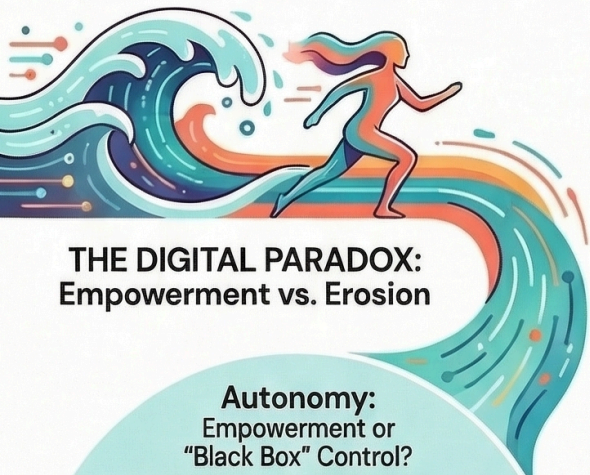


Beyond the Bot: Human-Centered Work Design in the Digital Age



THE DIGITAL PARADOX: Empowerment vs. Erosion

Autonomy: Empowerment or "Black Box" Control?



Tech distributes data to empower decisions



centralize control through opaque algorithms.

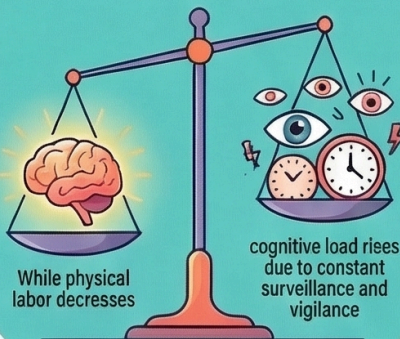
Skill Use: Upgrading vs. Atrophy



Automation can free humans for high-level creativity

or trap them in monotonous monitoring.

Job Demands: Reduced Labor, Increased Stress



While physical labor decreases

cognitive load rises due to constant surveillance and vigilance



3 STRATEGIES FOR A PROACTIVE FUTURE

Joint Optimization & Participatory Design

Feature	Traditional "Left-Over" Allocation	Human-Centered Complementarity
Human Role	Fills gaps left by automation	Exercises judgment and adapts to novelty
System Logic	Opaque "Black Box"	Transparent and predictable
Feedback	Surveillance and compliance	Actionable data for learning

Involve workers in implementation to ensure technology complements human strengths rather than replacing them.

Human-Centered Procurement

Work Design Literacy

Train engineers and managers in sociotechnical principles, moving beyond simple digital ops-ailing.



Traditional vs. Human-Centered Technology Implementation

Feature	Traditional "Left-Over" Allocation	Human-Centered Complementarity
Human Role	Fills gaps left by automation	Exercises judgment and adapts to novelty
System Logic	Opaque "Black Box"	Transparent and predictable
Feedback	Surveillance and compliance	Actionable data for learning