CENTRE FOR TRANSFORMATIVE WORK DESIGN

Curtin University
FUTURE OF WORK INSTITUTE

Quality Work in A Digital Age: Opportunities, Threats, and a Role for IO Psychology

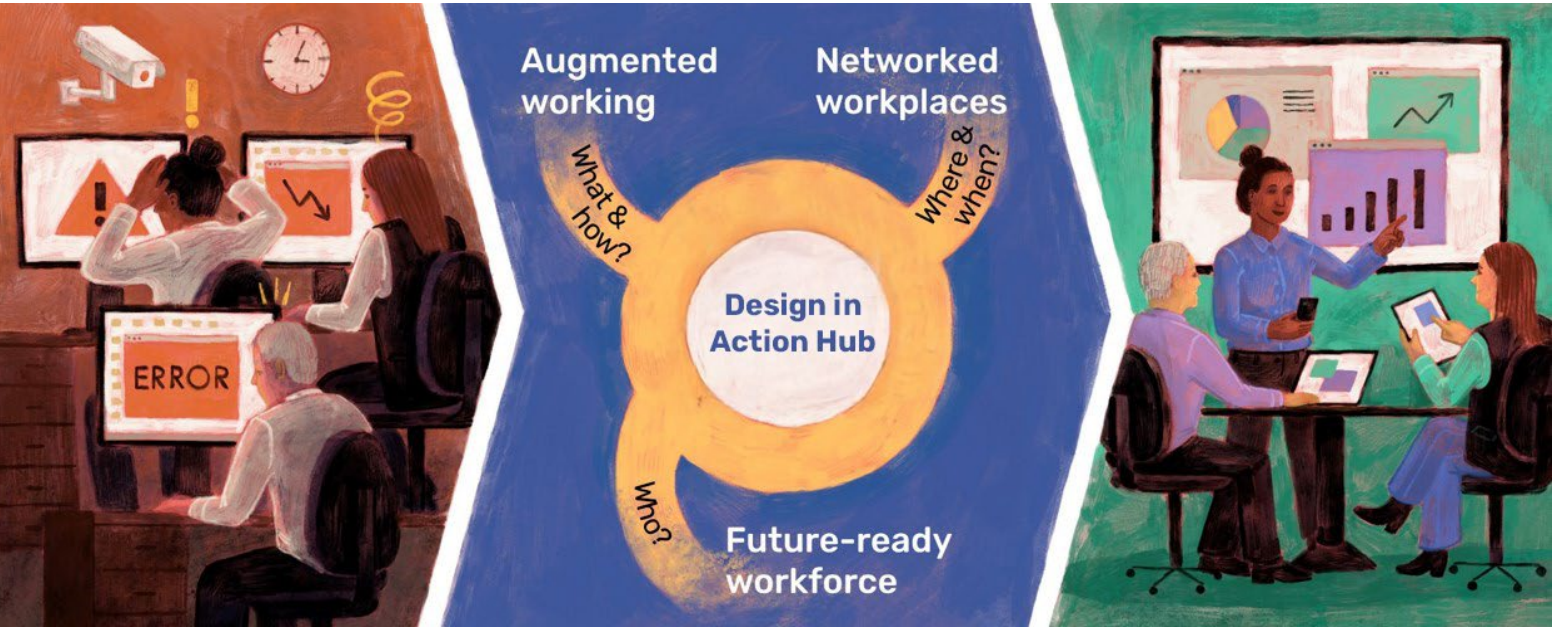
John Curtin Distinguished Professor Sharon K Parker

@wetransformwork

AHRI August 2026

ARC Centre of Excellence for **Quality Work in a Digital Age**

(QWiDA, pronounced ‘Qweeda’)



Quality Work:

- HEALTHY
- INCLUSIVE
- PRODUCTIVE

Advertising alert!

1145am on Friday: Profs Collins, Jorritsma More About QWIDA!

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

My Focus Today:

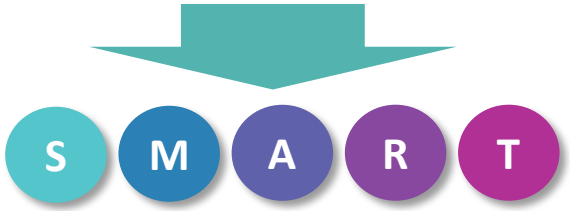
Achieving healthy, inclusive and productive work with AI:

A **work design** perspective

Work design

"content and organisation of one's work tasks, activities, relationships, and responsibilities within a role or a set of roles"

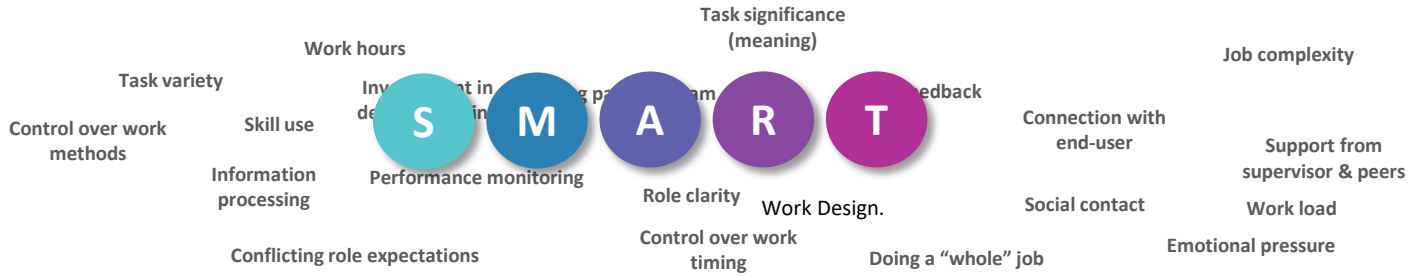
(Parker, 2014)



Work Design.

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

Key Ingredients of Well-Designed Work



See www.transformativeworkdesign.com/smart-work

Parker & Knight (2023). Seeing The Wood For the Trees: Structuring Work Design Via A Higher-Order Analysis of Work Characteristics. *Human Resource Management.*

AI / Digital Technologies

?

Work design

"content and organisation of one's work tasks, activities, relationships, and responsibilities"
(Parker, 2014)

S M A R T

Work Design.

A Positive Work Future

- 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

Successful technological transformation

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.

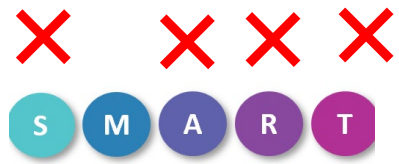
Example 1: Digital policing



© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

Quality Work in a Digital Age

Predictive Policing: Data Reporting



Work Design of Dutch police officers

Stimulating (S)

- 1/3 shift spend spent reporting
- Incongruence of reporting with skills & values
- Increased inauthentic “front stage” performance because of bodycam recording etc



Agency (A)

- Officers’ situational discretion reduced because calls/responses must be reported (enforced accountability)
- Reports must fit standardized format - issues with rigid labels (eg “resistant”; safe-at-home”)

Relational (R)

- Officers’ links to the community weakened

Tolerable (T)

- Reporting often creates moral & emotional dilemmsa
- After intensive multiple incident day, long report must be completed.
- Pressures for bodycam recordings etc add load (eg tree example)

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

Predictive Policing: Criminal Anticipation System



Dutch information officers
→ intelligence officers

Stimulating

- Low- status IOs role expanded to bridge data science & policing.
- From lower-skill work to interpretive/ making meaning from AI data (eg high car burglaries)

Agency

- Used own judgement to steer work of officers, compiled strategic to do lists for officers

(on the down side, CAS reduced police officers' agency)

Relational

- Intelligence officers became key bridge and developed strong relationships with police managers (eg met police commander before briefings etc)

CAS Goals

(hot spots, hot times)

- More efficient scheduling
- More objective decision making
- More proactive policing



Mastery

- Intelligence officers didn't understand the data science side but boosted police knowledge, which they used to "complement" (and alter) the CAS predictions
- Traded off the lack of transparency of the AI outputs and created own simple (no ML) tool

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

Predictive Policing: KrimPro System → XXX

S M A R T Work Design

German police officers

Stimulating (S)

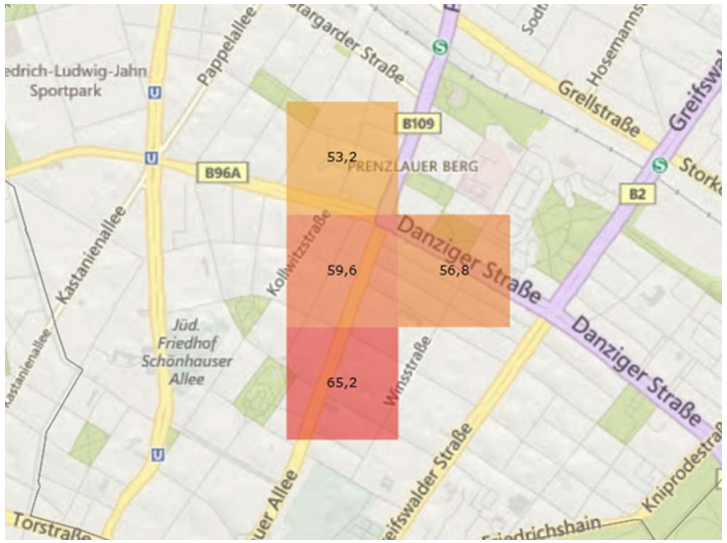
- Traditional detective work eroded
- Local knowledge undermined

Agency (A)

- Commissars make decisions using AI; analysts only in support role.
- Officers get pdf map for their area; cannot influence system
- Must follow - part of the hierarchy

"That is not an easy position for anyone who actually really rejects this system because there is always some kind of pressure`….you have to do this."

Goal: more efficient use of police resources



Mastery

- System seen as a 'black box' (information analysts also indicated this)
- No specific training given on the system

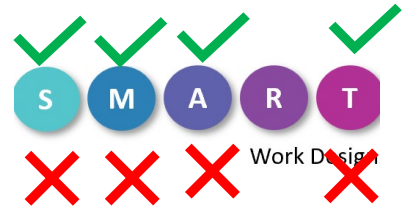
"an algorithmic cage"

"I do not risk anything because even if I find it stupid… it will not be my responsibility…. I have not done anything wrong." (police officer who follows KrimPro even if ineffective)

Jolly, A. A., Dunlop, P. D., Parker, S. K., & Kanse, L. (2026). It's Not My Responsibility: Working with Autonomy-Restricting Algorithms Facilitates Unethical Behavior and Displacement of Responsibility: AA Jolly et al. *Journal of Business Ethics*, *203*(2), 405-424.

Quality Work in a Digital Age

Example 2: Banking “Clever-loan”



of German service staff & loan consultants

Stimulating

- Upskilled service personnel to work on loans & system gave them confidence
- Deskilled loan consultants- loss competence “role can be done by anyone who can push buttons” & status

Agency

- No autonomy over loans for consultants (although some found ways to tweak the system)

Mastery

- System has some transparency - ex-service employees confident in decisions
- Loan consultants frustrated by arbitrary decisions they could not explain to customers

> *“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

Tolerable

Reduced emotional pressure from making hard decisions (eg saying no to a well-known client); customers accept a machine decision more readily.
Increased moral burden for loan consultants from poor or non-transparent decisions they did not make but had to communicate

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

Lessons From These Cases

Mixed yet major effects on people's work design

Work design mediates effect of AI on healthy, inclusive, & productivity

- Bank example: Profitability in short-term but… excluded particular clients; lost knowledge, critical thinking, & expert staff. Effect on long term competitiveness?

At most, work design is an after-thought



"I honestly had no idea about these (people) issues" (Manager, Main Finance)

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

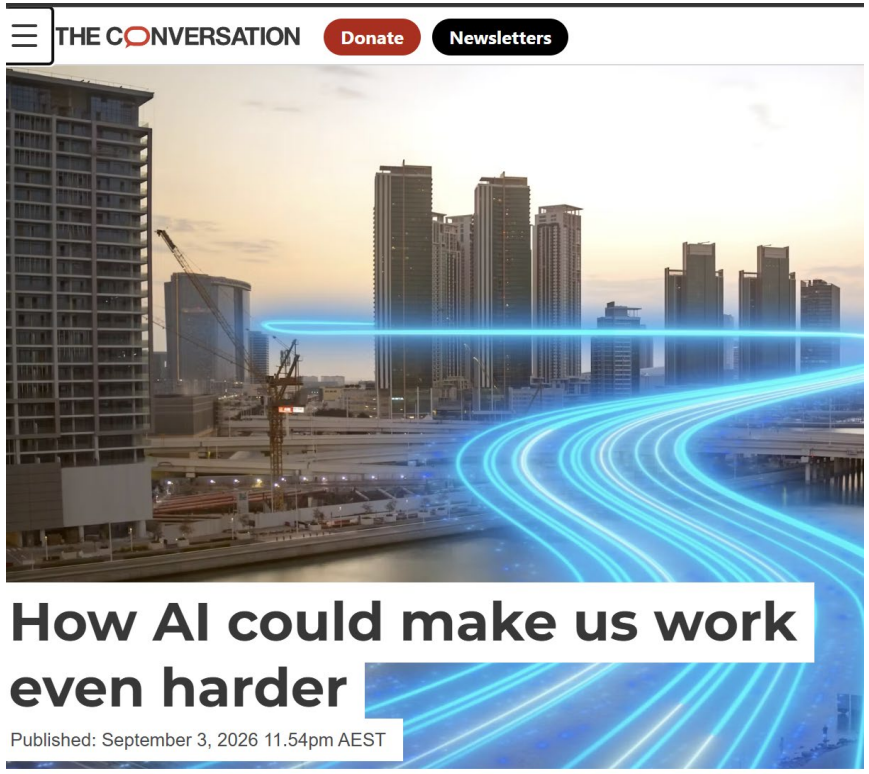
More Examples and Studies!

AI (artificial intelligence)

Teachers at Euan Blair firm report 'horrendous stress' after AI used to rate their work

Exclusive: Instructors at tech training company Multiverse hit out at 'remorseless' and 'unnerving' monitoring system





TechAnimationStock/Shutterstock

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.

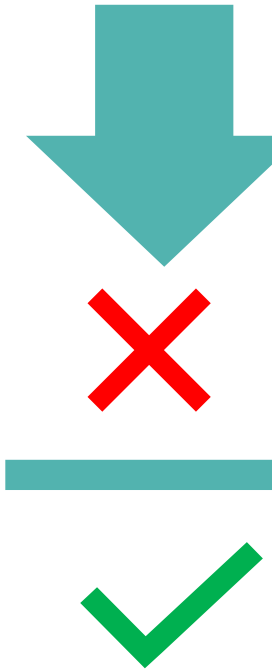
Jooss, S., Solnet, D., Knight, C., Worsteling, A., Rinta-Kahila, T., & Hansen, A. (2026). Artificial intelligence and work design: implications for frontline service employees and future research. *Journal of Service Management*, *37*(4), 622-643.

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.

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

Sociotechnical Approach

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"
(Parker, 2014)

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.

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission.

So How Can We Move Forward?

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

As Leaders

Adopt a “sociotechnical” rather than a “technocentric” approach to AI



A 1951 Yorkshire coal mine holds the key to why 70% of digital transformations fail today.

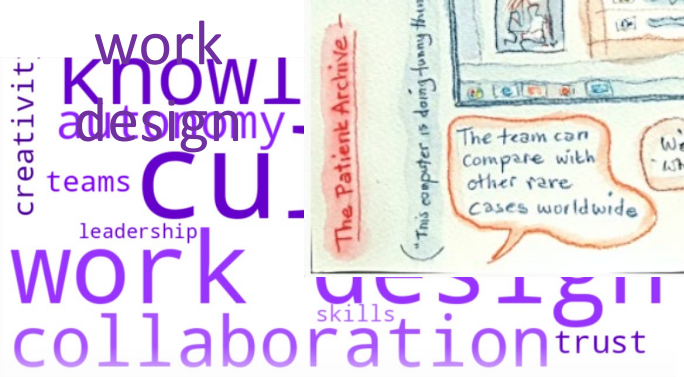
Social

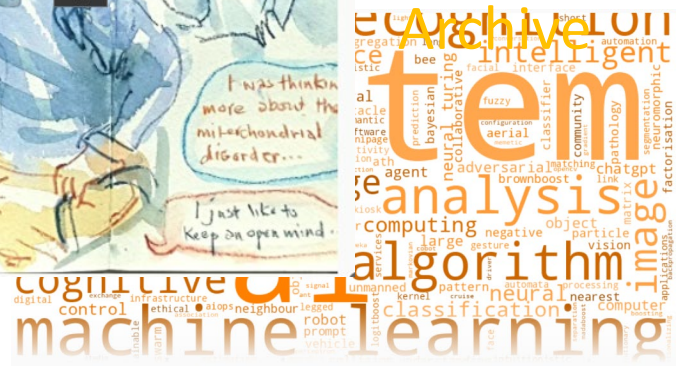
A new team work



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.*

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

Consider how AI affects work design throughout the AI journey

Work design can be used a part of the **criteria** when developing, procuring & deploying AI, and when evaluating AI impact

Considering work design/ SMART in planning digital tech

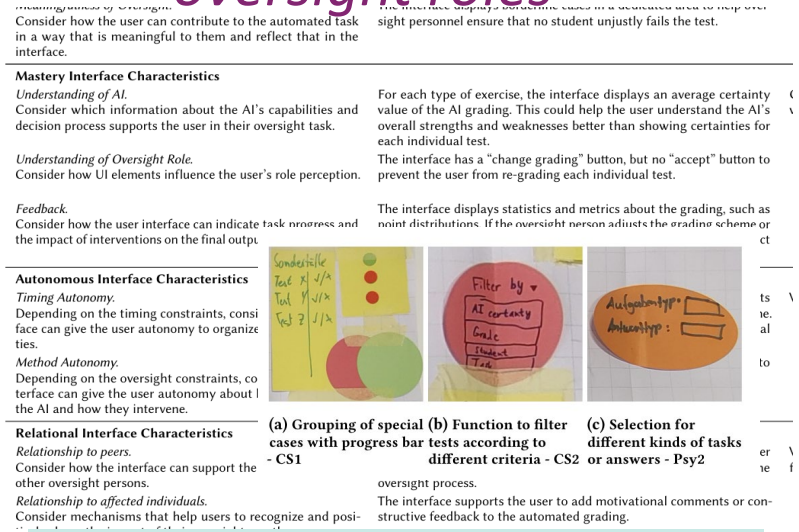
- Does the technology excessively monitor individuals creating surveillance demands?
- Does the technology allow individuals to manage their
- Wh
- Are

by the new technologies?



Parker & Boeing 2025; Boeing, A. A., Jorristma, K., Griffin, M. A., & Parker, S. K. (2020). Surfacing the social factors early: A sociotechnical approach to the design of a future submarine. *Australian Journal of Management*, *45*(3), 527-545.

Using SMART to design oversight roles



Consider how the user can contribute to the automated task in a way that is meaningful to them and reflect that in the interface.

sight personnel ensure that no student unjustly fails the test.

Mastery Interface Characteristics

Understanding of AI.
Consider which information about the AI's capabilities and decision process supports the user in their oversight task.

For each type of exercise, the interface displays an average certainty value of the AI grading. This could help the user understand the AI's overall strengths and weaknesses better than showing certainties for each individual test.

Understanding of Oversight Role.
Consider how UI elements influence the user's role perception.

The interface has a "change grading" button, but no "accept" button to prevent the user from re-grading each individual test.

Feedback.
Consider how the user interface can indicate task progress and the impact of interventions on the final outpu

The interface displays statistics and metrics about the grading, such as point distributions. If the oversight person adjusts the grading scheme or

Autonomous Interface Characteristics

Timing Autonomy.
Depending on the timing constraints, consi face can give the user autonomy to organize ties.

Method Autonomy.
Depending on the oversight constraints, co terface can give the user autonomy about the AI and how they intervene.

Relational Interface Characteristics

Relationship to peers.
Consider how the interface can support the other oversight persons.

Relationship to affected individuals.
Consider mechanisms that help users to recognize and posi-

(a) Grouping of special cases with progress bar - CS1

(b) Function to filter tests according to different criteria - CS2

(c) Selection for different kinds of tasks or answers - Psy2

oversight process.

The interface supports the user to add motivational comments or constructive feedback to the automated grading.

Faas, C., Kerstan, S., Uth, R., Langer, M., & Feit, A. M. (2025).

Using work design ideas to design for alignment of control & accountability

Grote, Parker & Crowston (2025a,b)



© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

Engage employees in the change process & support their upskilling throughout



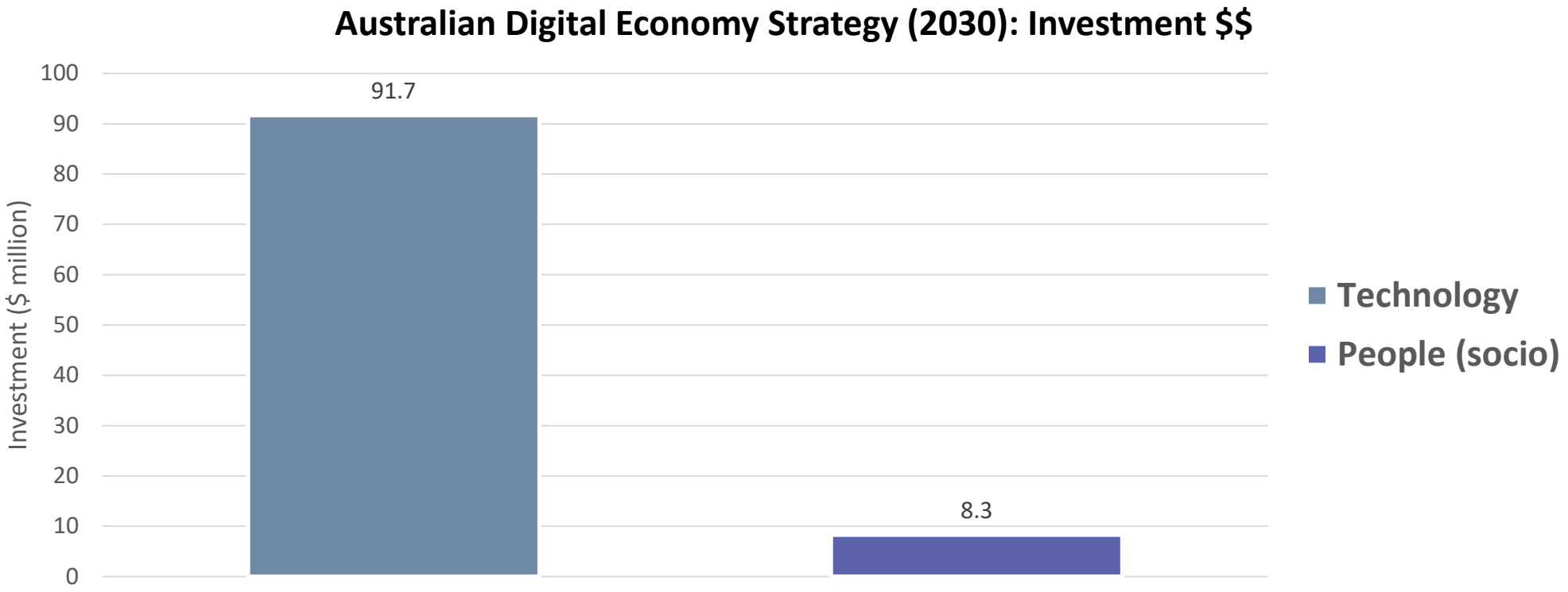
Five year study of retailers: Successful AI requires radical changes in ways of working, which in turn requires engaging employees in change

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

As Policy Makers…

Invest in sociotechnical support!

"….the bottleneck is no longer technical"

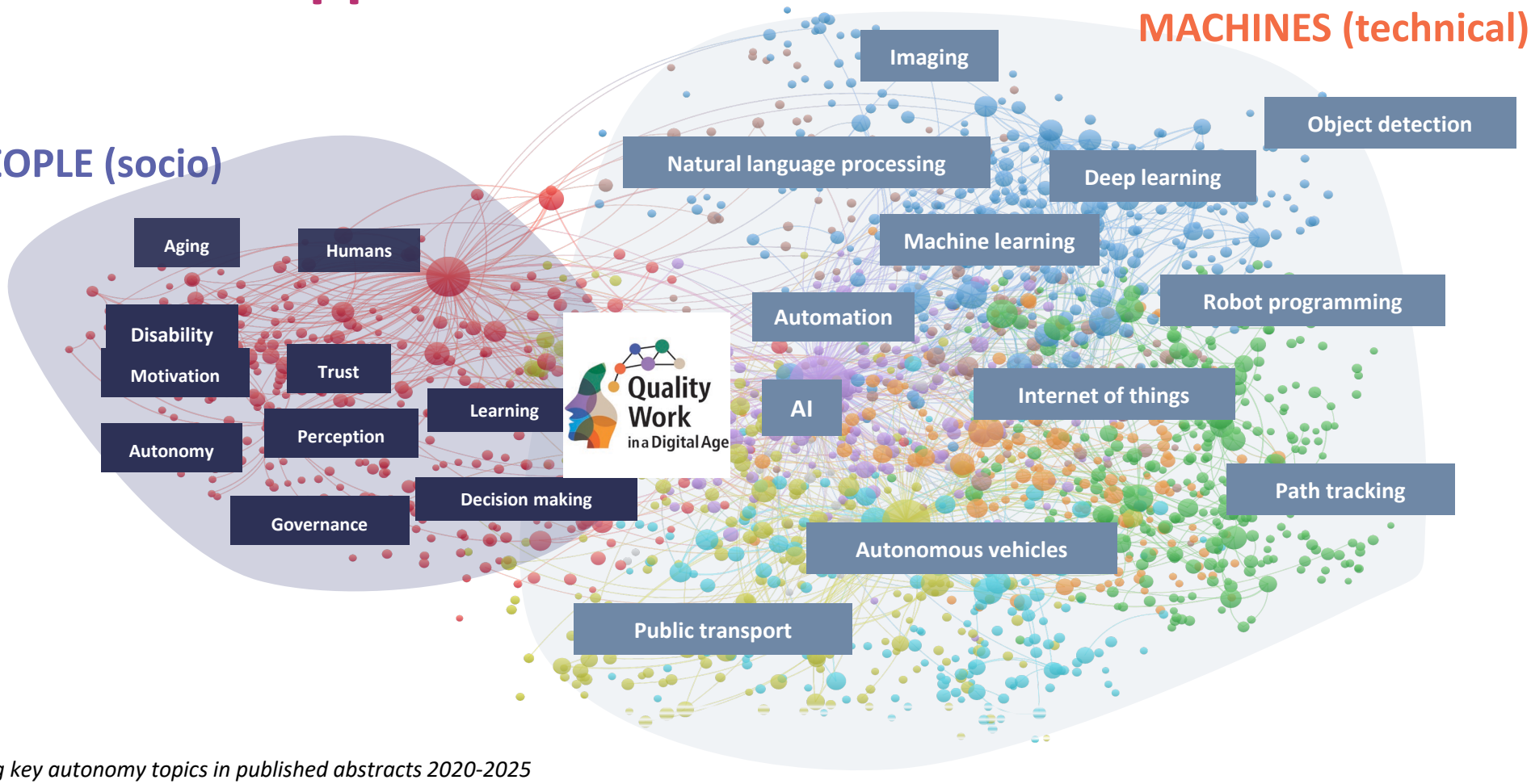


© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

As researchers: New approaches needed

AUTONOMOUS MACHINES (technical)

AUTONOMOUS PEOPLE (socio)



Scientific map of strength of association among key autonomy topics in published abstracts 2020-2025

Size of dot: How frequent is the key word

Distance between dots: How strongly key words are associated with each other

New evidence base

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

Quality Work in a Digital Age

As People *in the Field of* IO Psychology/ OB

Our strengths

- We have unique knowledge about work design
- We care about multiple outcomes
- We can operate at multiple levels
- We care about theory, evidence, and practice
- We can use our people skills to help facilitate change (e.g., working in multi-disciplinary teams)
- Other ideas?





© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

As People *in the Field of* IO Psychology/ OB

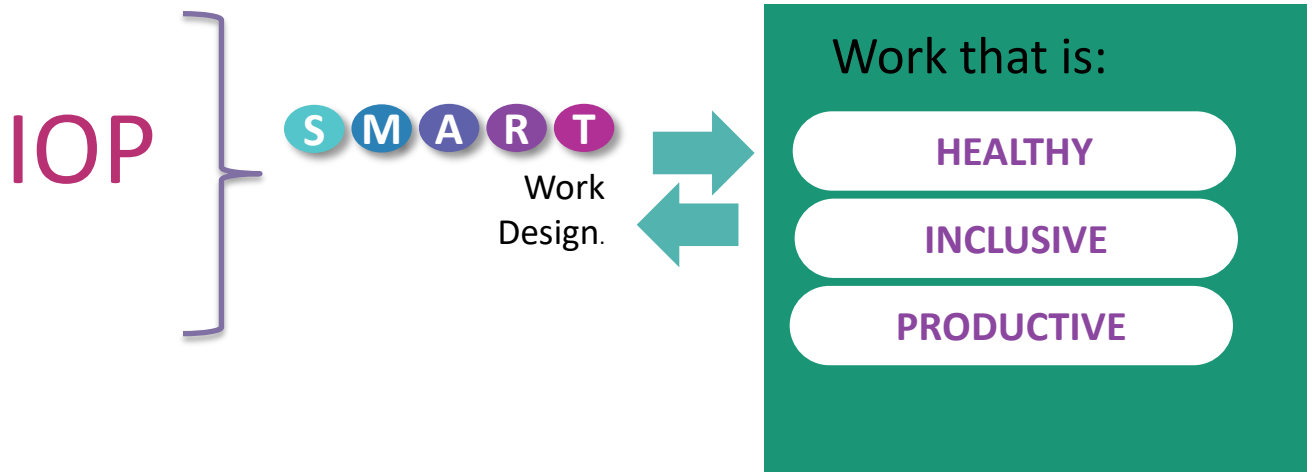
Possible areas for development

- Do we give enough attention to “work”? And work design?
- Do we need stronger business knowledge/ systems thinking?
- Should we consider power more?
- How are we impacting national policy? Big discussions?
- Are our methods sometimes too restrictive?
- Do we promote ourselves enough and appropriately?



© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

To Conclude: *In an AI-Future…*



The future is not some place we are going, but one we are creating. The paths are not to be found, but made”

(John H. Schaar)

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission

Thank you!

If you would like to be on our QWIDA mailing list, scan QR code below

qwida@curtin.edu.au

qwida.org.au

linkedin.com/company/qwida

© Sharon K. Parker. Please do not use these slides for any commercial purpose without permission