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AI-SUPPORTED DECISION-MAKING

Managing AI-Supported Decision-Making as a Socio-Technical System

Groupthink and Employee Voice

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Why AI changes collective decision-making

TRADITIONAL FOCUS

AI can support decision-making through:
- **information processing**
- **pattern recognition**
- **decision support**
- **alternative generation**
- **complex cognitive tasks**

(Berente et al., 2021; Raisch & Krakowski, 2021)

MISSING QUESTION

What happens among organizational members when AI recommendations enter collective decision-making processes?

→ How is authority attributed to the output, whether it is challenged, and whose judgement is ultimately adopted?

CENTRAL TENSION

AI may weaken groupthink by broadening information search—or reinforce it when recommendations gain authority and become difficult to challenge.

AI may therefore shape employee voice through groupthink dynamics.
(Ahdadou et al., 2024; Kamalnath, 2020).

Research gap: how AI-supported decision-making, groupthink, and employee voice intersect.

Why speaking up matters

WHAT IS EMPLOYEE VOICE?

Discretionary expression of:
- ideas & suggestions
- concerns
- alternative viewpoints
- challenges to existing practices

(Morrison, 2011, 2023; Van Dyne & LePine, 1998; Whiting et al., 2012).

WHY IT MATTERS

Voice supports:
- problem identification
- organizational learning
- adaptation
- innovation and performance

Its intent is to improve organisational functioning or challenge existing practices.

WHY PEOPLE STAY SILENT

Speaking up can involve:
- interpersonal and career risks
- low psychological safety
- beliefs that views will not be valued
- expectations of negative consequences

(Peng et al., 2019; Detert & Burris, 2007; Morrison & Milliken, 2000)

Key point: silence does not mean an absence of knowledge or disagreement. Conformity and self-censorship can suppress useful alternative perspectives.

Socio-Technical Systems (STS) Theory views organizations as systems in which technological and social elements are interdependent and therefore should be jointly optimized (Sarker et al., 2019; Alter, 2024).

TECHNICAL SUBSYSTEM

AI-generated recommendations

Informational affordances

Alternative options

Data / analytical outputs

SOCIAL SUBSYSTEM

Authority
Interpretation
Roles
Conformity/dissent
Legitimate challenge

→ Depending on the surrounding social conditions, AI can remain a resource for judgement or become an authority that is difficult to challenge.

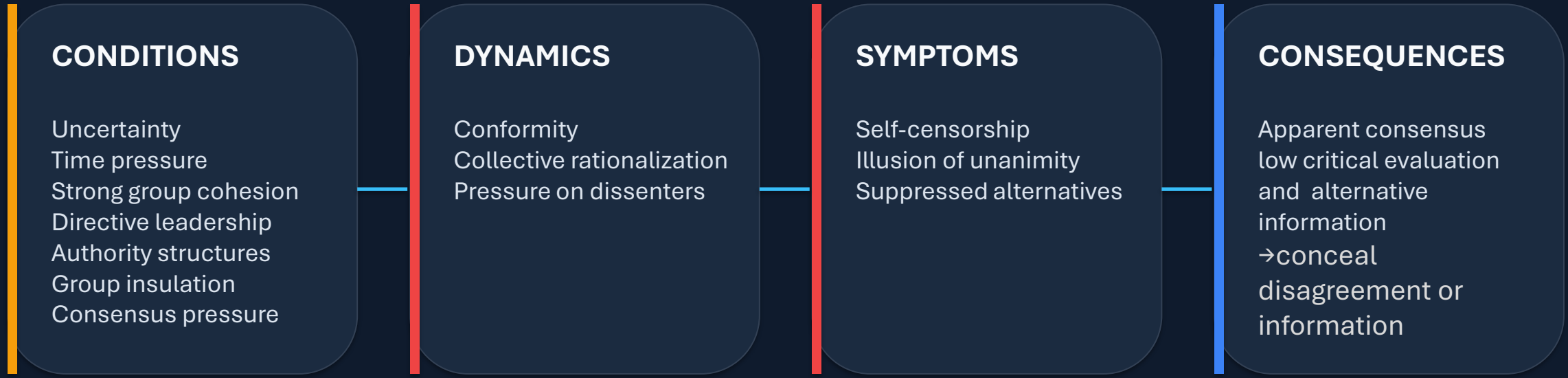
INTEGRATION

Groupthink can emerge from this coupling as a socio-cognitive state, with employee voice as a behavioral outcome. Similar AI capabilities may therefore produce different outcomes under different forms of socio-technical integration.

STS theory suggests: technology and social arrangements should be understood jointly—not as separate causes. AI's organizational value depends not only on its technical capabilities but also on how employees interpret, evaluate, and integrate AI-generated information into existing work processes.

3• GROUPTHINK is centered on human group dynamics: pressures for agreement and cohesion can displace critical evaluation, producing self-censorship, suppression of dissent, and limited consideration of alternatives (Janis, 1972).

Groupthink is rooted in social influence, shared norms, and collective sense-making that shape how groups seek consensus.



AI's relationship with groupthink is contingent—not inherently positive or negative.

AI can become an additional source of consensus — depending on how its output is treated.

The same AI capability can produce opposite effects. The key is how it is integrated into the social system.

EXPLORATORY INTEGRATION

AI output is used to:
- compare and challenge alternatives
- generate counterarguments
- broaden information search
- stimulate critical evaluation

→ Lower groupthink risk

AUTHORITY-CENTRED INTEGRATION

AI output is treated as:
- objective or highly accurate
- a dominant reference point
- difficult to challenge
- the preferred basis for consensus

→ Stronger conformity pressure

Key point: the mode of socio-technical integration—not AI use alone—shapes agreement and dissent. The social subsystem determines how AI output is interpreted, how much authority it receives, and whether it can be challenged.

Three proposed relationships

P1

Exploratory AI integration will be associated with lower groupthink in collective decision-making groups.

P2

Stronger groupthink will be negatively associated with employee voice expressing concerns, challenges, or alternative viewpoints during collective decision-making.

P3

AI integration will relate to employee voice through groupthink: exploratory integration → lower groupthink → higher voice.

P3 identifies groupthink as the intervening mechanism.
STS = overarching perspective | Groupthink = socio-cognitive mechanism | Employee Voice = behavioral outcome

The study's contributions

1 • CONFIGURATIONAL

Explains why similar AI capabilities can produce different outcomes depending on how they are socially integrated.

2 • GROUPTHINK

Extends Groupthink Theory to human–AI decision-making by showing how AI integration may stimulate critical evaluation or conformity.

3 • AI RESEARCH

Moves beyond capability-centred explanations to examine technical–social interactions.

4 • EMPLOYEE VOICE

Shows how AI-supported decision-making reshapes the perceived risks and value of speaking up.

Four design principles for voice-preserving AI governance

AUTHORITY

AI outputs are significant but not unquestionable.

Keep final accountability explicit.

DISSENT

Include challenge and make it part of the process:

- alternatives
- counterarguments
- verify evidence before reaching a conclusion

ROLES

Define:

- who interprets AI
- who can challenge it
- who decides

FEEDBACK

Monitor long-term effects of AI-supported decision-making:

- Does participation increase?
- Does silence persist?
- Does dependence on AI grow?

Goal: integrate AI as an input to collective judgement—not a substitute for it.

AI-supported decision-making is a systemic management challenge

CORE CONCLUSION

AI does not inherently suppress or encourage employee voice. Its effects depend on how technical outputs interact with authority, interpretation, conformity, and dissent.

FUTURE RESEARCH

Test the two integration modes across settings.

Examine:
- leadership openness
- psychological safety
- AI literacy
- system transparency

LONGITUDINAL QUESTION

Does repeated AI exposure change:

- perceived AI authority?
- willingness to speak up?
- patterns of conformity?

Thank you all for your attention