

Generative AI User Types in Human Resource Departments

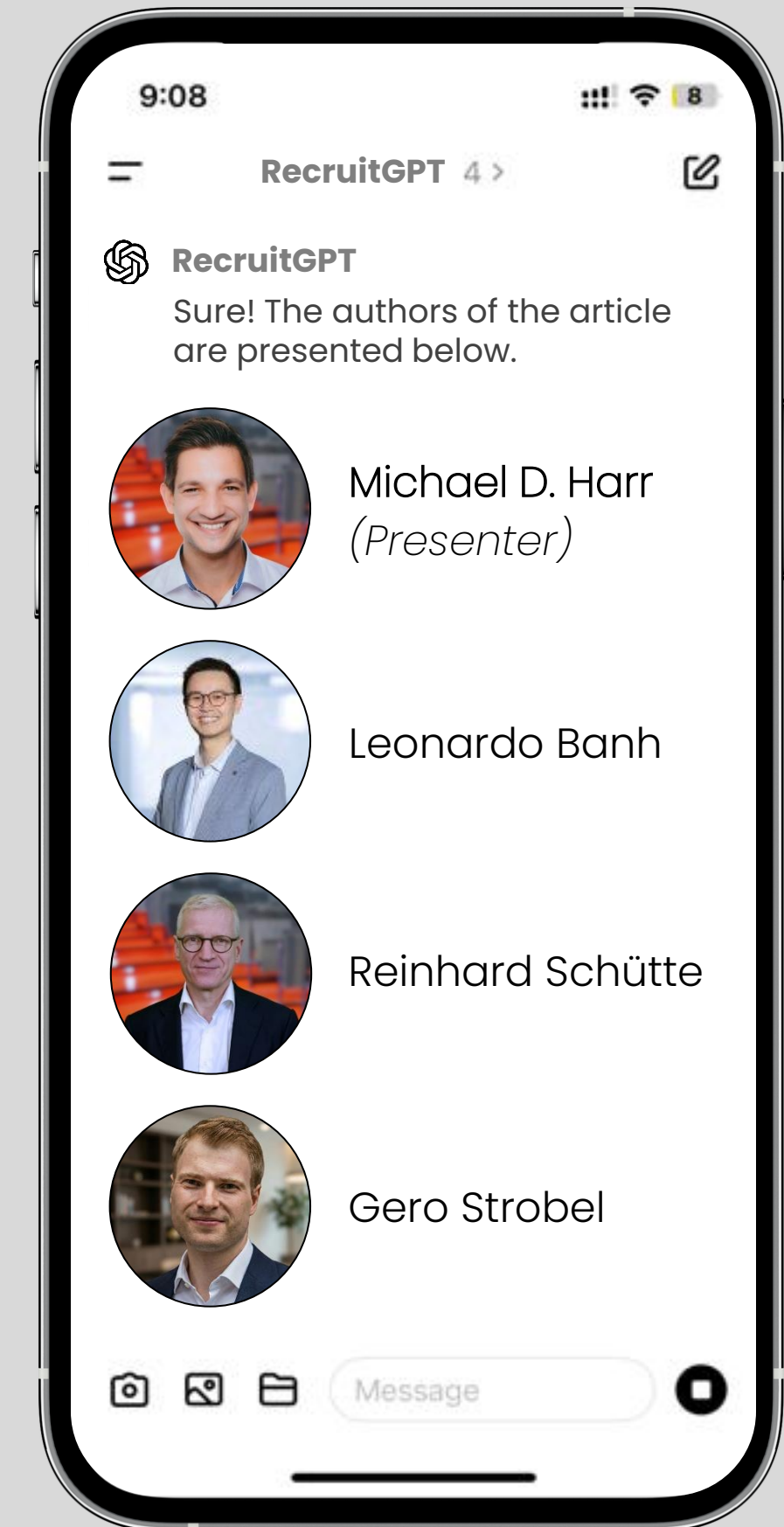
A Governance Framework

Research Paper

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Motivation | GenAI Adoption

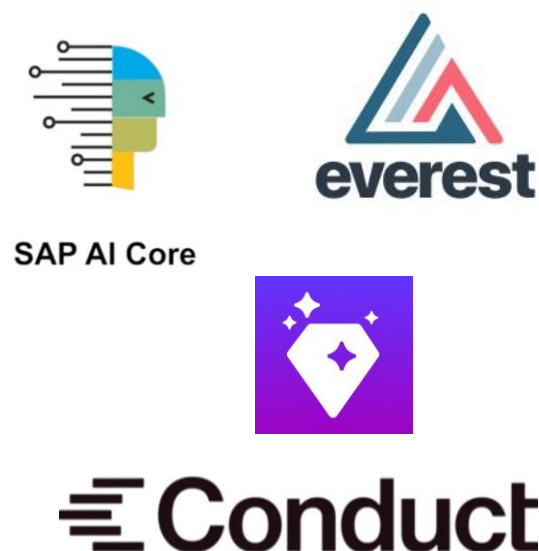
Motivation

- Generative Artificial Intelligence (GenAI) emerged as an ‘General-Purpose Technology’ [1, 2], promising significant economic potentials.
- Democratization of access enables the use of sophisticated capabilities within reach of any employee, regardless of technical expertise [3].
- GenAI is increasingly adopted by organizations and individuals in both, private and professional realms.

GenAI Adoption in Practice

Software Provider

- AI Agents in enterprise systems [for an overview, see 4].



Organizations

- Commercial GenAI tools integrated into employees’ daily workflows [5, 6].



- GenAI use by Organizations increased from 55% (2023) to 78% (2024) [7].

Employees

- ChatGPT reached 100 Mio. users in 2 months after launch [8]; by July 31st, 2026, ChatGPT had grown to 1 Bio. weekly active users [9].
- 75% of employees use GenAI at work [10]



Problem Space | Shadow AI

A Governance Vacuum

Shadow AI Economy

- 90% of surveyed employees regularly rely on personal AI tools to perform work tasks [12]
- 78% admit to using unapproved AI tools [5, 6, 13]

Deliberate Defiance

- 50% of employees engaging in 'Shadow AI' would continue doing so, even if their employer banned such use [11] -> proactive concealment!

Lack of Training & AI Literacy

- Only 7.5% of employees received extensive AI training [5, 6, 13]
- 23% have received no AI training at all [5, 6, 13]

Detrimental Examples



- Deloitte sold an 'AI-assisted' welfare report with fabricated references/court rulings [14].
- Leaked salary information from CEO's emails via copilot (I15).
- By 2030, over 40% of org. will face security/compliance incidents from unauthorized GenAI use [15].

A **governance vacuum** has opened between the pace of employee adoption and the ability of organizations to guide, regulate, and support responsible GenAI use [16, 17, 18].



Background – AI Literacy

“

A **continuum of competencies** needed to understand, use, critically evaluate, and responsibly interact with AI [19, 20].



Competencies

„cross-functional coordination [and integration] of different types of capabilities to address AI-related tasks“ [21] (p. 15)

The **5 building blocks** of AI Literacy according to Passlack et al. [21]

Capabilities

„describe personal resources individuals possess that allow them to complete tasks with/about/resulting from AI or deal with given situations in the context of AI“ [21] (p. 15)

Knowledge

domain expertise, meta-knowledge, AI knowledge based on experience.

Personal Disposition

attitudes, behaviors, talents that influence how employees apply knowledge and skills.

Skills

learnable/trainable abilities that grow through experience and training.



Research Gap & Question

Research Gap

1

AI Literacy matters but post-adoption phase [22] is shallow

How employees actually use GenAI responsibly [23] and which GenAI user types emerge is important [24, 25], if governance is not enough.

2

Existing GenAI User Typologies dominantly neglect governance

Existing typologies segment users by adoption, engagement, or task-fit; governance appears only as one privacy attitude or an implicit barrier to remove [24, 25, 26].

3

HR is a critical and understudied context

- Double role: subject and steward of AI literacy
- High-stakes decisions
- Legal, ethical, and regulatory obligations (GDPR, EU AI Act)

Research Question



What **GenAI user types emerge among HR professionals**, and how can organizations **prescriptively support their transition** toward responsible GenAI use?

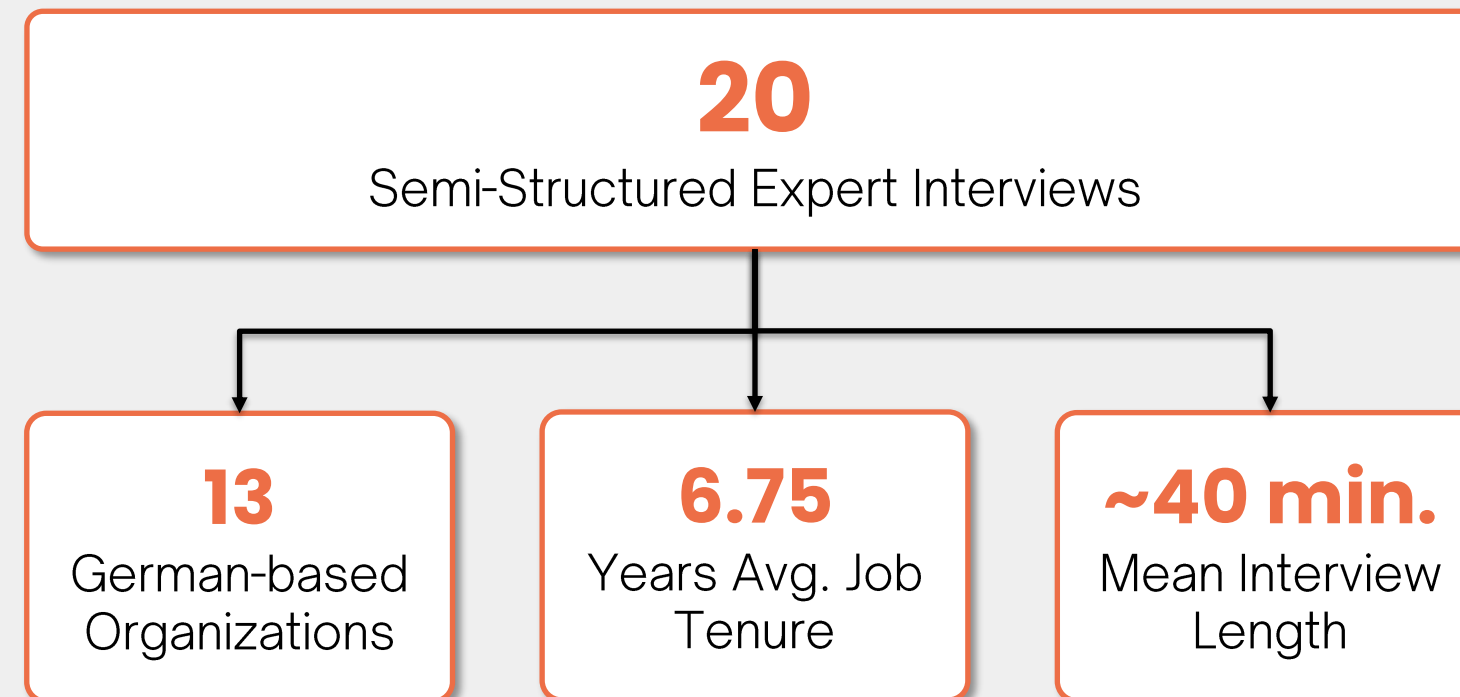


Method

**Semi-Structured
Expert Interviews**
& (Type-Building)
Qualitative Content
Analysis

Data Collection

- **Purposive & snowball sampling [27]**
 - HR Professionals at the intersection of GenAI and HR Operations.
 - Subject and Steward of AI Literacy.
- Interviews conducted between 08/25 – 04/26.
- Interview guide (i.e., Shadow AI) and sampling (i.e., External Consultants) was iteratively refined after the 13th interview.



Data Analysis

- **Type-building qualitative content analysis [28]** where we placed each case along three coded dimensions / axes of the framework.

1

GenAI Usage

Tasks, frequency, and range of GenAI tools used

2

AI Literacy

How participants described, evaluated, and critically reflected on GenAI and their competencies

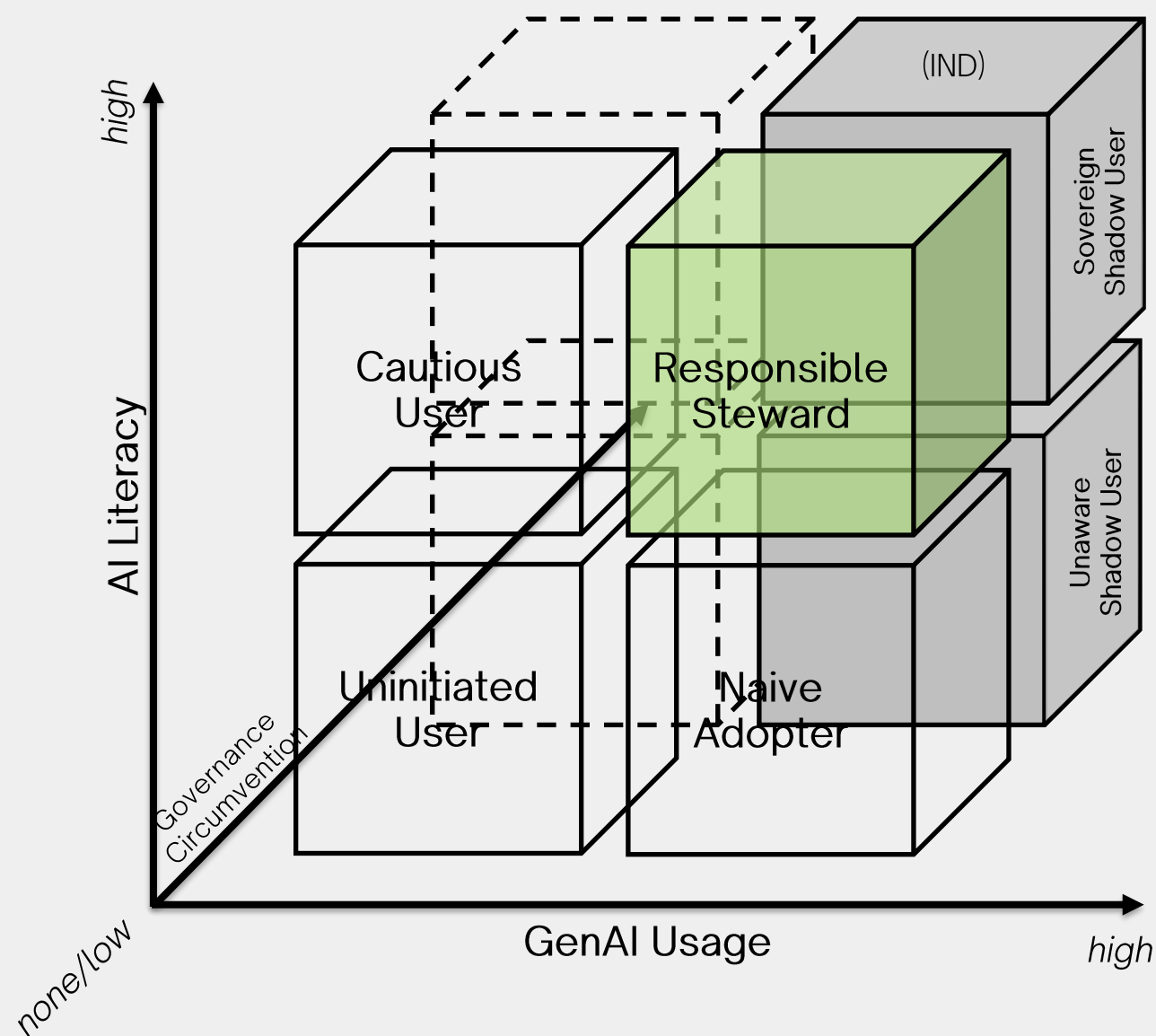
3

Governance Circumvention

Whether policies existed and were known / followed, treating legally breaching use as circumvention



Results | GenAI User Types



Cautious User

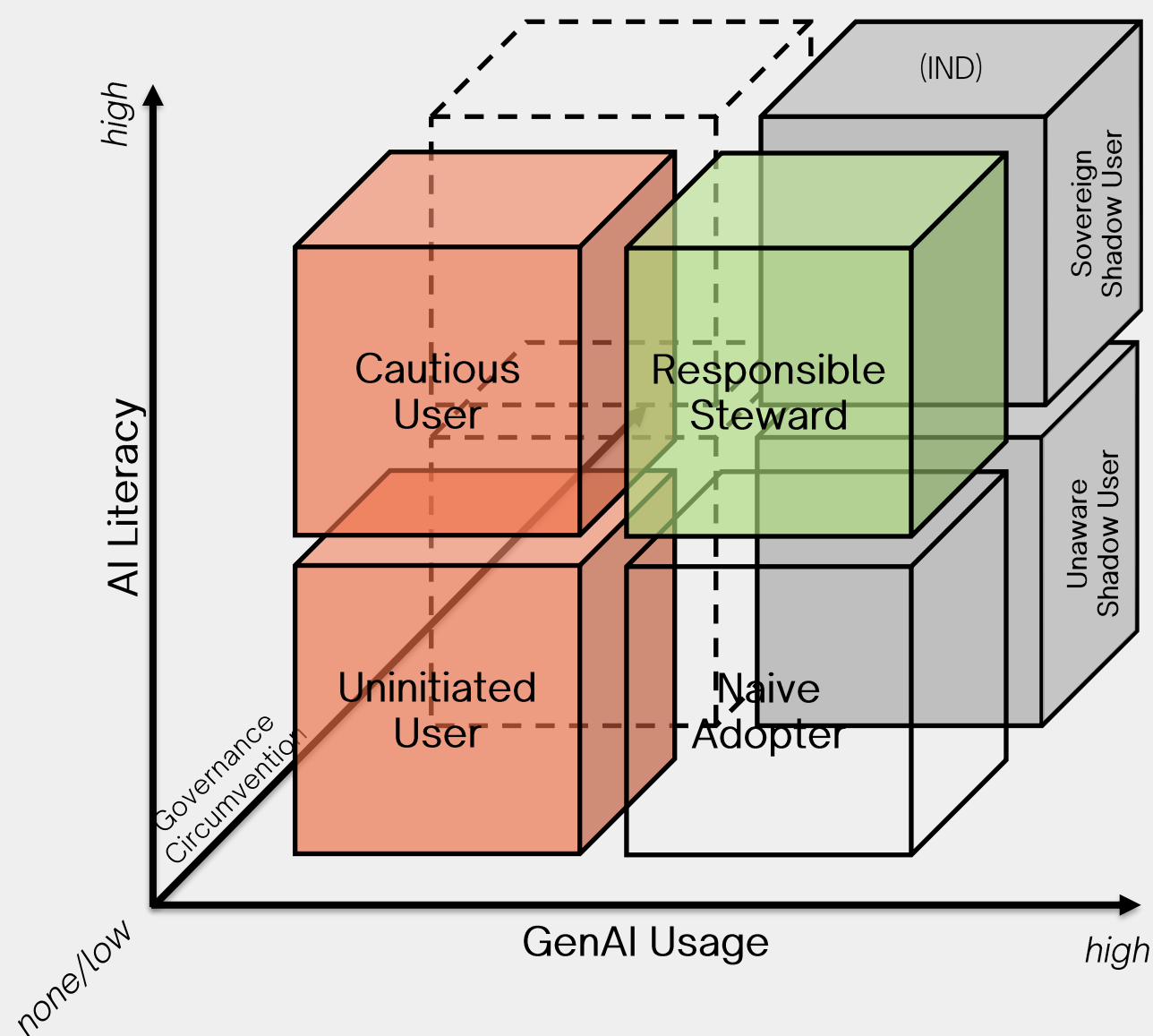
- Hold a well-developed reflective understanding of GenAI, yet articulate reasoned choice for non/low GenAI use (resist the top-down hype)
- AI literacy situated at the knowledge/dispositional blocks (skepticism, ethics) without converting into frequent use
- Articulate problems and risks precisely (blackbox, hallucination) and treat GDPR as non-negotiable

Uninitiated User

- GenAI is neither critically understood nor used often; if at all, then via organizationally provided tools (e.g., Copilot)
- Knowledge, skills, and risk awareness are all quite thin – where data ends up is “*a book sealed with seven seals*” (114)
- **No outright refusal:** Lack of awareness, credible use cases, and sanctioned time for training/experimentation



Results | GenAI User Types



Responsible Steward (normative ideal)

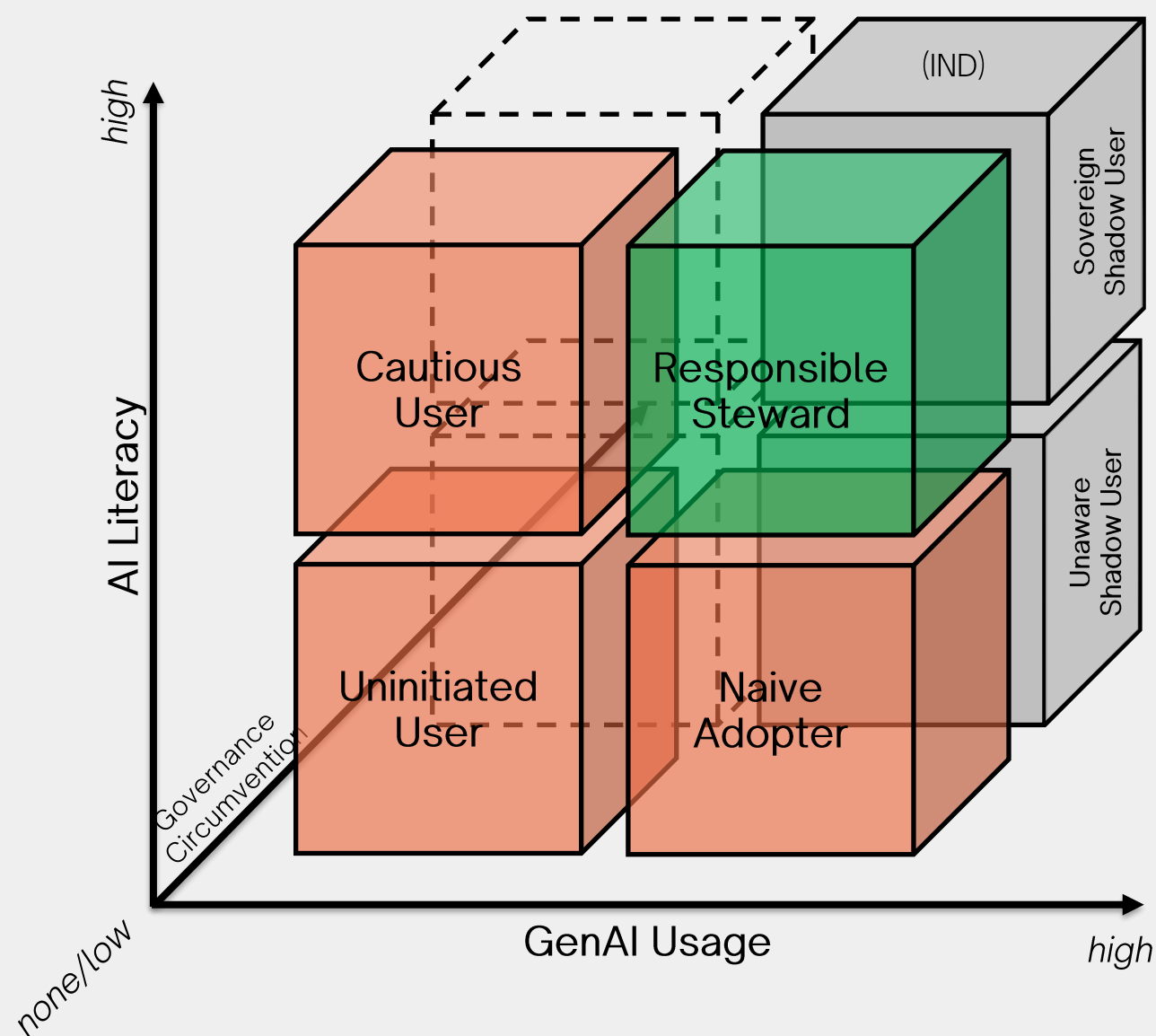
- Broad, deeply embedded usage disciplined by reflexive, risk-aware judgement within governance bounds (quality, not quantity)
- AI literacy: Actively checks for biases, deliberately abstains from high-risk tasks, 'human-in-the-loop' responsibility internalized
- Lead as examples (I16) and act as role models who build AI literacy in colleagues (I11)

Naive Adopter

- Enthusiastic and often daily user whose engagement outpaces a still shallow critical understanding of GenAI (*Top-down-momentum*)
- Basic skills are present, while knowledge and reflexive blocks are missing
- Colleagues who “use ChatGPT like a search engine and don't question the answers, they simply believe them” (I11; IND)



Results | GenAI User Types



Sovereign Shadow User (IND)

- Conscious and deliberate circumvention of governance lines despite full awareness of the risks; paired with indifference to sanctions: “*There are people who are aware of all the risks but do it anyway, because they say ‘screw it’*” (I20; IND)
- Reasons: inferior unavailable governed tools and acute workload pressure

Unaware Shadow User

- Heavy, enthusiastic GenAI users whose limited AI literacy carries them across governance (and legal) lines without them realizing it
- Benefit-fixated and euphemistic: high-risk tasks are reframed as harmlessly “*automating repetitive tasks*” (I10)
- Breach is invisible: no known governance mechanisms exist
-> no malicious intents but a critical literacy void



Discussion | Prescriptive Transition Paths

1 Toward Higher AI Literacy

Employees “must first become aware and take notice of the existence of the new phenomenon before being able to direct attention toward, develop an interest in, and learn about it” [29] (p. 2442)

- Start with low-threshold and/or experiential **awareness campaigns** with ‘hands-on’ formats
- **Remove structural barriers** by explicitly sanctioning time for training
- Leaders need to serve as **credible role models**, not hypocrites
- There is **no ‘one-fits-all’ approach** to trainings: a “*watering can principle [...] is not the way*” (I20)

2 Toward Beneficial Usage

Not generally ‘more’ GenAI use is important, but more beneficial use in the sense of ‘purposeful deployment’ [26].

- **Identify and communicate** beneficial and legally unproblematic use cases for GenAI
- Provide **clear guardrails/guidance** to provide governance-aware employees legitimacy to actually use GenAI
- Address **employees’ individual frictions** that suppress beneficial use (hallucination-driven withdrawal, error-prone integration into daily work [26])

3 Toward Gov. Conformance

Due to legal obligations, the most immediate task is to redirect governance circumventers into organizationally governed GenAI systems.

- Provide **GenAI tool parity** by keeping them competitive before establishing further policies and bans and assess **BYOAI** opportunities
- Communicate, **make transparent**, and enforce organizational governance (e.g., Browser-pop-up)
- **Relieve workload pressure** and **re-attach personal responsibility** for GenAI use may defer circumvention.



Conclusion | Limitations

Contribution

Empirically Grounded 3D-Framework

- Six identified GenAI user types: *Uninitiated User*, *Cautious User*, *Naïve Adopter*, *Responsible Steward*, *Unaware Shadow User*, and the *Sovereign Shadow User (IND)*.

Governance as an Independent Dimension

- Address blind spot of governance, which has predominantly been treated as a barrier to overcome [24], by showing that employees can deliberately circumvent organizational policies even when they are highly AI literate.

Three Transition Pathways Toward Responsible Stewards

- Three axis-aligned transition paths for cultivating Responsible Stewards in the organization, and emphasize that structured training alone is insufficient, particularly where it is conceptualized and rolled out as a ‘one-fits-all’ approach.

Limitations

- **Cross-sectional method**
design at one point in time! How employees actually transition from types is not assessed.
- Sovereign Shadow User was only **indirectly observed**.
- The framework leaves two potential user types open for future research (i.e., boundary cases)

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**Thank You
for Your Attention!**



Enterprise Systems,
Platforms, and
Architectures



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Backup

Foundations –
Differentiation
from Related
GenAI User Types

	Gerling et al. [11]	Tuczek et al. [14]	Bruhin et al. [10]	This article
Domain	Cross-context consumers	German consulting firms	ISD teams (single firm)	German HR roles (13 firms)
Sample	344 early ChatGPT users	22 interviews (33 participants)	20 interviews (revelatory case)	20 interviews (purposive variation)
Unit of Analysis	User (individual adopter)	Task (task-technology fit)	User (ISD team member)	User (HR professional)
Dimensions	6D: (utilitarian/convenience value, job utility, perceived social presence, trust, privacy concerns)	Task-GenAI Fit (TGAIF; task characteristics, GenAI capabilities; automation vs. augmentation)	2D: depth of engagement, perceived value	3D: AI literacy, GenAI usage, governance circumvention
Structure	4-archetype cluster	4-TGAIF roles	4-archetypes in 2x2 matrix	3-dimensional: six populated types
Role of Governance	Privacy as one attitudinal dimension	Not explicitly addressed; handled at the task level	Not explicitly addressed; barrier to overcome	Independent axis; high literacy may lower governance conformance
Lens	Technology adoption	Task-technology fit; TGAIF	Job characteristics model	AI literacy, AI governance, Shadow AI
GenAI User Types	Reserved Exp., Cautious Adopters, Naïve Pragmatists, AI Enthusiasts	Adaptive Specialist, Precise Specialist, Scalable Generalist, Creative Generalist	Disengaged Sceptic, Cautious User, Frustrated Strategist, Productive Optimiser	Uninitiated User, Cautious User, Naïve Adopter, Responsible Steward, Unaware Shadow User, Sovereign Shadow User (IND)



Backup

Overview of
Interview
Participants and
their GenAI User
Types.

(assigned ex-post)

ID	Role	Organization	JT.	T.	Primary GenAI User Type
I01	HR People Tech & Data Lead	IT Service Provider	3	66	<i>Responsible Steward</i>
I02	Senior Talent Acquisition Expert	IT Service Provider	18	25	<i>Responsible Steward</i>
I03	Managing Director	Exec. Recruit Consultancy	4	28	<i>Uninitiated User</i>
I04	Employer Branding Expert	Insurance Company	2	30	<i>Naïve Adopter</i>
I05	Senior Recruiter	Recruitment Agency	8	29	<i>Unaware Shadow User</i>
I06	Recruiter	Manufacturing Firm	1	29	<i>Uninitiated User</i>
I07	People Analytics Expert	Energy Corporation	2	51	<i>Cautious User</i>
I08	SAP Talent Acquisition Expert	HR Consulting	1	28	<i>Uninitiated User</i>
I09	Senior HR Business Partner	Telecommunications	4	25	<i>Uninitiated User</i>
I10	Head of Employer Branding	Telecommunications	9	24	<i>Unaware Shadow User</i>
I11	Senior Sourcing Specialist	Energy Corporation	6	35	<i>Responsible Steward</i>
I12	Self-Employed Owner	HR Consulting	5	24	<i>Uninitiated User</i>
I13	HR Business Partner	Ind. Manufacturing	2	27	<i>Cautious User</i>
I14	Lead HR-Payroll Accountant	Automotive	41	79	<i>Uninitiated User</i>
I15	CEO Upskilling Advisor	Exec. Consultancy	3	48	<i>Responsible Steward</i>
I16	Learning Experience Designer	IT Consultancy	8	55	<i>Responsible Steward</i>
I17	Head of Learning & Innovation	IT Consultancy	3	44	<i>Responsible Steward</i>
I18	CEO & Head of HR	IT Consultancy	3	40	<i>Responsible Steward</i>
I19	PO-HCM-Software	Energy Corporation	6	47	<i>Responsible Steward</i>
I20	HR Manager	Chemical Corporation	6	62	<i>Responsible Steward</i>



Backup

High-Resolution Governance Framework

