Designing Jobs in the Age of AI

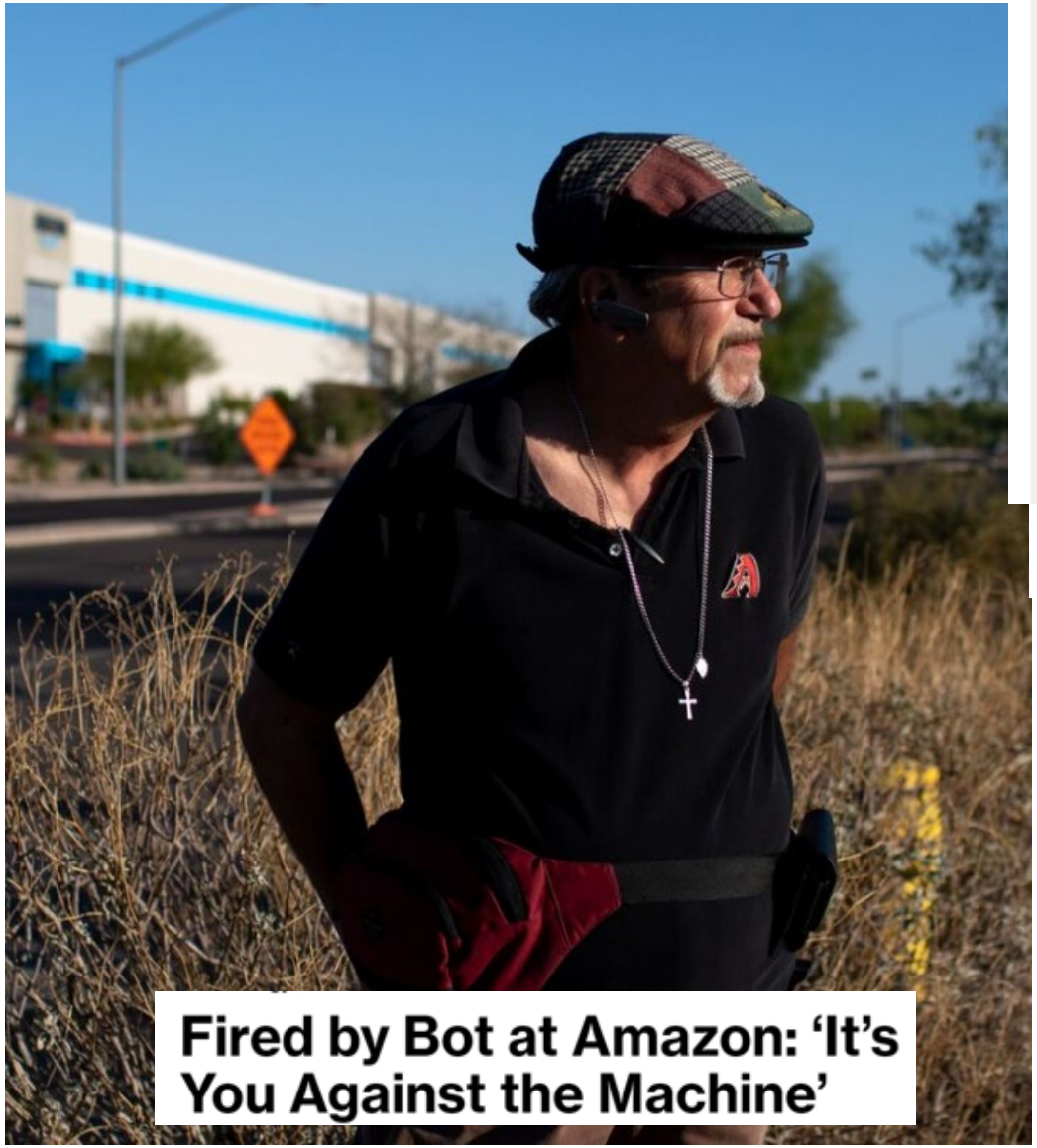
ARC Laureate Fellow Sharon K. Parker
Director, Quality Work in A Digital Age/ Centre for Transformative Work Design



s.parker@curtin.edu.au
Linkedin Sharon K Parker

Smartworkdesign.com.au
Transformativeworkdesign.com
Qwida.org.au

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-----Original Message-----
From: Amazon.com
To: [redacted]
Sent: Sat, Oct 3, 2020 12:08 pm
Subject: A Message from Amazon Flex Support
Hello Stephen,Thank you for providing us with more context about your history with Amazon Flex. We’ll consider this

‘thank you for providing more context’…’we will review’

‘we will respond in 7 days’

Pavani G

(6 days later) ‘we are still reviewing…’

(apologies) and ‘we will update you asap’

ArnaB

(Oct 19) ‘we are reviewing your appeal’

(after copying in Bezos) ‘researching the issue on behalf of Bezos’

Taylor F

Raquel

(finally) ‘“We understand that every delivery partner has difficult days and that you may sometimes experience delays, and we have already taken this into account…..” (you are still fired)

SYAM

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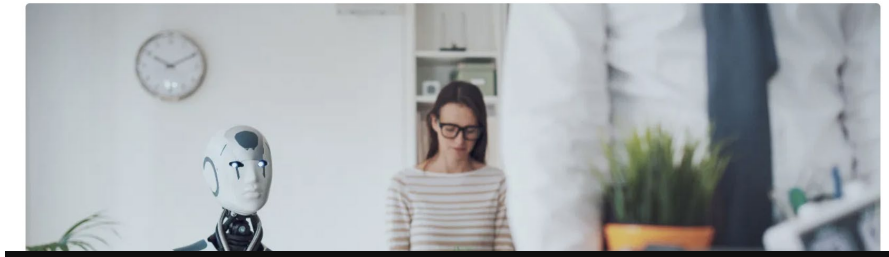
Woolworths strike bill tops $50m as disruption spreads to Dan Murphy's

CommBank worker fired after 25 years, replaced by AI chatbot she helped train



Abhinav Bakshi • Join Us Follow Us

5 September 2025



"Call volumes were rising, with management scrambling to offer overtime and even pulling team leaders onto the phones," its statement read.

CENTRE FOR TRANSFORMATIVE WORK DESIGN

Curtin University
FUTURE OF WORK INSTITUTE

These are not isolated cases!

Parker, S. K., & Grote, G. (2022). Automation, algorithms, and beyond: Why work design matters more than ever in a digital world. *Applied psychology*, *71*(4), 1171-1204.



https://www.ifow.org/landing-page/the-pissarides-review

*How can we create **healthy and meaningful work** in the future?*

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Hannah Ross
04 November 2026 · News

EMPLOYEE ENGAGEMENT | WELLBEING | CULTURE | PERSONAL DEVELOPMENT

Job satisfaction falls to lowest level in a decade, survey suggests



British Social Attitudes Survey

[HR Magazine - Job satisfaction falls to lowest level in a decade, survey suggests - HR Magazine]

https://mentalhealth-uk.org/

Burnout Report 2026: High stress pushing workers into sick leave as just one in four feel mental health is genuinely prioritised and supported in the workplace

POSTED 16TH JANUARY 2026

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The "Klarna effect"

These are not isolated cases!

eg Raji & Kumar, 2022;
Dell'Acqua et al., 2023;
Brynjolfsson et al., 2018;
Humlum & Vestergaard, 2025

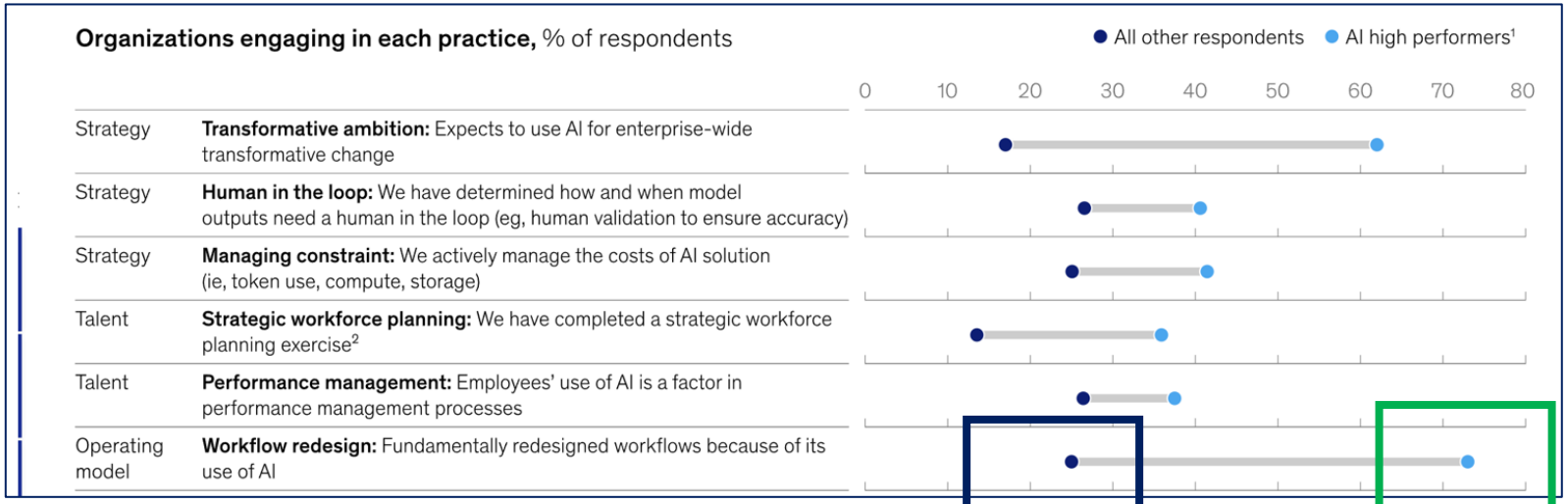
Senior leaders do not see AI investments translating into productivity gains. Eg:

- Only 37% companies report some enterprise-level benefit; 6% significant benefit (McKinsey, 2026)
- 5% firms generating substantial AI value (BGC, 2025)
- 72% of CIOs report their organisations are breaking even or losing money on AI investments (Gartner, 2025)
- And many other similar reports!

*How can we achieve **productive work** in the future?*

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Attention to work design fosters effective AI use



McKinsey report

Other users

AI high performers

Academic research supports these ideas!

Example studies

Raji & Kumar, 2022

Dell'Acqua et al., 2023; Brynjolfsson et al., 2018; Humlum & Vestergaard, 2025

Bonetti et al., 2023

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*How can we create **healthy & meaningful work?***





Work Design

How can we deliver benefits of, and value from, AI?



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Work Design

"the content and organising of tasks, activities, relationships, and responsibilities within a job or role, or set of jobs/roles"

Parker, 2014

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AI rarely replaces whole jobs or occupations…

AI vs human vs both (automation/ augmentation)

AI as team-mate

"the content and organising of tasks, activities, relationships, and responsibilities within a job or role, or set of jobs/roles"

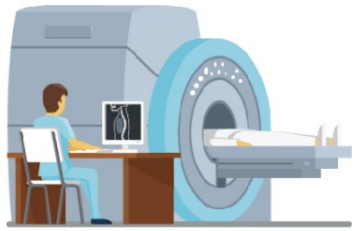
Oversight, human in the loop, accountability

Parker, 2014

Example: Radiology

Make sense of ambiguity

Link output into wider plans & patient history







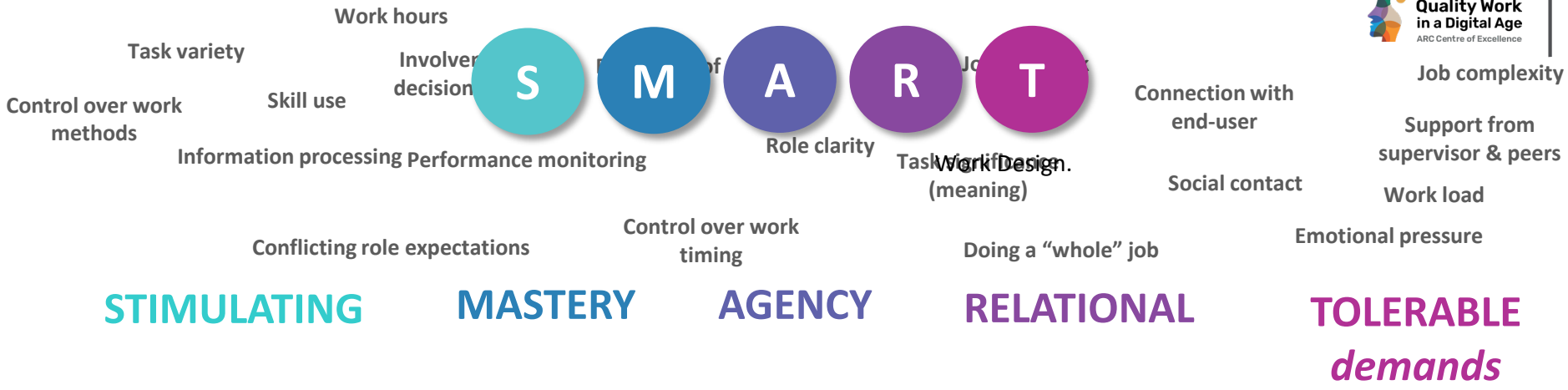
SCANNING:

INTERPRETATION:

COMMUNICATION:

Professionally and legally accountable for any decisions

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See smartworkdesign.com.au

Parker, S. K., & Knight, C. (2024). The SMART model of work design: A higher order structure to help see the wood from the trees. *Human Resource Management, 63*(2), 265-291.

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Why does work design matter?



Mental health
e.g., depression, burnout

Motivation & performance e.g., job satisfaction creativity, core task performance, proactivity

Learning & growth
e.g., skill development, use of talent

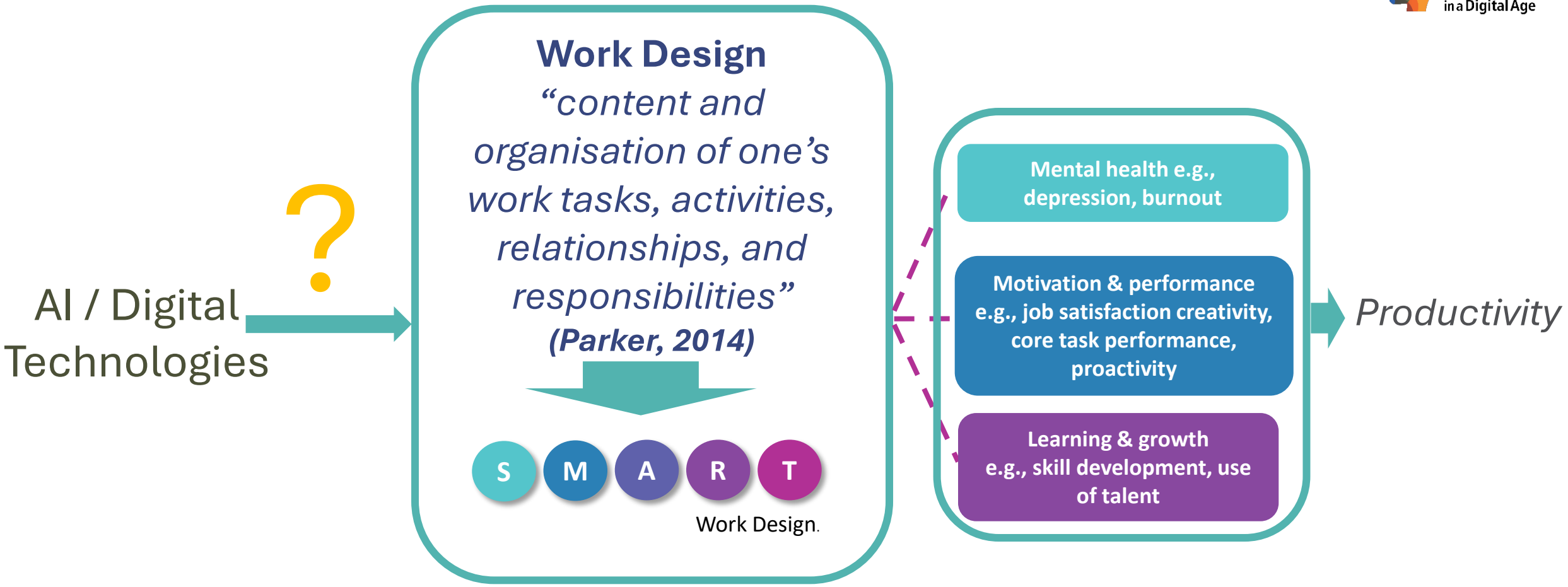
Critical Foundation for Effective AI Deployment

Over 5000 articles- inc. meta analyses, longitudinal intervention studies etc

Parker, S. K., Morgeson, F. P., & Johns, G. (2017). One hundred years of work design research: Looking back and looking forward. *Journal of Applied Psychology*, *102*(3), 403.

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Effect of AI on Work Design



Over 5000 articles- Including meta analyses, intervention studies etc.

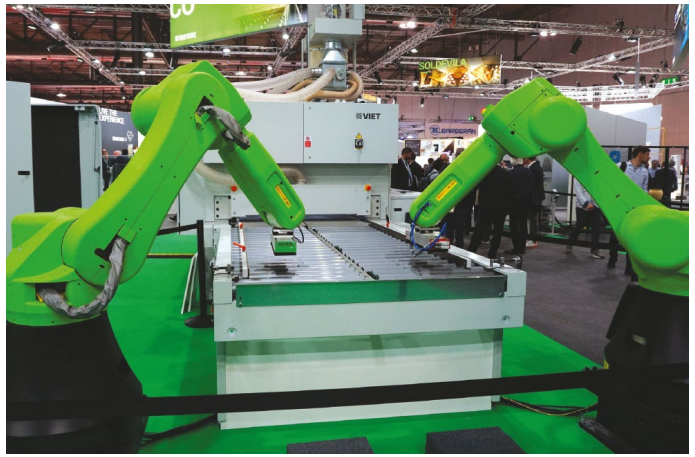
Parker, S. K., Morgeson, F. P., & Johns, G. (2017). One hundred years of work design research: Looking back and looking forward. *Journal of Applied Psychology*, *102*(3), 403.

Stimulating SMART Work Design. in the future?

STIMULATING

- Task variety
- Chance to use & develop skills
- Challenge

Example: Growth of 'grey collar' work



Can reduce "dull, dirty and dangerous" tasks (Walsh, 2024)

Outsmarting The Robots

*"If you have a piece of sixteen centimeters [which robots do not recognize], you have to **trick the robot** into thinking that it is nineteen or twenty centimeters thick…"*

Goštautaitė, B., **Parker**, SK., Liubertė, I., & Bučiūnienė, I. (2024) Outsmarting the robots. Academy of Management Discoveris.

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Stimulating SMART Work Design. in the future?

Example



*"They trained in (top) programs that teach robotic surgery…**And they suck**.. I mean these guys can't do it. They haven't any experience doing it. They watched it happen. Watching a movie doesn't make you an actor, know what I am saying?"*

(Chair, Urology) Beane et al., 2018

Reduces opportunities for learning & skill development

Examples

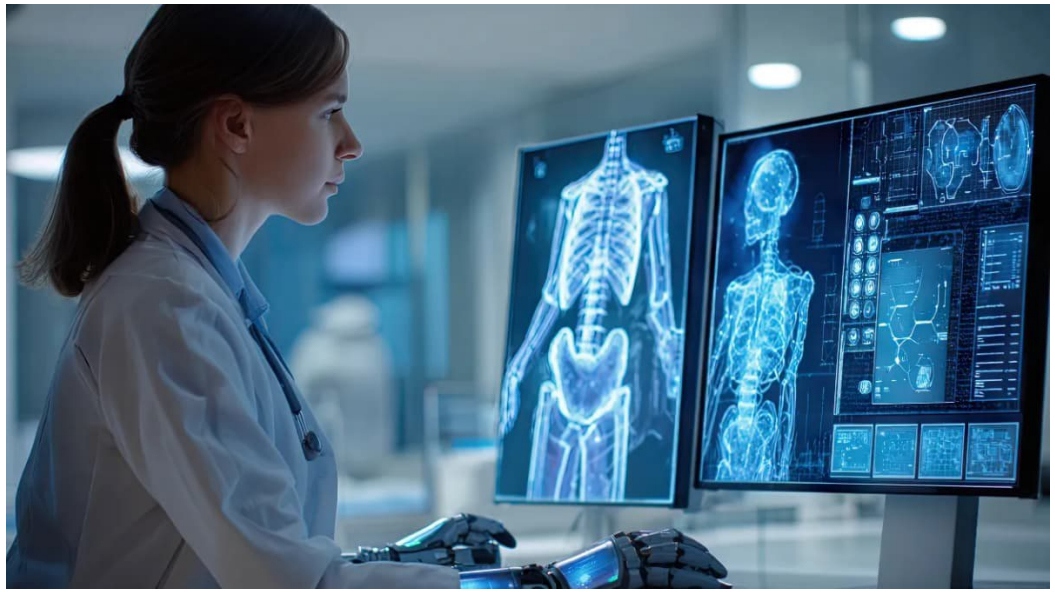
- "cognitive offloading"
- systems not designed for engaged learning

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Mastery SMART Work Design.

in the future?

Example:
AI training better performance in 93% studies



Eg. Keshavarz et al., 2026

MASTERY

- Clarity
- Feedback
- Task identity

AI systems can give real-time, consistent feedback and promote independent self-paced learning

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in the future?

Example:
Loan consultants (Mayer et al)

"Last week, I had a young woman of 22 as a customer, and she had just started working. She got a €35,000 loan, and a very good interest rate, about 5%. ... A bit later, I had a former colleague who came to me, who wanted to buy a car; ... he is about 38, has a good income, everything is absolutely great. ... He was given an interest rate of almost 9%. ... Sometimes I can't understand these decisions." Loan Consultant, Main Finance



Lack of transparency because of AI learning over time impairs understanding

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Agency in the future?

SMART Work Design.

Example: AI suggests, humans decide



Brynolfsson et al. Productivity increased by 15%

AGENCY

- Control over work methods & timing
- Chance for decision-making
- Influence and voice

An augmentation approach can support human agency

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Agency in the future?

SMART Work Design.

Examples



Mayer et al., 2020

✕

Human out of the loop (e.g., Mayer et al., 2020, loan consultants could not override AI decisions that excluded anyone ‘different’)

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Agency SMART Work Design.

in the future?

Examples

Are you guilty of 'AI washing'?

Organisations are facing accusations of making AI the convenient villain in corporate layoffs



Beware “Human-washing” (Scorici et al., 2020) - people apparently in the loop but lack the understanding/ training to exercise agency

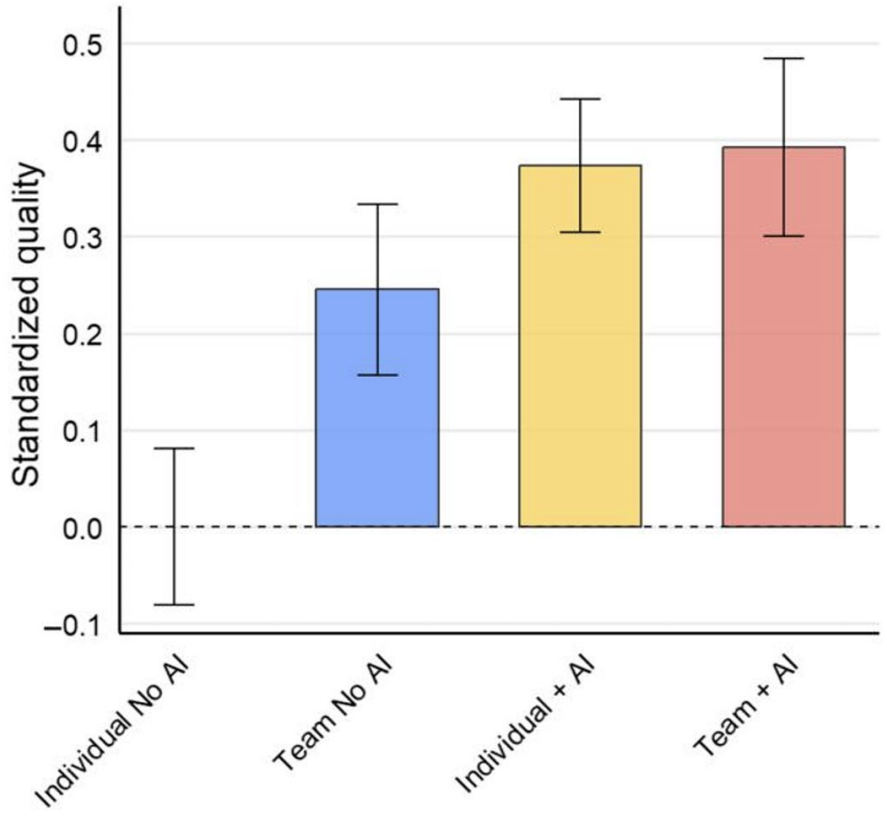
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Relational SMART Work Design. in the future?

RELATIONAL

- Social contact
- Support
- Being in a team
- Positive relationships

Figure 2. Average Solution Quality



Example

Fabrizio Dell'Acqua, et al., (2026) The Cybernetic Teammate: A Field Experiment on Generative AI and Teamwork. Organization Science 37(4):1217-1242. (AI reduced functional silos, generates positive emotions, & enhances the quality of solutions)

Human + AI, and Team + AI, teams can outperform other combinations in creative work

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Relational

SMART

Work Design.

in the future?

Example: People trust others less when they disclose using AI



Schilke, Oliver, and Martin Reimann. "The transparency dilemma: How AI disclosure erodes trust." *Organizational Behavior and Human Decision Processes* 188 (2025): 104405.

Èxamples:

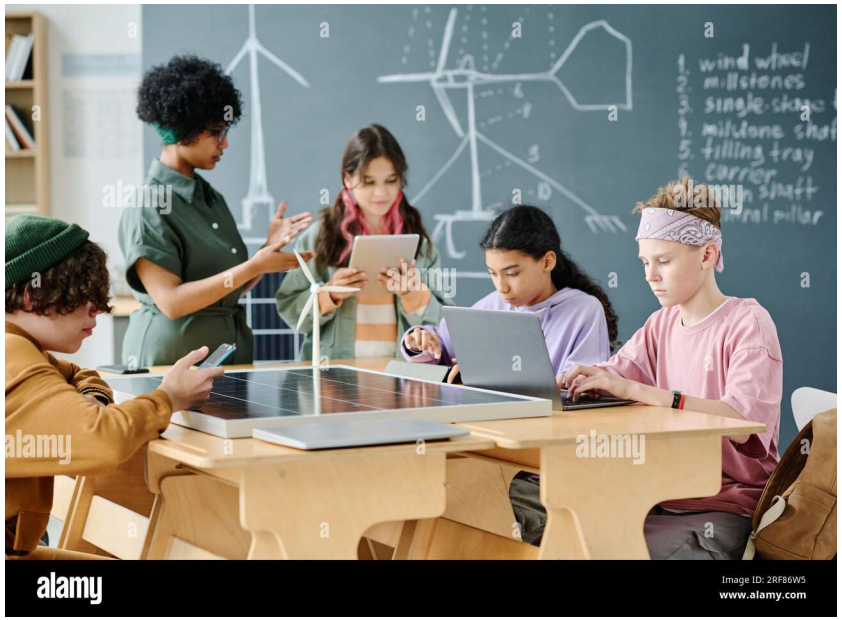
- Using AI can reduce connections with people & degrade relationships over time (Seeber et al.,2020).
- In teams, can reduce effort, trust, and performance (Dell Acqua et al., 2025).

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SMART Work Design.

Tolerable in the future?

Example



Gupta et al., 2024: task analysis for teachers pre and post AI

Teachers spend less time on grading, attendance tracking, reporting, reducing administrative burded

TOLERABLE DEMANDS

- work load
- cognitive demands
- emotional demands
- other demands

Reduces time spent on administrative/ routine tasks

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SMART

Tolerable

in the future?

Work Design.

Examples

AI Doesn't Reduce Work —It Intensifies It

by Aruna Ranganathan and Xingqi Maggie Ye

February 9, 2026



Unrealistic performance expectations (e.g., radiology case, Lebovitz et al)

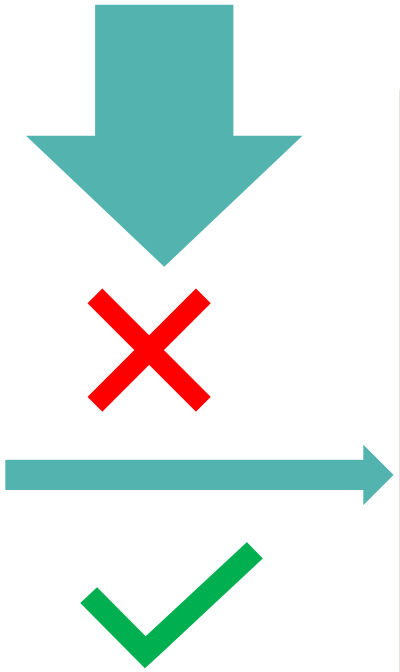
New tasks generated by AI raise work load (e.g.,; Mertons, Parker et al., in prep. remote health monitoring health)

"Brain-fry"& intensification from oversight, weird outputs, multitasking, being left with hard tasks etc (Beddard, J., Kropp et al., 2025; Ramganathan & Ye)

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??

AI / Digital Technologies



"technology is neither good nor bad; nor is it neutral" *(Kranzberg)*

Work design

"content and organisation of one's work tasks, activities, relationships, and responsibilities"

(Pa… 14)

S M A R T

Work Design.

Healthy & inclusive work Augmentation

- Mental health e.g., depression, burnout
- Motivation & performance e.g., job satisfaction creativity, core task performance, proactivity
- Learning & growth e.g., skill development, use of talent

Benefits for productivity

Parker, S. K., & Grote, G. (2022). Automation, algorithms, and beyond: Why work design matters more than ever in a digital world. *Applied psychology*, *71*(4), 1171-1204.

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So how do we ensure that AI has a “good” effect on work design?

Train & coach individuals to craft SMART work when using AI

S — Don’t deskill yourself through cognitive offloading; build & retain subject matter expertise; experiment and learn

M — Consider trading off accuracy for understanding

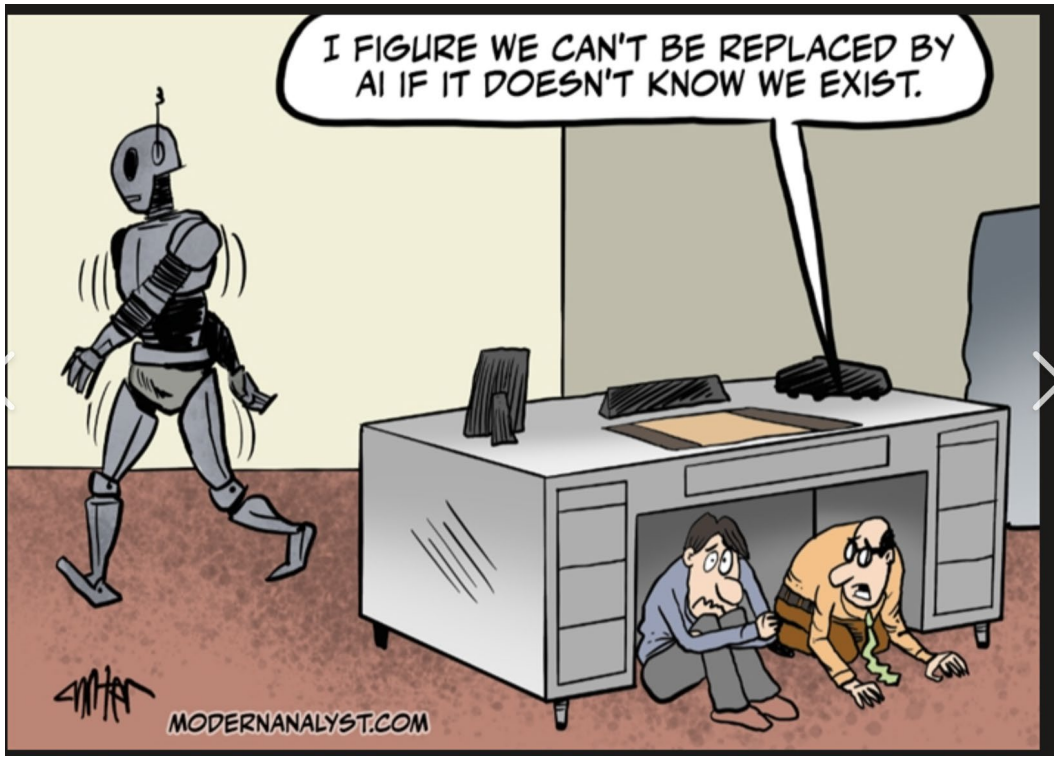
A — Exercise your agency, especially when you are accountable

R — When AI is a collaborator, calibrate your trust.
Don’t pass on AI slop to your human team-mates.
Create new ways to connect with your colleagues if you rely more on AI.

T — Manage your own and others’ expectations about what is possible
Beware brain fry

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Help AI project teams shift from "*which tasks can we automate*" or "*how many people can we replace?*" to "*how can we better design the work system*"

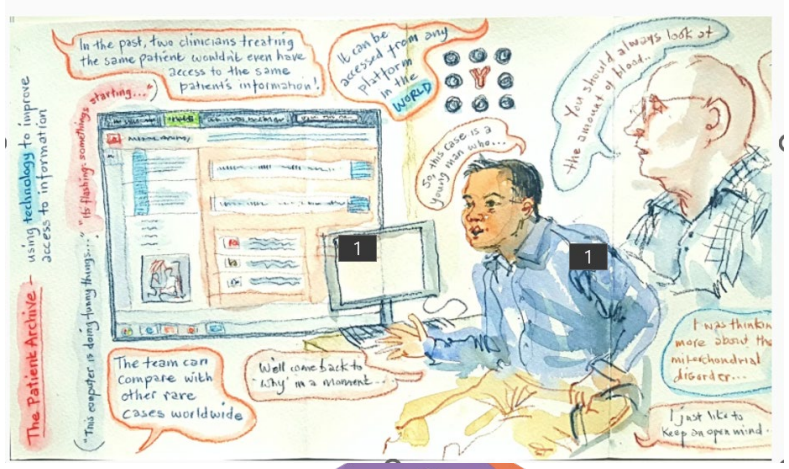




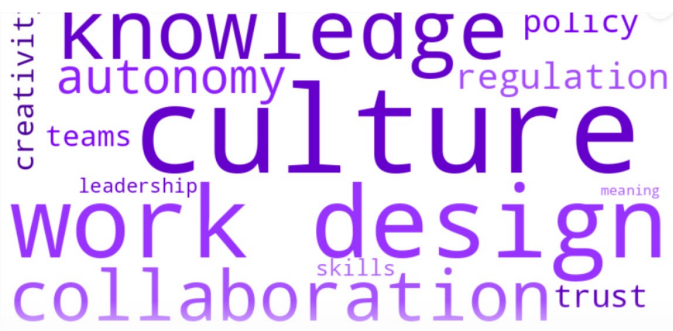
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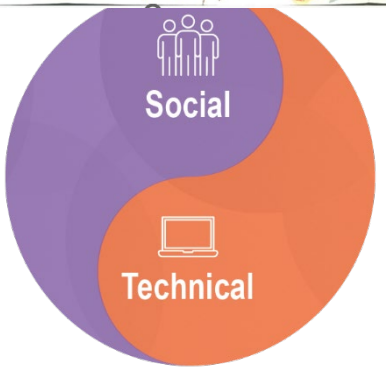
Adopt a “sociotechnical” rather than a “technocentric” approach to improving the work system

Social
A new team work design



Tech
The Patient Archive





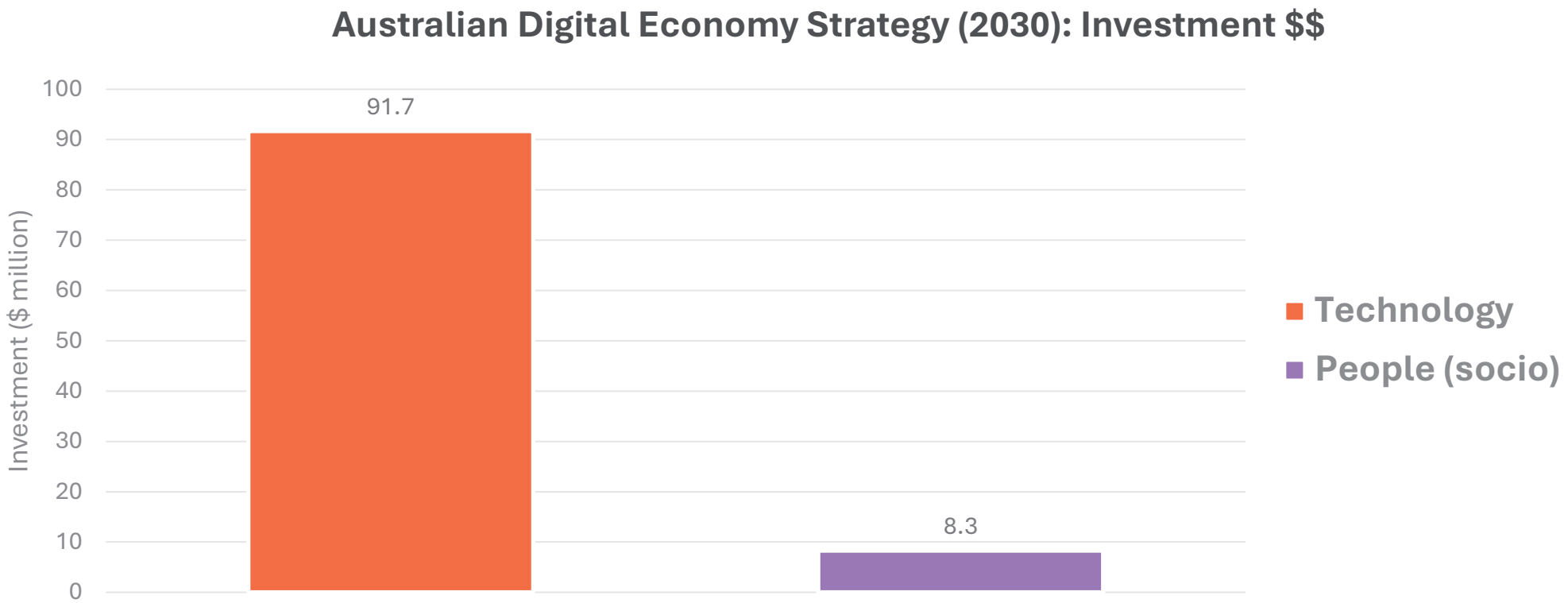


Parker, SK., Ballard, T., Billinghurst, M., Collins, C., Dollard, M., Griffin, M.A., Johal, W., Jorritsma, K., Kowalkiewicz, M., Kyndt, E., Lusher, D. McLennan, C., Miller, T., Neal, A., Paterson, J., Vetere, F., and Walsh, T. (in press). **Quality Work in the Future: New Directions Via a Co-Evolving Sociotechnical Systems Perspective.** *Australian Journal of Management.*

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Invest in the ‘socio’ as much as the ‘technical!’

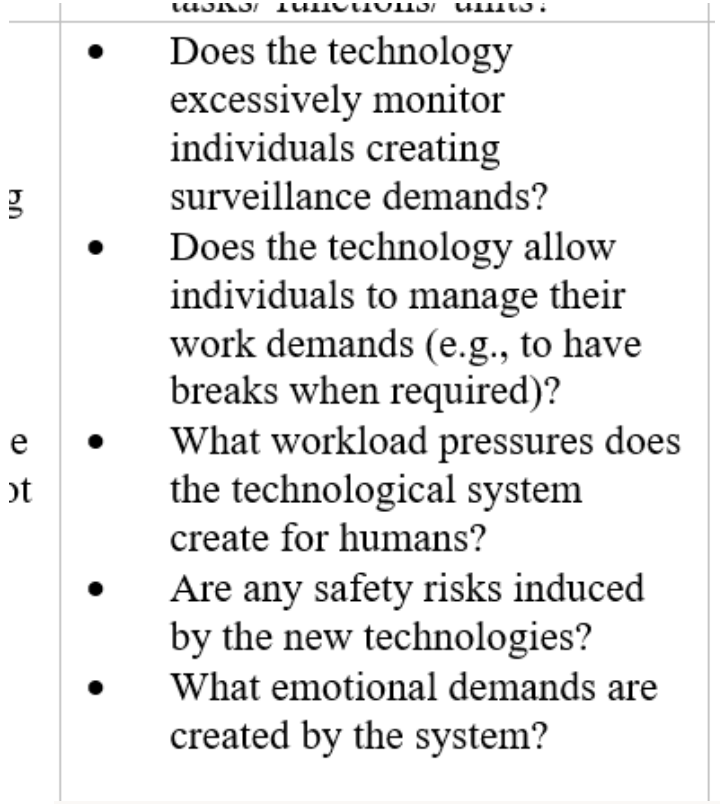
“….the bottleneck is no longer technical”



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Actively plan for, and shape, human-AI work design throughout the journey

The SMART model can be used a part of the **criteria** when developing, procuring & deploying AI (eg choosing amongst options), and when evaluating AI impact



- Does the technology excessively monitor individuals creating surveillance demands?
- Does the technology allow individuals to manage their work demands (e.g., to have breaks when required)?
- What workload pressures does the technological system create for humans?
- Are any safety risks induced by the new technologies?
- What emotional demands are created by the system?

Parker & Boeing 2025

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Be proactive in thinking about work design & other 'socio' aspects



"We're the band-aid until the techies get there to fix things… Originally train drivers were up there with airline pilots and they were one of those careers everyone aspired to… Now we're just forgotten, we're the band-aids…"

De Boeck & **Parker** (under review)

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Engage the people who do the work in the design process, and support their upskilling if/when roles change



Five year study of retailers: Successful AI requires radical changes in ways of working, which in turn requires engaging employees in change (Bonetti et al., 2023)

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Example of Non-Sociotechnical Approach

- Advanced speech recognition tool for clinical documentation of doctors
  - dictating 33% faster than typing
  - highly accurate tool
- Volunteer participants trained on the tools
- Dedicated IT project manager



Project manager

"We could not see it being adopted sufficiently by a sufficient number of users to make it financially sustainable"

After 9 months, hospital halted investment due to low adoption.

Mertens, A., Kho, M., De Toni, F., & Parker, S. K. (2026). Why technology implementation fails: From adoption to dynamic technology integration. *European Journal of Work and Organizational Psychology*, 1-16.

Quality Work in a Digital Age

Why did adoption fail?

Pre-existing high workload raised the 'effort threshold' for uptake:

- Tool less accurate in context
- Significant time to learn & train the system (eg adding templates; system didn't easily 'learn')
- speaking vs typing is new skill and people tended to use more words when speaking

Mismatch of existing work design with the technology

- Shared office spaces/ confidentiality concerns
- Multiple e-tools for documentation meant constant swapping (interdependence of tasks)
- Separate system for writing a clinical letter caused duplication

"We do have an open office of about 20-odd people. And at times, it gets quite noisy. And other times it's dead silent. And I will admit, that restricts when I feel comfortable using it". (clinician)

Example of a Sociotechnical Approach… Wei 2025

Open-source tech

Proactive Sociotechnical Approach to Work Design

- Proactive strategy to use tech to make work better
- UX design deeply embedded *"…We use their feedback to decide whether a product was successful or not. Employee voice is very very important" (HR mgr)*
- Iterative open learning culture

150 digital HR products across all functions (recruitment, training, benefits, etc)

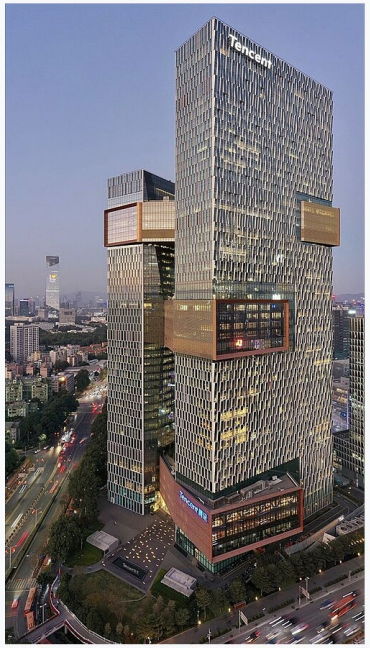
S M A R T Work Design.

Healthy & productive work

"it's like 'use and go'. The products are user friendly, they save a lot of my time" (staff member)

*"These products are not like some cold-hearted tools for us, **or something that companies impose on us**… these products are truly supporting us, not only in our work but also in our lives. (Staff)*

"Within the OKR (goal) tools, you can list your own objectives & share them with those you deem appropriate…. everyone's input and collaborative efforts can be displayed" (Staff2, Business group 1)



Tencent Seafront Towers in Shenzhen

Top ranked Chinese IT company with > 100,000 employees

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So... *In an AI-Future:*

*How can we create **healthy & meaningful work?***





SMART Work Design.

Sociotechnical Approach

How can we deliver benefits of, and value from, AI?



An Opportunity for HR?

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Questions?

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