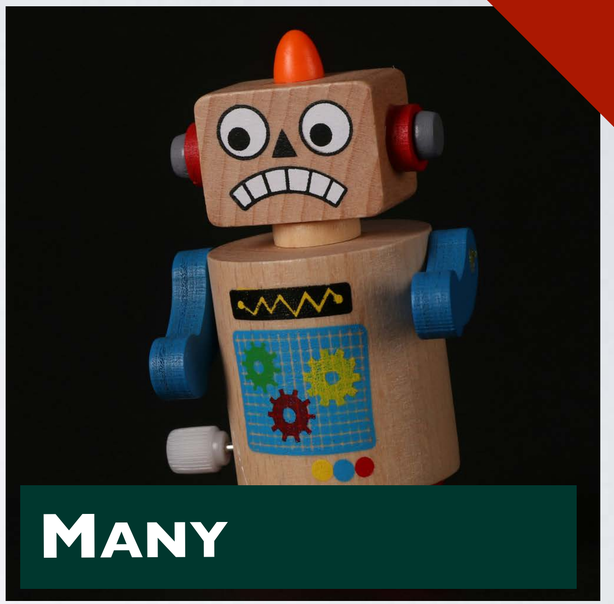
BENEFITS

BONUS LENS









Are we building something *useful*?

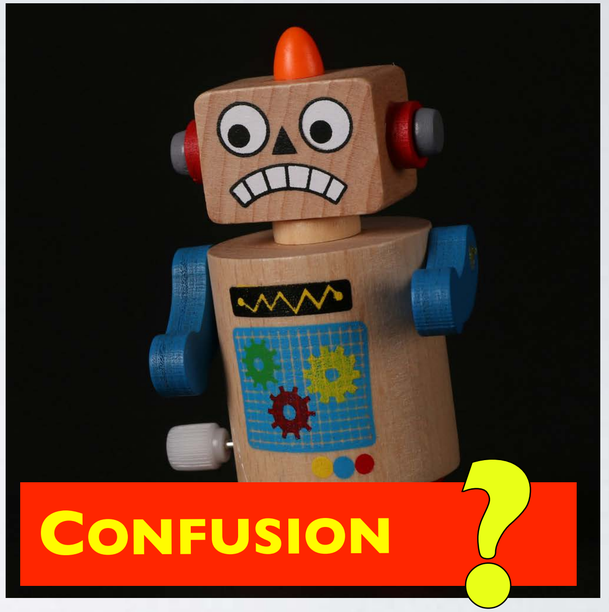
WELFARE

LENS









Is it *dangerous*? Are we *protected*?

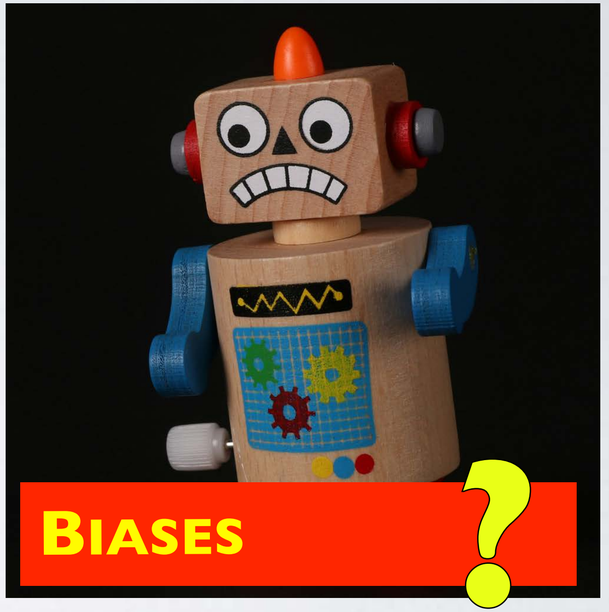
FAIRNESS

LENS









Is it accessible? Biased?

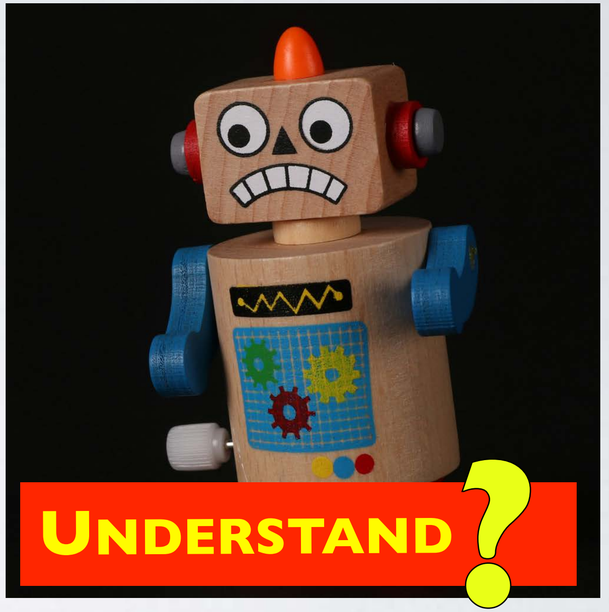
AUTONOMY

LENS









Can users understand? Make choices?

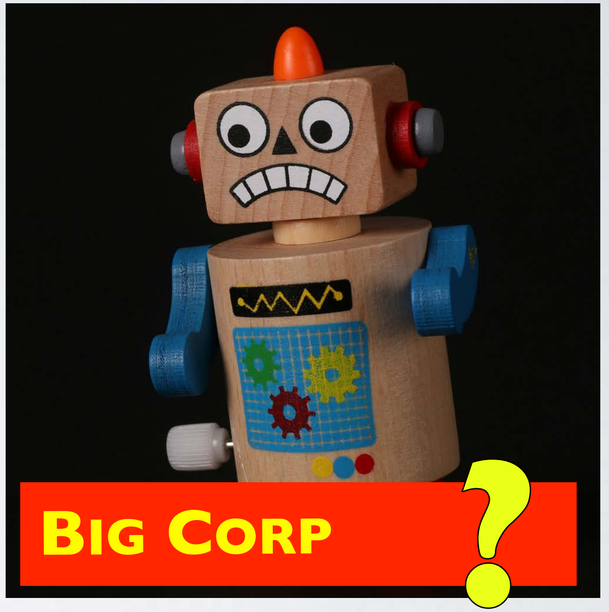
PRIVACY

LENS









Is our user's *privacy* respected?

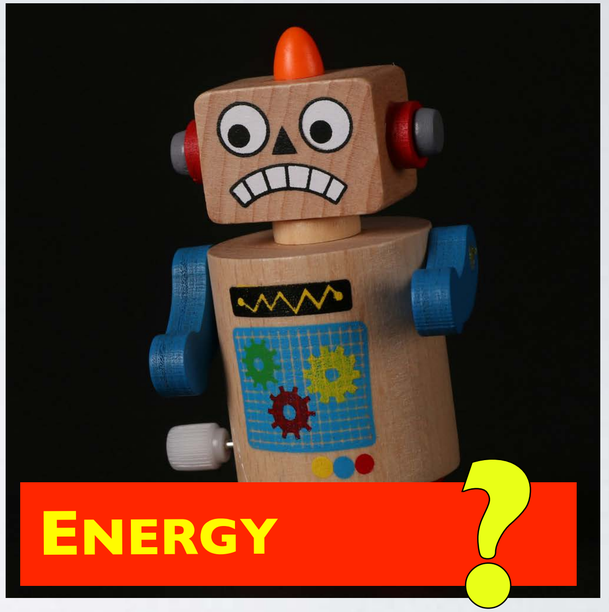
SUSTAINABILITY

LENS









Are we destroying the planet?

CANVAS

BENEFITS

WELFARE

FAIRNESS

AUTONOMY

PRIVACY

SUSTAINABILITY

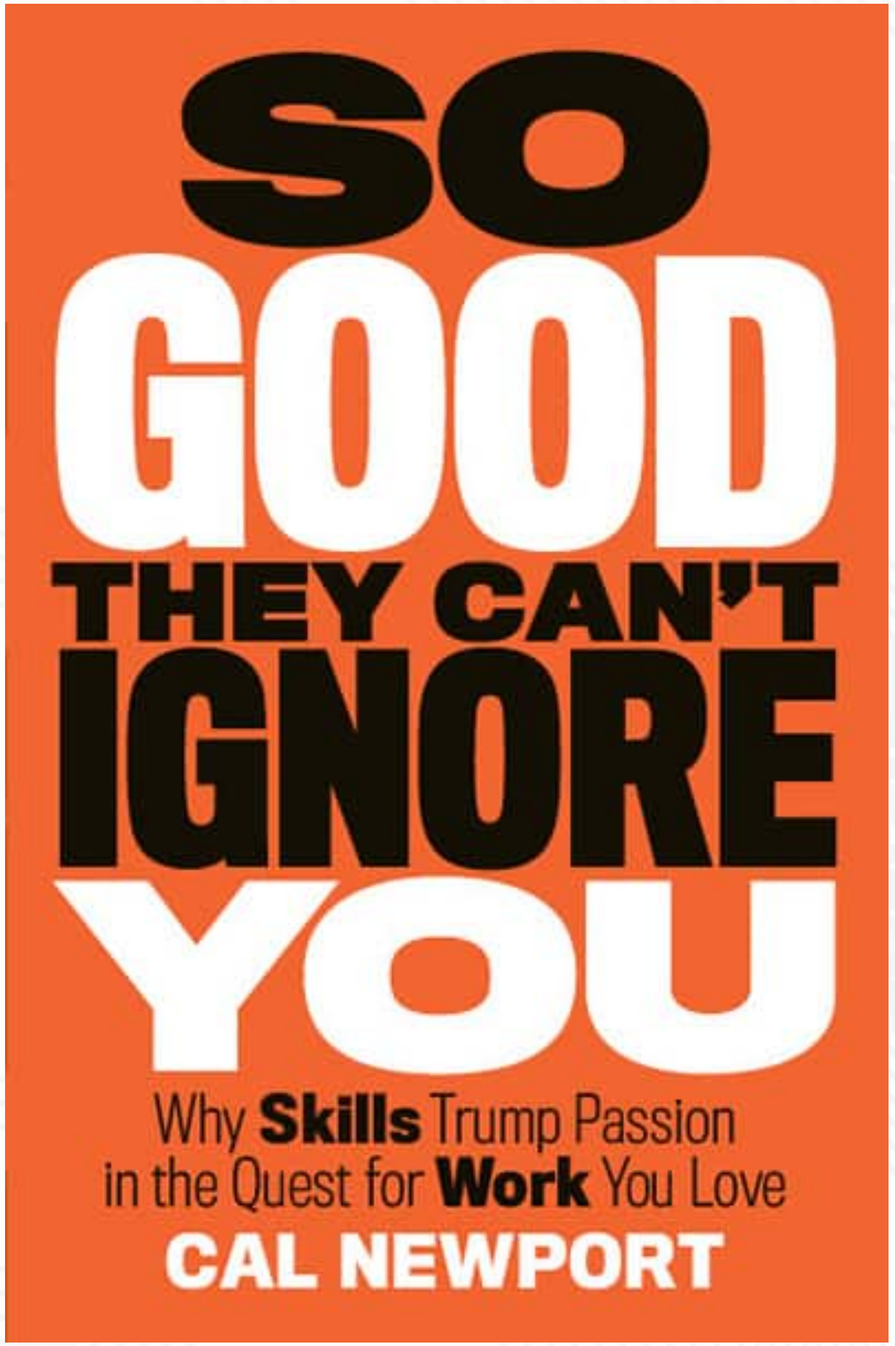


Are we destroying the planet?

EXPOSES
MANY
RISKS!

INFLUENCE
OR
WALK AWAY

Basel One



INFLUENCE

DOING A FANTASTIC JOB HELPS!


INFLUENCE
CHOOSE
YOUR
ALLIES !
photo: Harrison Haines



FIND BUSINESS REASONS

photo: Warren Yip


INFLUENCE
Don’t be evil..
BACK
TO
VALUES
photo:Danish Bashir


WALK AWAY?
VALUES
DON'T MATCH?
GO AWAY!
photo:Володимир Олейніков

PRE-CODA

TOUR DE SUISSE BROADWAY 45 TRAPEZ

https://www.tds-velo.ch

HAPPY CUSTOMER!



Basel One

CODA





THANKS TO THE BASELONE SPONSORS!

SO, WE

NEED ETHICS

BASED ON

SHARED VALUES





MULTI-LENS DECISION CANVAS

BENEFITS

WELFARE

FAIRNESS

AUTONOMY

PRIVACY

SUSTAINABILITY

CANVAS



Are we destroying the planet?

Links + recording + feedback, on my blog

https://grep.codeconsult.ch/2026/05/06/ethicszh/