

Rules against fragility in a digital world  
*Commercial offering*



"Software is eating **the world**"<sup>1</sup>

you can **no longer exist without software.**

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<sup>1</sup>*Why software is eating the world*, Marc Andreessen, 2011

Software can make you **stronger**,  
or, providers can get stronger **at your expense**.

In other words:

usage of software can foster your **business**,

but can also make it **fragile**.

I can help you **de-risk**,  
and **move away from fragility**.

## What risks?

Technologies can help us, even provide us with a sense of empower.

No doubts.

But, is the prospect of new possibilities technologies offer, undermining our ability to see that technologies are not just progress?

In other words, is the way we think of technologies prompting us to think that there is no downside, or no pernicious effect?

What risks, downside, or pernicious effect are you talking about?

Regression.

# What's regression?

Most of us miss the risk of regression that comes with usage of technologies as philosopher Daniel Ross helped me see.

What's regression?

Regression is the loss of know-how, or the loss of epistemic<sup>2</sup> abilities (the abilities we need to self-govern or remain autonomous), a risk philosopher Bernard Stiegler has also called *proletarianisation*.

To become proletarianised, is to lose autonomy or the ability to self-govern.

In the context of technological usage, the risk of regression comes as we use technologies, for example an application.

We first use an application because it is more convenient or because it makes things easier, however, as we further rely on this application, we risk losing the ability to take care of the things the application does ourselves. Sometimes, we can no longer get things done without this application.

Think of the auto-corrector: we use it because it is convenient, but then when we turn it off, some of us struggle to spell words correctly; so we turn it back on. The auto-corrector application has become a staple. Most of us no longer write without.

The issue isn't dependency. The issue is when regression prompts us to use this application further, and that usage of this same application

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<sup>2</sup>relating to knowledge



is proletarianising us further. It can be a vicious circle. In other words, the risk of regression can be recursive.

What's worse, is when proletarianisation (the loss of ability to self-govern) transfers power to others (the application) to influence how we do things.

In other words, when digital agents gain heteronomy (the power other have to govern us; for example the power digital technology providers have to govern how users to things).

### **Are we blind to regression?**

We could end here. That's how we could see the problem, however, despite this short introduction of the risk of regression, most of us are nudged to see technologies as tool of empowerment *only*.

In our mind, the idea of a risk of regression is overridden by the infinite field of possibilities digital technologies offer - and they do.

But:

is the prospect of new possibilities making us blind to the regressive effect?

In other words:

are we using technologies thinking it opens new worlds to us (and it does), not to realise that after a while, these technologies have become the only (digital) world we can see?

This problem isn't just about being blind to regression (the loss of know-how), but also about return on investment (ROI).

As businesses use more of the same tools to do

marketing, sales *et cetera*, and as these tools nudge users to exploit the same opportunities, do marketing through the same channels, or produce more of the same products. ROI might decrease.

Digital opportunities that worked at first are being consumed faster (remember, this effect can be recursive.) As more businesses use the same tools, they converge onto the same avenues. More businesses eat of the same pie.

This would not be a problem if businesses could move on onto the next opportunities, but, remembers, these tools might have proletarianised businesses (undermine their ability to see new opportunities). Businesses can no longer imagine how they could do business otherwise, or how they could depart heteronomy (the governance of those who provide them with digital tools) As their sphere of action shrinks, they have no other choices but to keep using those tools, and keep fighting for a pie that's getting smaller and smaller.

When users experience a declining ROI, it also becomes a problem for the purveyors of these technologies. How could purveyors of digital tools that lead to regression could help users move away from regression?

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To write this, is not to reject technologies, obviously, but to see that technologies are both, a tool of empowerment as well as a tool that can undermine our abilities and ROIs; a tool that is good and bad at the same time; or, as philosopher Stiegler wrote: the intertwinement of a poison and remedy.

If we can see this, we might want to learn to distinguish between usage that is pernicious

and can make our businesses fragile, and usage which can foster our ability to create new possibilities: new business models, new revenue streams *et cetera*.

We can use heuristics (rules of thumb) to secure our ability to do business.

## How can I help?

I offer:

- **keynote speech** I help your team see risks that can make your business fragile.
- **audit** I identify risks in your business and provide you with suggestions to move away from fragility.
- **implementation** I don't just sell ideas; after an audit, I can help your team on implementation.
- **training course** I don't retain knowledge; I can train your team to incorporate heuristics (rules) to use against fragility.

## What's the keynote like?

I give you an insight on risks that can make your business fragile.

For example:

- regression
- iatrogenesis
- heteronomy

After the keynote, you can start thinking about how to de-risk, hire me to run an audit, or I can train your team to help them incorporate heuristics (rules) against fragility.

## What's an audit like?

I look through technologies and provide you with suggestions to move away from fragility.

To do so, I look at 4 things:

1. **licenses** of technologies you use
2. **governance** structures of:
  - software you use
  - servers you rely on
3. **know-how** that derives from technologies you use.
4. **business model**; I provide you with suggestions to move away from business models that are fragile and give you examples of practices that can make your business model stronger.

## **What's the training course like?**

I take your team through heuristics (rules) they can use against fragility.

I first give them an overview of these rules, then we go through your own cases altogether.

At the end of the training course, your team should have all heuristics (rules) in minds, and have an understanding of how they can apply those rules, internally or with clients.

Some examples of heuristics (rules) we can cover:

- Am I being misled to build my business with a technology that will disappear sooner than later?
- Am I the option of someone else?
- Can I detach myself from the purveyor?
- Is this technology like a restaurant, or like a bank?
- Is this technology like a recipe?
- Will my business get locked up?
- Is there reciprocity?
- What know-how is this technology prompting my organisation to develop (or lose)?
- What do I mean when I ask whether an application is secure?
- What about technical debt, design debt & *via negativa*<sup>3</sup>?
- Is this a technology which will undermine my business but which I won't be able to quit because I won't be able to do business without?

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<sup>3</sup> *by removing*, "we improve systems by removing parts, not by adding" Taleb"?



## How do I do things?

My value proposition is that there is no vendor lock-in.<sup>4</sup>

My aim is to transfer my know-how to you, or members of your organisation, so you don't become tethered to me or another digital vendors.

You can also use what you've learned from me commercially, with your own clients or partners.<sup>5</sup>

We work under non-disclosure agreement (NDA).<sup>6</sup>

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<sup>4</sup>"Vendor lock-in, also known as proprietary lock-in or customer lock-in, makes a customer dependent on a vendor for products, unable to use another vendor without substantial switching costs."–Wikipedia

<sup>5</sup>I license my work freely under Creative Commons licenses.

<sup>6</sup>I don't use my clients' names for marketing purpose.

## Who am I?

I've worked for an investment fund, early-stage startups, fortune 500 companies and a government; in countries such as the U.S., the U.K., France, Germany, Singapore, Hong Kong and China.

Now, I do applied research to help people move away from practices that make their businesses fragile.

My work is influenced by Daniel Ross, Bernard Stiegler, Nassim Taleb, Neil Postman, Yevgeny Zamyatin, Gaël Giraud, Cédric Durand, Plato, Richard Stallman, Lawrence Lessig, Aaron Swartz, Creative Commons, Evgeny Morozov, Eric S. Raymond, Paul Graham, Sean Ellis, Dave McClure, Unix philosophy, the contributors of Trisquel GNU/Linux as well as the maintainers of many freely distributed software, Leah Rowe, Lukas F. Hartmann (MNT Research), the MIT Artificial Intelligence Lab, the Homebrew Computer Club and many more.

# Notes

## What is a heuristic?

The word heuristic stems from Ancient Greek εὐρίσκω (heuriskō) 'to find, discover'.

A Heuristic is a rule of thumb we can use to keep us in check, while we move on, as technologies evolve.

As we move on, we'll learn through trials and errors, and will adapt those rules.

## Why would we need heuristics at all?

Using technologies is a little bit like signing a contract:

you don't mind hiring others to do work for you, but you don't want to get deceived. To avoid this, you draft contracts and review the conditions of delegations.

You don't sign contracts blindly.

Same with technologies:

you can delegate jobs to technologies, but you first have to figure what the conditions of delegations should be, so you don't get deceived.

Heuristics can help us not to get misled as we adopt and use digital tools.

## What are examples of practices that are fragile?

- Business XYZ built their business using product A. Company B acquired product A and shut it down.  
Clients were no longer able to use this technology.
- Digital provider provided their clients with a technology. Digital provider shut down.  
Clients were no longer able to use this technology.
- Digital provider A provided clients with the technology of digital provider B; digital provider B discontinued their technology.  
Clients were no longer able to use this technology.<sup>7</sup>
- Organisation XYZ used a platform to reach their audience, at first things worked out, but over time, less of the content XYZ posted reached their subscribers. Organisation had to post more and more content to try to stay afloat.
- Business XYZ had no agency over their own emailing systems and shared drives; the company operating XYZ's systems shut down XYZ's access overnight; as a domino effect, the marketplace operator through which XYZ sold their product also suspended XYZ's shop. Not only XYZ were no longer able to use its email system, shared drives or sell products, but XYZ's funds were locked with the marketplace operator. It XYZ a few days to retrieve access to its emailing system.

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<sup>7</sup>Google has shut down 289 products so far; Apple: 58; Microsoft: 101. Source: <https://killedbygoogle.com/> and <https://killedby.tech/>.

- Business XYZ lost know-how when employees left or moved positions because the value employees created was not captured.

## **What are examples of practices that are non-fragile?**

- business XYZ uses technology A through a digital provider, if the digital provider shuts down, XYZ can carry on using this technology.
- business XYZ uses a technology that cannot be acquired by any company.
- business XYZ uses technology A provided by company A; company B acquires technology A from company A and transforms it into technology B; technology B no longer suits XYZ; yet XYZ can carry on using technology A regardless of company B's wishes.
- business XYZ delegates the job of running their emailing, shared drives and other digital tools to an IT provider, yet XYZ governs (controls) the IT provider.
- business XYZ uses a platform to publish content and reach their audience; interactions between XYZ and their audience aren't short-circuited by third-party interests.
- business XYZ's implemented a system to capture know-how employees create, so when they leave, or change positions, new persons in charge can leverage know-how created by former employees instead of starting from scratch.

## What are examples of business models that are non-fragile?<sup>8</sup>

- MNT Reform produces laptops which source is distributed freely, i.e. anyone can study or use their work, even commercially. MNT Reform has received improvement of their products from third-parties which use their work. As of January 2025, MNT Reform is preparing to launch their third laptop and have pre-sold more than expected: \$150,000. Pre-sales target was \$100,000.
- Ghost publishes a software for publishers to run their own blogs and (paid) newsletters. They distributed their software freely and offer to help publishers with hosting. Ghost's revenues were \$6,000,000+ in 2023. 100+ technology providers have built integrations with Ghost. Clients: IBM, Tinder, Sky News, VEVO, and Zappos.
- In 1991, a couple of programmers wrote a document processor that is freely distributed. Since then they've been running their own consultancy business to assist corporations to leverage their software.
- Agency XYZ provide digital technology services and works with freely distributed software only.
- Red Hat Inc. (acquired by IBM for \$34 billion) only publishes open source software and serves Fortune 500 clients. Red Hat's revenues were of US\$3.4 billion in 2018.
- Wordpress is distributed freely; over the last 15 years, it has become the go-to Content Management System for more than 40% of the top 10 millions websites in 2021.

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<sup>8</sup>In other words: businesses that distribute their technologies freely and benefit as more parties adopt their technologies.

Some agencies have focuses on adopting Wordpress has the only technologies they provide to clients, others have built extensions or add-on on Wordpress.

## How can we get in touch?

### Email

yctct@yctct.com

### Public key

[https://yctct.com/\\_pubkey.txt](https://yctct.com/_pubkey.txt)

### GPG fingerprint

2E0F FB60 7FEF 11D0 FB45 4DDC E979 E52A  
7036 7A88

### Languages

fluent: english, french

beginner: italian, german, farsi

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### TZ identifier

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