

Building Skills In An AI Workplace

How do we keep our human-based professional skills sharp AND use AI tools to improve efficiency?

This presentation will discuss how AI tool usage impacts our ability to retain and build new professional skills.

THE CHALLENGE



“Organisations that become critically dependent on AI systems will become more and more fragile. ... Skill erosion represents a critical concern in AI-augmented workplaces, where workers gradually lose abilities they once possessed through lack of practice.”

– Laëtitia Vitaud, “AI’s battle of the skills: upskilling vs deskilling,”
<https://laetitiaatwork.substack.com/p/ais-battle-of-the-skills-upskilling>

WHAT DOES THE DATA SAY?

Gains For Less Skilled Workers

- [2023 study](#) conducted by Stanford's Digital Economy Lab And MIT.
- AI assistance increased call center agent productivity by 14%.
- Conclusion: "Workers with access to AI see fairly significant productivity gains, but most of those gains accrue to novice or less able workers."

Skill Amplifier For Top Performers

- [2025 research paper](#) with literature review
- Notable study from 2024: sales agents equipped with AI automation made more sales than control group
- But top performers made 2.8 times more sales - better scripts
- Conclusion: AI tools may free up time from qualification tasks to allow top performers to write better scripts

Other Studies

- 2022: ChatGPT helps programmers build a web page 30 percent faster, and non-programmers build one 95 percent faster
- 2023: Programmers using GitHub CoPilot cut development time by 50 percent, least skilled users benefit most

Conclusions?

- Does AI erode worker skills? It depends.
- Less skilled workers may benefit by gaining "tacit knowledge" more skilled workers carry in their head.
- More skilled workers may benefit when more routine tasks are automated, so they can concentrate on adding value.

Dangers Of Cognitive Deskilling

Deskilling

Previously learned skills begin to erode when always performed with AI help.

Cognitive Outsourcing

AI assistance to complete a task may lead to less mental engagement than completing it without help.

Skill Formation

Heavy AI usage can interfere with the formation of new skills.

Metacognitive Laziness

Use of AI tools without forethought can lead to dependence on the technology, interfering with self-regulation and ability to engage deeply with learning.

3 QUESTIONS TO ASK ABOUT AI AND SKILL BUILDING

What gain am I looking for by using AI?

Efficiency gains? Improved quality? Faster turnaround?

AI often succeeds in providing efficiency gains, although this is much more uneven in practice.

Asking this question helps avoid “AI for AI’s sake.”

Do I already know how to do this skill?

If you don’t know how, or can’t do it well, AI may provide “tacit knowledge” more experienced workers have – but you may lack context to understand what good or bad output looks like.

If you do know how, be aware of the potential for skill erosion.

How can I build in human “friction” to an AI task?

Human in the loop is necessary but not sufficient!

Add friction by:

1. Step-by-step/iterative prompts
2. Build in time for review points
3. Incentivize analog practice on a regular basis

BUILD YOUR SKILLS WHILE USING AI TOOLS

1

Evaluate Brain Impact

Cognitive offloading vs. cognitive outsourcing.

Offloading = saving time to spend time on creative or critical thinking tasks.

Outsourcing = taking the human out of the loop - NOT RECOMMENDED.

Use AI strategically, not reflexively.

2

Evaluate Skill Set

Get clear on your top human skills and protect them.

Don't outsource your key skills. Spend time practicing and growing portfolio.

Identify "stick + rudder" components essential to human performance of the skill.

Protect your top skills and keep them sharp.

3

Improve, Don't Replace

Use AI to improve human output, rather than the reverse.

Add your impact up front and have AI refine it. Evaluate its suggestions critically.

Use AI to amplify your creativity and expertise.

Feed AI your best efforts and ask for help amplifying them.

4

Build AI Skills

Learn how AI works and which AI skills you want to gain.

Learn about LLMs, agentic systems, etc. - what's happening underneath the hood?

Try vibe coding, certification classes, etc.

Use strategy with AI skill building, too!

5

Use Human-Only Skills

Improve your skills in areas AI can't currently touch.

Examples: relationship building, active listening, ethical reasoning, contextual thinking.

Human-only skills also show off your leadership abilities!

Our human skills allow us to make our highest and best contributions.

Questions

- What skills related to AI do you most want to learn?
 - What top professional skills do you most want to protect?
 - What ideas do you have for using AI more strategically?
 - How can FindLaw DS support our human-only and AI-related skills?
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Thank you!

We always welcome feedback on the AI Power Hour!