WELCOME

LINKING STS ORGANIZATION DESIGN & HUMAN-CENTERED AI

🔴 REC This webconference will be recorded

STS RT
SOCIOTECHNICAL SYSTEMS ROUNDTABLE INC.

HUMAN CENTERED
AI

STS ORGANIZATION
DESIGN

Who Are We?

Human-Centered Artificial Intelligence (HCAI)

- "The new goal is to seek **high levels of human control** AND **high levels of automation**… to produce computer applications that are Reliable, Safe & Trustworthy."
- "HCAI technologies bring superhuman capabilities, **augmenting human creativity**, while **raising human performance** and **self-efficacy**."

Shneiderman, 2020 & 2022

Sociotechnical Systems Design (STS)

- "Work systems…devised for a 'win-win-win-win'…so that employees have **greater control** over technology, while also experiencing social and psychological rewards, [with] technology operating **closer to its potential**, and the organization **performing better overall** while **adapting more readily** to change in its environment."

Pasmore et al., 2018; Ref; Trist et al, 1951,1963.
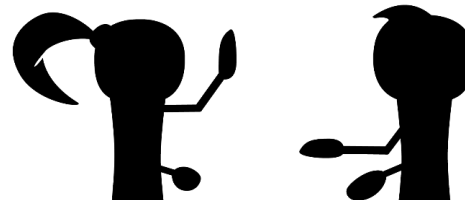
Objectives

- To provide members of our 2 communities an opportunity to Meet
- To INTRODUCE ourselves and some of our work potentially relevant to each other, and
- To EXPLORE whether there is 'Common Cause' between our communities

Agenda

- HCAI perspective
  - Ben Shneiderman "HCAI: Making it Happen"
  - 1-2 Other HCAI community Members

- STS Perspective
  - Erik Nicholson "Worker centered innovation and co-optimization"
  - Stu Winby "HCAI & Future of Work"
  - Peter Aughton "How to Design Organizations to Integrate AI"
  - Terri Griffith "Work Crafting with Bottom-Up Automation"

- FOLLOW-UP Comments & Questions

- EXPLORATION
- In what way, if any, do we see 'Common Cause' & Potential Collaboration between HCAI & STS communities?
- Next Steps
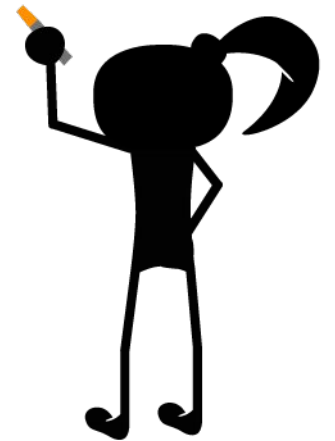
semillero de ideas

centro de innovación de campesinos
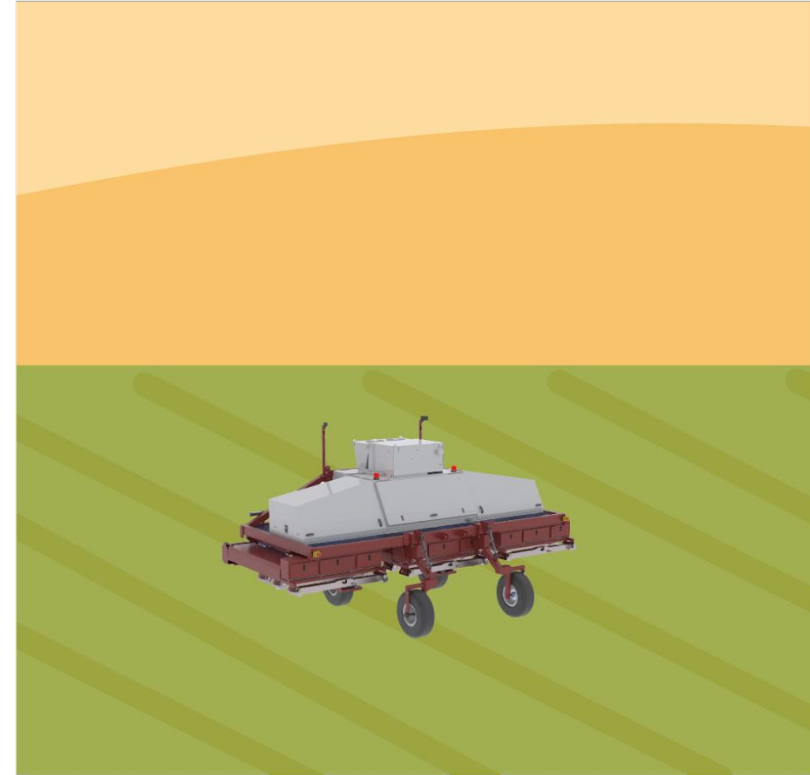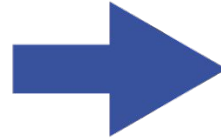
Worker Centered Innovation and Optimization

Farmworkers are not asking to be saved or replaced by technology They want an equal seat at the table to co-create a better future for themselves, their employers and consumers

Centering Farmworkers as Innovators

Automation

Optimization

Designing the ecosystem
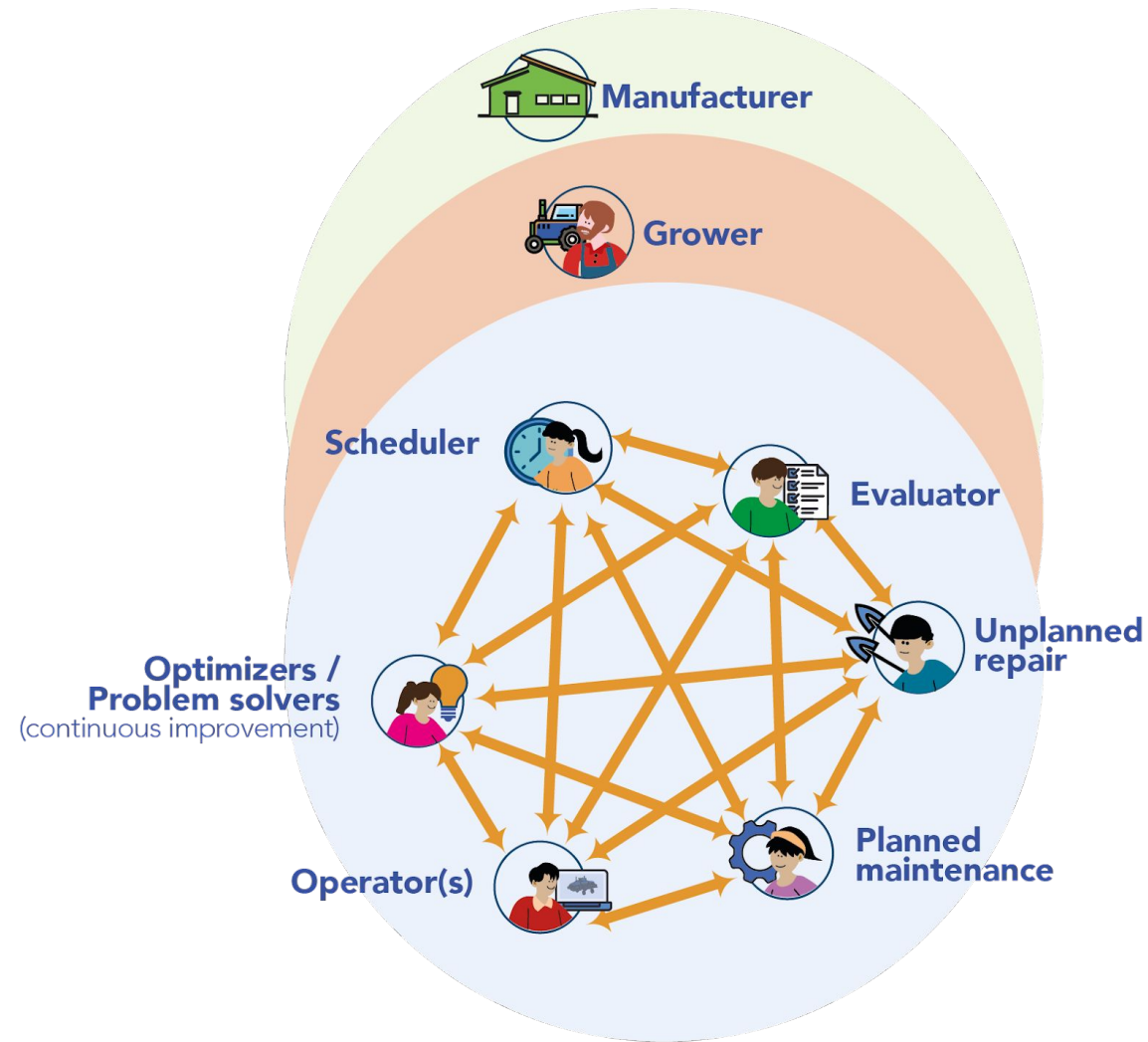
Join Us!!

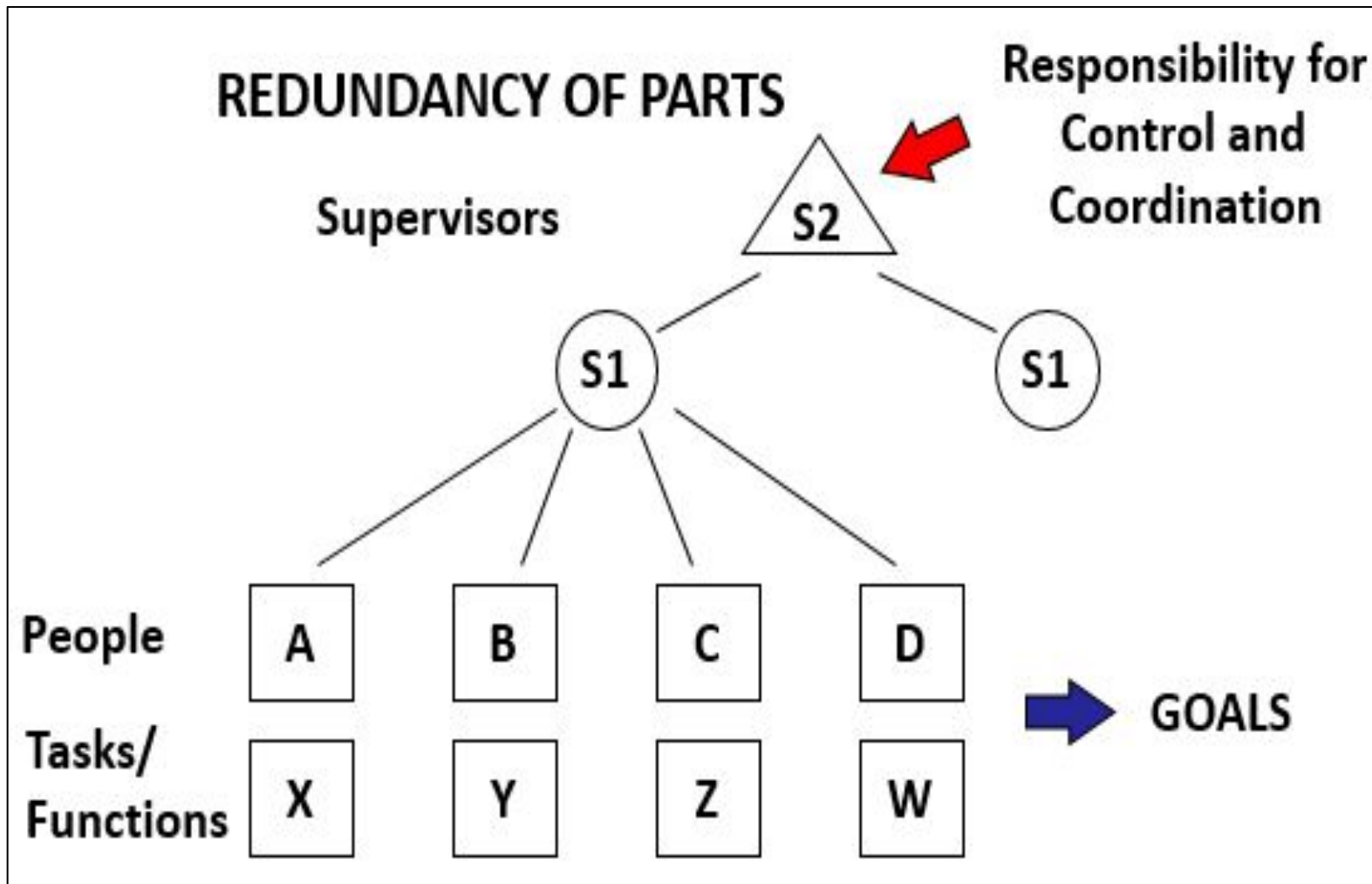We need your expertise.

erik@semilleroideas.org

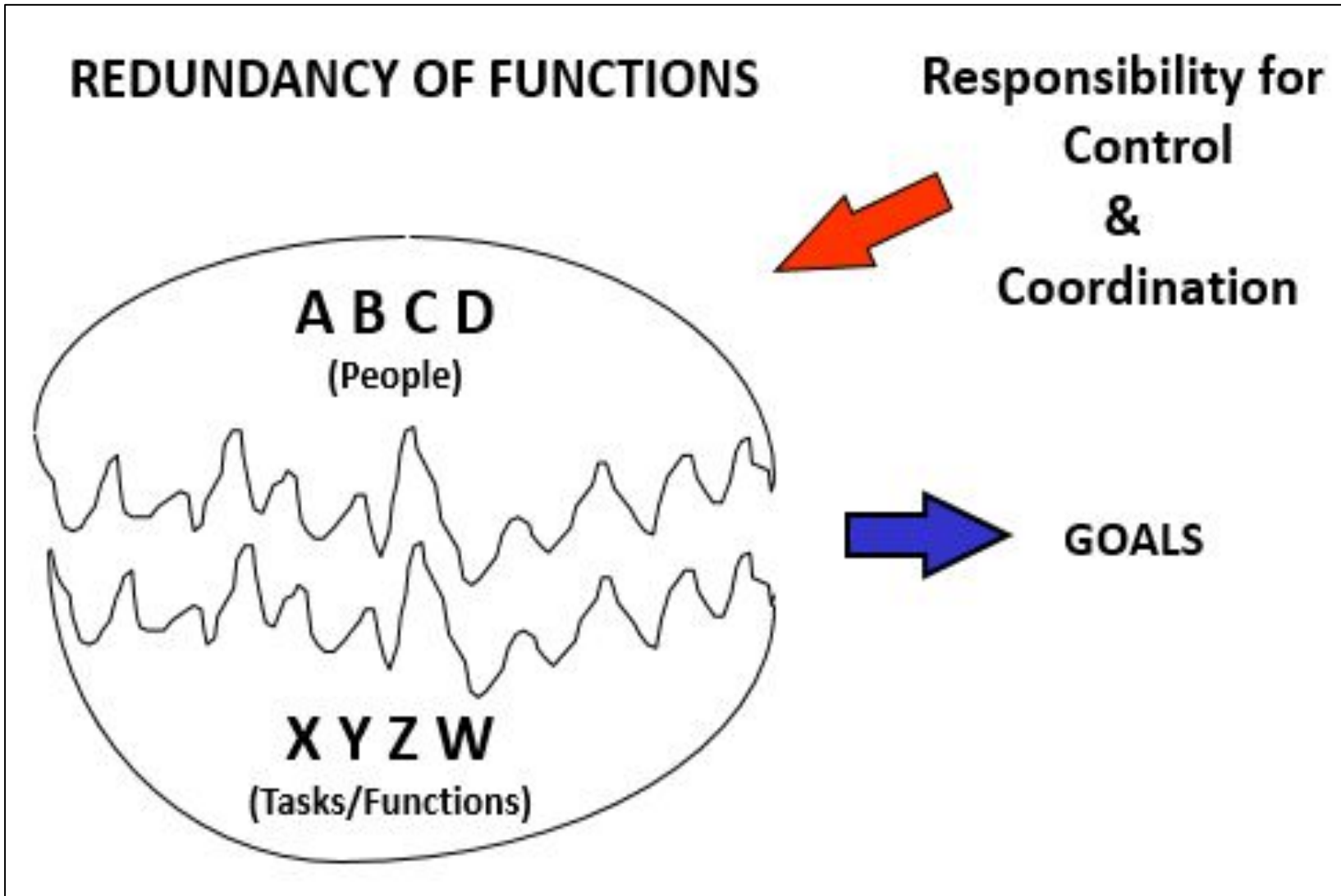Semilleroideas.org

HCAI / STS and the Future of Work

- Technology lead – social system lag
- Socio-technical systems and the technology imperative
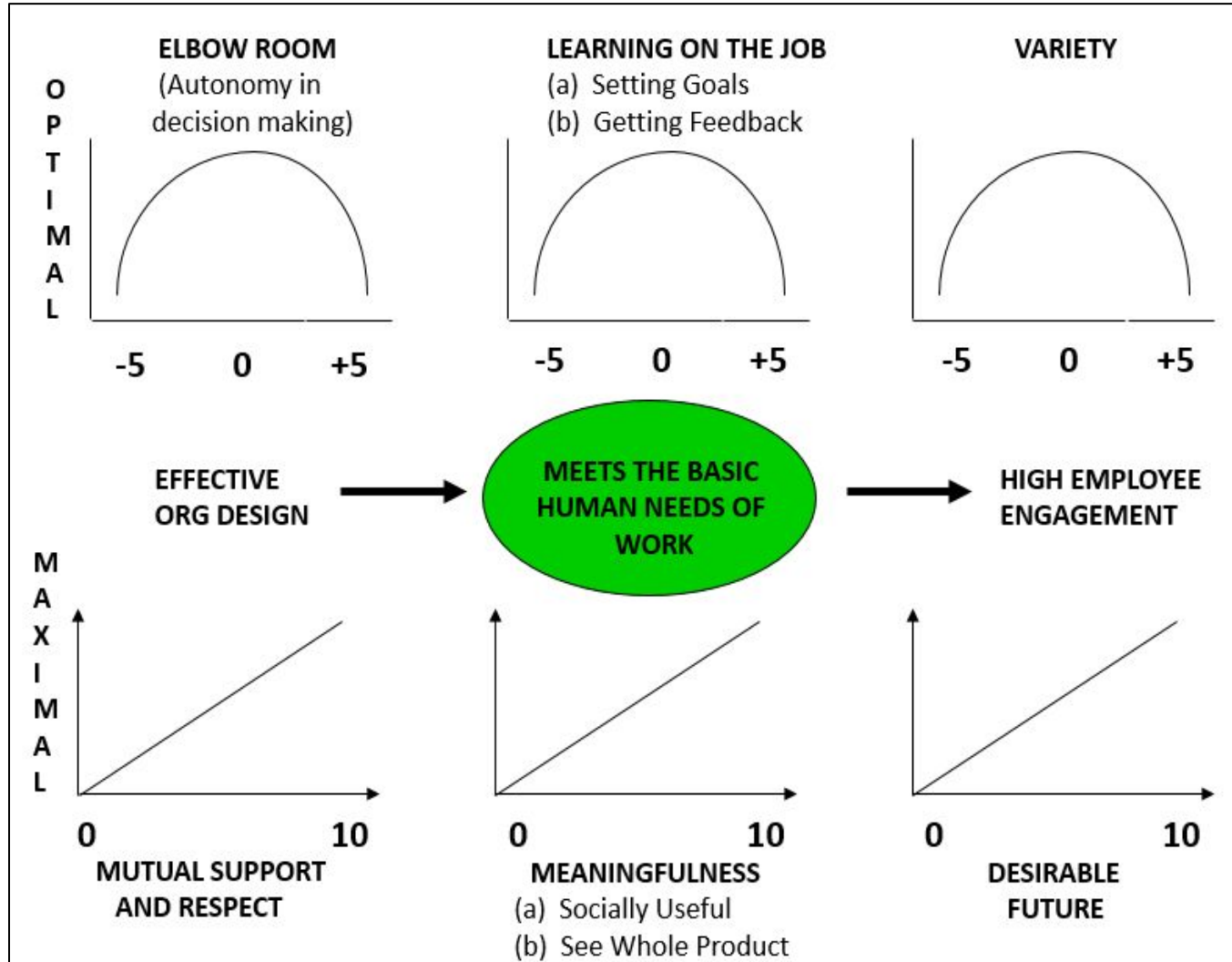- Human-centered interdisciplinary AI

Design Principle 1 (DP1)
The bureaucratic structure

Design Principle 2 (DP2)

The team-based structure

Intrinsic Motivators
The 6 basic human needs of work

Analysis → Redesign → Practicalities

Briefing 1
DP1 & Consequences
- Measure Intrinsic Motivators
- Conduct Skills Analysis and produce a Skills Matrix

Briefing 2
DP2 & Consequences
- High level process mapping
- Draw existing DP1 Structure
- Redesign new DP2 Structure *(best possible jobs for all)*

Briefing 3
- Team goals
- Training Requirements from Skills Matrix
- Career Paths
- Employment T&Cs
- Other – make sure works
- Improvement in Intrinsic Motivators

Participative Design Workshop (PDW)
For organizational redesign

Connect With Us

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Join the HCAI Google Group:

`https://groups.google.com/g/human-centered-ai/`

STS Roundtable:
- Website: stsroundtable.com
- LinkedIn: https://www.linkedin.com/groups/2789592/
- Facebook: https://www.facebook.com/STSRoundtable
- X: https://twitter.com/SociotechSystem

Thank you!