

MEASURING THE AI LITERACY OF COMMUNICATION PROFESSIONALS



Artificial intelligence is currently transforming the world and with it, the field of communication. As new technologies emerge, new competencies become essential. This article introduces COMM-AIT, the first scientifically validated AI literacy test developed specifically for communication professionals. The self-assessment test helps individuals to discover their strengths and areas for growth. By completing the test, communicators can compare their own AI literacy index to the average index of the communication profession. The test is available for free at www.comm-ait.com.



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NEW TECHNOLOGIES DEMAND NEW COMPETENCIES

Artificial Intelligence (AI) is currently redefining the communication profession by reshaping work environments, altering professional roles, and creating new opportunities and challenges in a digitally driven landscape (Maslej et al., 2025; Tamayo et al., 2023; Wuersch et al., 2024). AI literacy has been identified as a key capability for the future of communication teams (Stieglitz et al., 2024). To keep pace with the rapidly evolving technologies, communication departments in organizations as well as communication agencies need forward-thinking professionals with AI expertise in their teams. The communication researchers Gregory and Smith (2025) analyzed international empirical studies on the use of AI in communication practice to identify the areas of competence most affected. They argue that various dimensions must be taken into account and that their relevance will change as software and services evolve.

WHAT IS AI LITERACY?

AI literacy is about more than just skills – it also includes knowledge and attitudes. AI literacy can be defined as a set of competencies comprising knowledge, skills, and attitudes that enable individuals to understand, use, and critically assess AI-based tools and services effectively and efficiently for relevant tasks.

The importance of different competencies varies depending on one's role and responsibilities, meaning there is no universal standard. Instead, required AI competencies are context-specific, based on the tasks assigned to different communicators and the use cases that shape their daily work.

For example, a social media manager whose main tasks include planning, producing, and publishing posts on multiple platforms must have in-depth knowledge of the

latest AI-driven software for creating text and videos and for automated content distribution. Someone working in a strategy and planning department, on the other hand, needs to know how AI applications can be used to develop and analyze budget plans or to develop meaningful indicators for managing a project using the OKR (Objectives and Key Results) method.

HOW TO MANAGE AI LITERACY IN COMMUNICATION TEAMS

Assessing and developing the AI competencies of team members and themselves is a major challenge for any communication leader striving for success. This can't be done by initiating prompting courses or similar standard trainings. Instead, a structured approach is required:

- 1 **Identify relevant competencies:** Communication teams must define and prioritize AI competencies for professionals enacting different roles and working on various levels of responsibility.
- 2 **Assess current competencies:** Next, it's necessary to identify specific strengths as well as areas for improvement for individual communicators and/or teams. This requires a standardized AI literacy test, as subjective perceptions or wishes for improvement may conflict with the goal of systematically advancing the whole organization.
- 3 **Set development goals and strategies:** The insights from the previous steps help to design tailored competence development programs for communication teams or individuals. Such programs will determine the requirements, available resources, and responsibilities.
- 4 **Provide and implement development activities:** Concrete development activities as part of such programs may include in-person or virtual training, on-the-job support by internal AI experts, and cross-team or cross-organization peer exchange.
- 5 **Evaluate progress:** To track progress over time, competencies of individual communicators and/or teams need to be reassessed at a later point.

This approach is not complicated but it needs commitment and perseverance. It also requires an AI literacy test – something which has been missing until now.

MEASURE AI LITERACY WITH COMM-AIT

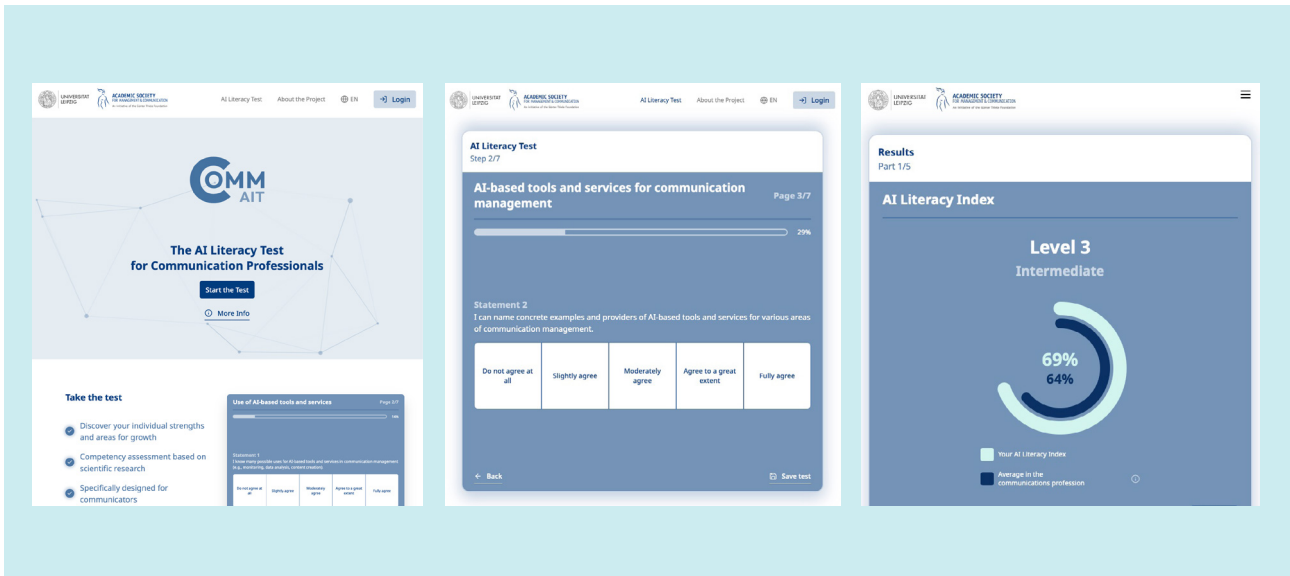
Many disciplines (e.g., information systems, education) have been actively discussing and researching how to measure AI literacy for some time. But there has been no scientifically validated AI literacy test tailored to communication professionals. Drawing from international research and existing AI competency frameworks, a new scientific model has been developed to assess AI competencies among communicators. The COMM-AIT model combines three competency dimensions – knowledge, skills, attitudes (Kiesenbauer, 2022; Tench et al., 2017) – with five AI dimensions adapted from Long and Magerko (2020):

- **What are AI-based tools and services?**
- **What can AI-based tools and services do?**
- **How do AI-based tools and services work?**
- **How can AI-based tools and services be used?**
- **What are the potential opportunities and risks of AI-based tools and services?**

In order to align the foundational model with the professional practice, specific questions and items focusing on communication management were developed for each dimension of the COMM-AIT matrix. For example: "I am familiar with the latest AI-based tools and services for different areas of communication management (e.g., for content creation, data analysis, or optimization of work processes)." The responses of participants are measured on a five-point Likert scale ranging from 'do not agree at all' to 'fully agree'.

All questions and items have been combined in the COMM-AIT questionnaire that can be used to assess specific groups of communicators, e.g., in an inhouse communication department. COMM-AIT is also available as a free online test for all communicators interested in their own competency profile and a comparison with peers in the profession. The test can be accessed in English and German at www.comm-ait.com.

The freely available AI literacy test COMM-AIT for communicators



Communicators can take the AI literacy test at www.comm-ait.com and get their personal AI literacy level presented right away.

The COMM-AIT matrix as a scientific model to calculate multiple indices

Based on the responses, several indices are calculated for everybody who takes the test: three sub-indices for competencies (AI Knowledge Index, AI Skills Index, AI Attitude Index) and five for the AI dimensions (AI Comprehension Index, AI Performance Index, AI Technologies Index, AI Application Index, AI Reflection Index) – all of which together form the AI literacy index.

SELF-ASSESSMENT FRAMEWORK	1) Knowledge	2) Skills	3) Attitude	INDICES
A) What are AI-based tools and services?	Question A1.1 with items Question A1.2 with items	Question A2.1 with items Question A2.2 with items	Question A3.1 with items Question A3.2 with items	▶ AI Comprehension Competence
B) What do AI-based tools and services do?	Question B1.1 with items Question B1.2 with items	Question B2.1 with items Question B2.2 with items	Question B3.1 with items Question B3.2 with items	▶ AI Performance Competence
C) How do AI-based tools and services work?	Question C1.1 with items Question C1.2 with items	Question C2.1 with items Question C2.2 with items	Question C3.1 with items Question C3.2 with items	▶ AI Technological Competence
D) How can AI-based tools and services be used?	Question D1.1 with items Question D1.2 with items	Question D2.1 with items Question D2.2 with items	Question D3.1 with items Question D3.2 with items	▶ AI Application Competence
E) What are potential opportunities & risks of AI-based tools and services?	Question E1.1 with items Question E1.2 with items Question E1.3 with items	Question E2.1 with items Question E2.2 with items Question E2.3 with items	Question E3.1 with items Question E3.2 with items Question E3.3 with items	▶ AI Reflection Competence
	▼	▼	▼	◀
INDICES	AI Knowledge	AI Skills	AI Attitude	AI Literacy Index

The COMM-AIT matrix captures knowledge, skills, and attitudes in relation to AI and communication tasks. It comprises different sub-indices that altogether represent the AI literacy index of an individual communicator and/or communication team.

Research Design

- 1 A literature review was conducted to analyze international research on AI literacy as well as existing AI literacy tests. By combining these insights with theoretical concepts of communication management and competency development, the COMM-AIT matrix was created as a scientific model guiding the skills test.
- 2 The questions for the AI literacy test were developed based on this model and items identified in previous research.
- 3 To validate the feasibility of the AI literacy test, a pilot study with the global community of corporate communicators at Siemens AG was conducted. They were the first to complete the test.

THE OUTPUT: FIVE DISTINCT AI LITERACY LEVELS

Upon completing the AI literacy test, participants receive an assessment of their personal AI literacy index. This categorizes their current competency level across five distinct levels:

Level 1 – Newbie (<30%)

Communicators at this level have little to no basic knowledge and are just beginning to familiarize themselves with AI-based tools and services for communications. They are not (yet) positive about using them.

Level 2 – Beginner (30 to <50%)

Communicators at this level have acquired initial basic knowledge and gained first practical experience with AI-based tools and services in communications. They have a slightly positive attitude toward using them.

Level 3 – Intermediate (50 to <70%)

Communicators at this level have a solid basic knowledge, use AI-based tools and services regularly, and understand how they work and where they can be applied. They are mostly positive about using them.

Level 4 – Expert (70 to <90%)

Communicators at this level are confident in their use of

AI-based tools and services in communications and can critically evaluate their opportunities and risks. They have a positive attitude toward using them.

Level 5 – Visionary (90 to 100%)

Communicators at this level are pioneers with specialized knowledge, advanced skills, and a positive mindset towards AI-based tools and services in communications. They have a very positive attitude toward using them.

OUTLOOK

As digital software and services continue to evolve, AI literacy is a critical capability for the future of communication teams. Understanding everybody's AI competencies is essential for aligning communication strategies with technological advancements, and to harness AI's full potential. COMM-AIT offers valuable insights to guide targeted competency development. Building a culture of innovation and digital readiness will ultimately strengthen the role of communications in shaping organizational transformation.

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RESEARCH PROJECT



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More information:
www.comm-ait.com



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