

Heads in the clouds

Being human in the age of cloud computing

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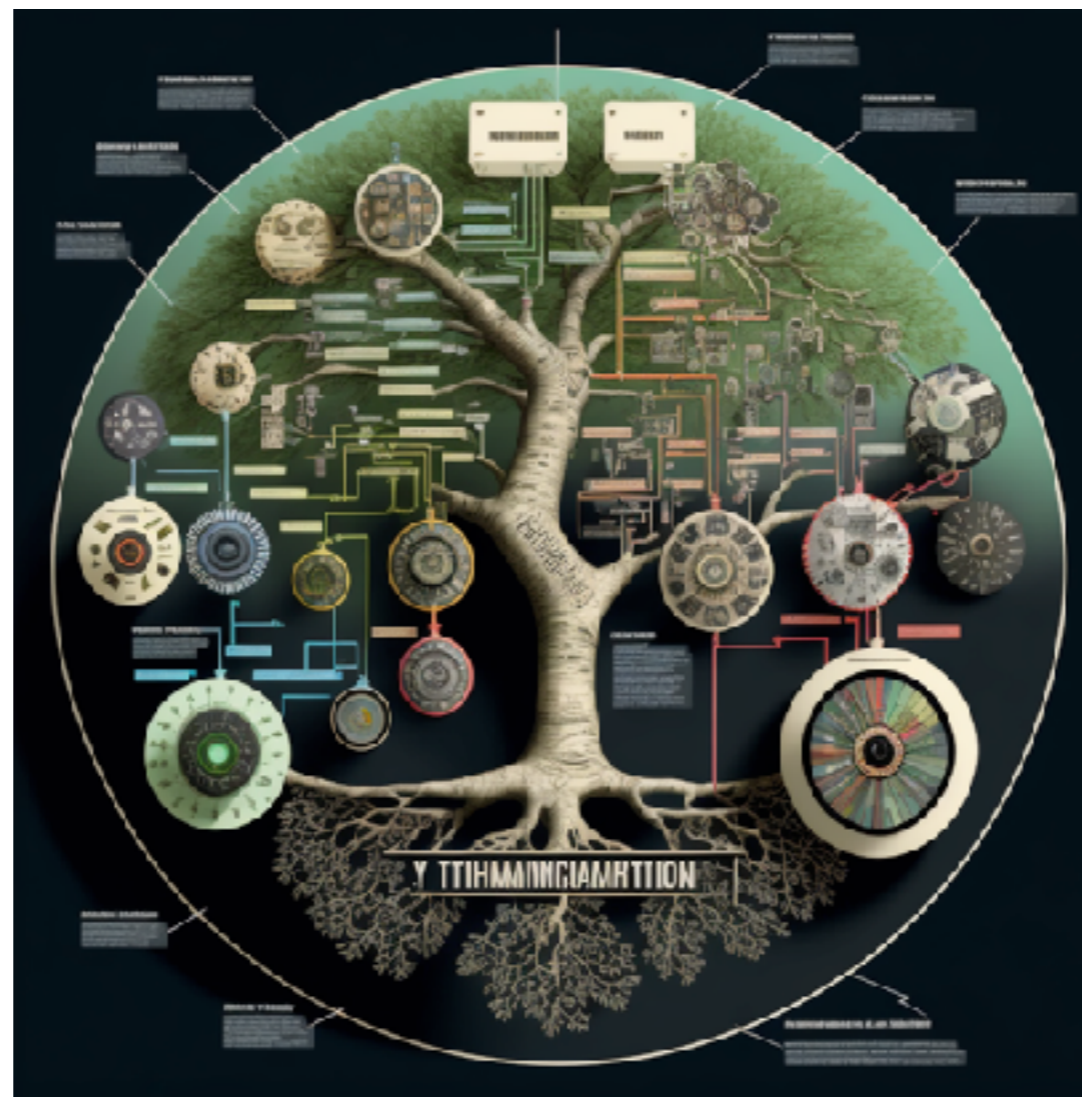


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Technology: organizing stuff to do stuff

(the orchestration of phenomena to some use)



The stuff that we organize to do stuff usually includes stuff that has been organized to do stuff

(technologies evolve by assembly)

Counter technologies



Many/most technologies in an assembly are needed only to fix problems caused by *other* technologies in the assembly...

***Including* those we enact ourselves**

Soft and hard technologies



- ✱ **Soft technologies are *made* to have gaps inventively filled.**
- ✱ **Hard technologies *force* us to fill the gaps correctly, as cogs in the machine.**

However, *any* technologies can be assembled with others in new and unprestatable ways.

Not just users but participants



Technologies are partly (sometimes wholly) made of us

Technique: the stuff we do with stuff that is done



Technologies that are enacted by humans



Hard technique and soft technique

- ✳️ **Soft technique is human, idiosyncratic, always unique, creative, and personal.**
- ✳️ **Hard technique is how we play our roles correctly.**

To put it another way...

Techniques
fill gaps in
the hard
assembly



The adjacent possible



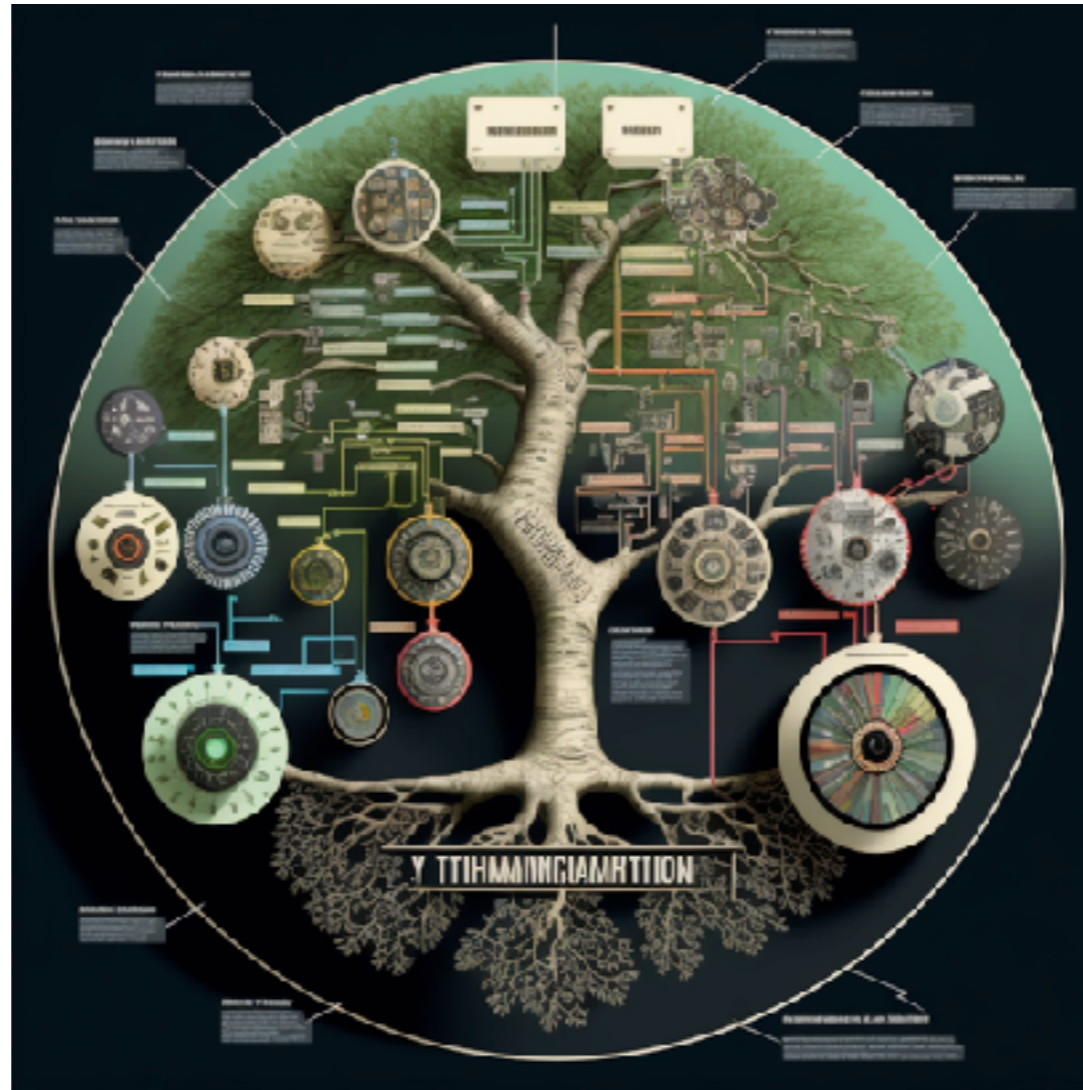
There are *always* gaps to fill. Each new technology makes new adjacent possible empty niches. Enablement, not entailment. But...

Pace layering

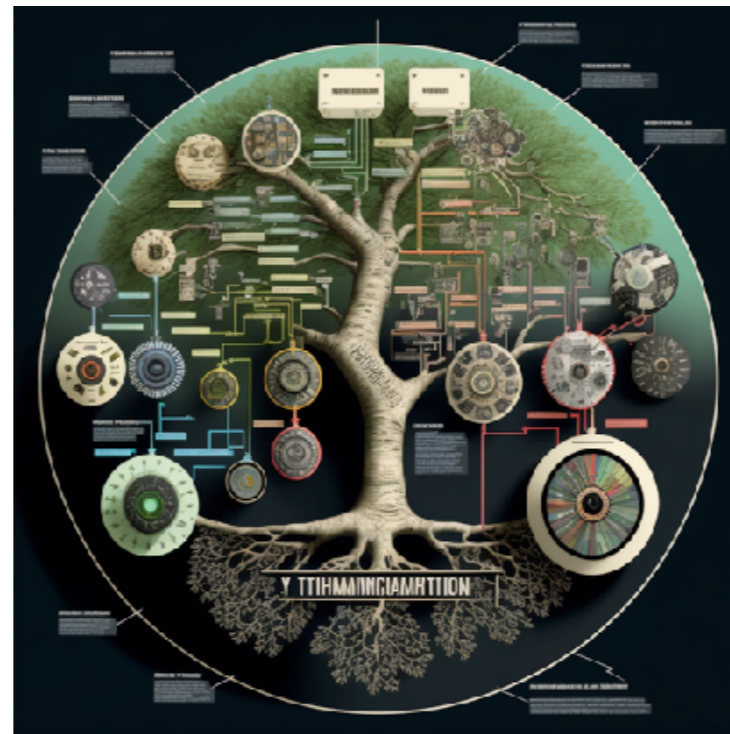


Larger and slower changing technologies have more influence than smaller and faster changing technologies. There are hierarchical layers.

Path dependencies



What exists constrains invention



**Hard technologies create
the context/environment
for soft technologies**

What is rigid constrains what is flexible



Synecdoches and wholes

What matters is the *whole* assembly. The parts may be essential, but they are not the technologies of interest.

The cloud



For different stakeholders there are different phenomena, different purposes, different gaps to fill.



Sometimes, they are in conflict

The cloud for the service provider

lock-in is *very*
desirable



The cloud for the IT department

**lock-in is very
undesirable**



The cloud for the end user?

Often just feel locked in (or locked out)



Clouds can be great, until the weather changes.



**What happens when cloud
providers:**

- Change the tech;**
- Change the rules;**
- Are acquired;**
- Change locations;**
- Change prices;**
- Go out of business?**

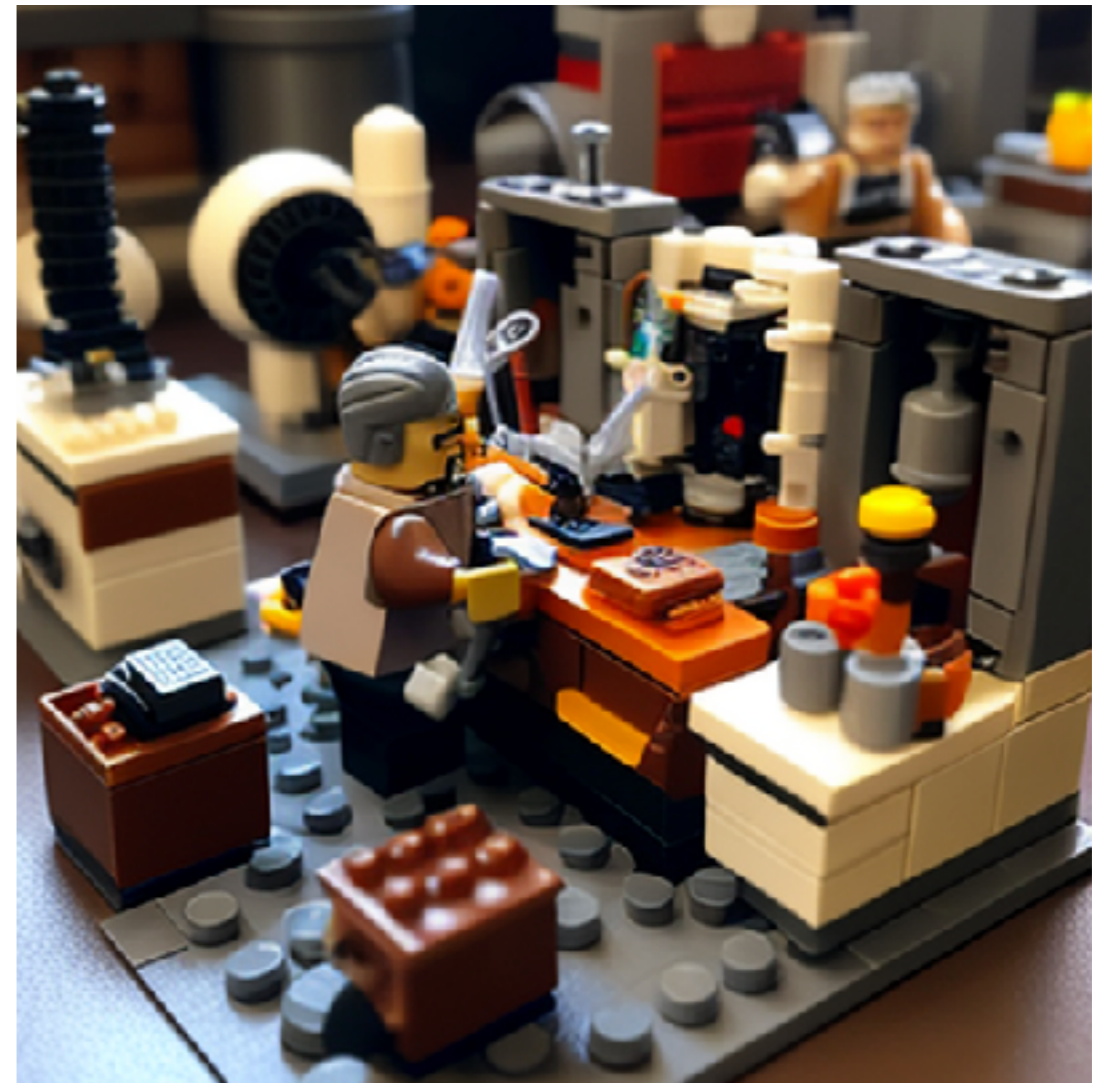


Focus on the participant role

What techniques depend on what has changed, what needs to change as a result?

**Build with small,
robust, assemblable
components.**

**Be the orchestrator,
not the orchestrated**



Use open standards, or wrap closed systems in open wrappers (microservices etc)



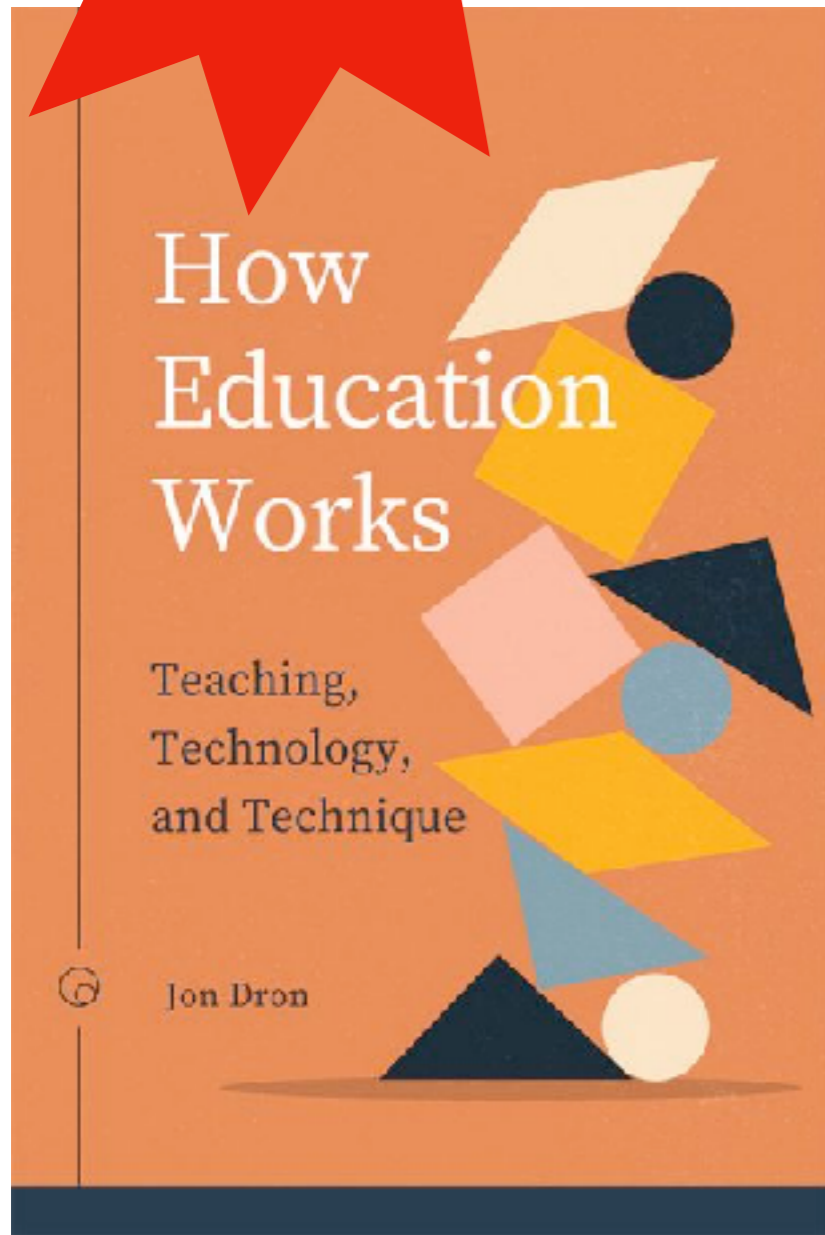


**Rent
generic,
replaceable
services, not
monoliths**

**In summary:
make the
right things
hard and
keep the right
things soft.**



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Thank you

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