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Realising the Role of Generative AI Among Project Management Professionals

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Abstract

Context: While conceptual research on AI in project management is advancing, empirical evidence of actual usage among IT project managers practising is limited.
Objective: We investigate how Finnish IT project and programme managers use generative AI in daily work, identifying practices, organisational constraints, and future visions through individual interviews.
Method: Using qualitative descriptive design, we conducted semi-structured interviews with 12 experienced Finnish IT project management consultants who work in multiple client organisations. Data were analysed through hybrid inductive-deductive thematic analysis to identify usage practices and future usage.
Results: GenAI adoption is fragmented and peripheral, mainly constrained by organisational policies rather than individual resistance. Participants use GenAI mainly for support tasks rather than core project management functions. Despite varied usage, participants converge on envisioning AI as an "assistant not replacement," reflecting professional boundary work that preserves human authority.
Conclusions: The adoption of GenAI in IT project management is limited by organisational constraints such as security policies and governance structures, which means that organisations should prioritise integration and data protection over bottom-up experimentation. More advanced capabilities remain aspirational, making incremental adoption through low-risk use cases more realistic than broad automation of core project management functions.

1. Introduction

The integration of artificial intelligence (AI) into information technology (IT) project management represents a technological shift with implications for professional practice, organisational efficiency, and the future of work. Recent years have witnessed growing interest in how generative AI (GenAI) tools can support or transform project management activities. Difference research papers have studied how generative AI (GenAI) can help and change the work of a modern IT project manager [1–5]. GenAI is evolving and enables new ways of working by providing assistance to project managers. However, today's IT project managers may find it difficult to benefit of the usage of GenAI or are at their early stage of adopting GenAI.

The purpose of this research is to examine the current practices in which GenAI tools are used and to explore the future implications of how AI can help IT project managers working in client organisations on a temporary basis. The objective of this research is to concentrate on competent Finnish IT project and programme management consultants how they use GenAI in their daily project management activities within client organisation engagements in an individual perspective. Furthermore, to find out what their vision is for the future of co-existence of AI and IT project management.

In this paper, IT projects are defined as those that involve software development, enterprise resource planning (ERP) implementations, IT infrastructure changes, system integrations, and digitalisation initiatives. The participating IT project managers represent a range of industries, including telecommunications, banking, healthcare, insurance, gaming, and cybersecurity. They also work in the client organisation as hired external project managers. Taking into account the following research questions (RQ1, RQ2), this study aims to deepen the understanding of how project management consultants use GenAI in their work and what thoughts and opportunities AI will use in the future.

RQ1: How are IT project management professionals using GenAI tools today?

RQ2: What vision do IT project management professionals have for the future use of AI?

This study follows the qualitative descriptive design guidelines [6,7] using semi-structured interviews with 12 experienced Finnish IT project management consultants. The research focused on practical interview questions with the aim of systematically documenting practises as they are experienced by the interviewed participants. Given that GenAI tools became widely available in professional contexts in 2023 [8], this research can be seen as an early-stage adoption characterised by heterogeneous and individualised usage practices. The rest of this paper is organised as follows. In Section 2, we present a background. In Section 3, the research method is described. Section 4 presents the results. Section 5 contains a discussion of the results, and final Section 6 concludes the study with the conclusions.

2. Background

Project management can be challenging. Several publications have studied different challenges in the success of the projects [9–11]. Moreover, the skill set of a project manager is broad, including capabilities such as communication, stakeholder engagement, and team motivation [12,13]. The day-to-day work of IT project managers follows the stages of project management and has many different tasks to consider throughout the project lifecycle [12]:

- planning scope, objectives, deliverables and project schedules,
- monitoring progress, controlling risks, and making necessary adjustments,
- managing the team through task allocation, conflict resolution, and alignment of capabilities,
- communicating with stakeholders by reporting status, managing expectations, and maintaining feedback channels,
- and ensuring quality through metrics, reviews, and compliance activities [12].

The rise of GenAI has created an important research domain focused on the evolving role of project managers. Different studies show interest in how GenAI can be used to support project management [14–16]. In the related literature, the distinction between

GenAI and AI is vague, making interpretations of related work difficult, since AI by definition covers a wide range of applications [17]. Furthermore, research related to the combination of AI and project management is challenging. According to Muller et al., in different studies, quality over quantity should be emphasised, bridge theory and practice, and provide future research guidance [18].

Various GenAI tools are frequently introduced to help in project management. As an example, Project Management Institute (PMI) has published the GenAI-powered assistant tool called PMI Infinity for project professionals [19]. It is targeted to provide intelligent guidance to current and impact PMI's best practices that enhance project outcomes. It contains a repository of more than 14,000 content items, curated by PMI members and global project management experts. Like OpenAI's ChatGPT, it provides conversations through the chat interface [20]. PMI has also conducted the second global study that includes 500 project professionals, each representing their organisation, collecting data from 18 industry sectors in 12 countries that state the situation in 2024 of how AI is adopted in project management related work [21].

In addition to PMI's Infinity [19], Dam et al. have introduced a framework through which GenAI technologies can be used to facilitate agile project management [22]. In general, different GenAI generated content mechanisms have been studied. Zuge et al. have studied that GenAI-created content has the potential to revolutionise engineering management by improving decision making, optimising resource allocation, and streamlined workflows across various phases of the life cycle, including demand analysis, design, implementation, testing, and evaluation [23]. Continuing, Barcaui et al. argues that when comparing AI-generated and human-created project plans, each exhibited distinct strengths and weaknesses, suggesting that a collaborative approach could be the most effective [24]. According to Patel, by automating routine tasks, optimising resource allocation, supporting critical decisions, and enabling precise forecasting, GenAI has the potential to fundamentally reshape project management practices [25]. Continuing, Bushuyev et al. argue that AI shapes project management by improving decision-making, optimising resource use, and automating routine work through predictive analytics, real-time risk evaluation, and data-driven insights that support more accurate managerial decisions [26].

Today, GenAI solutions may lack the capabilities needed to effectively help in complex project management challenges. Although GenAI tools can help project managers control and monitor projects, the weaknesses identified in existing models highlight the continued importance of human knowledge and judgement in the evaluation of results [27]. Moreover, general-purpose Large Language Models (LLMs), although not explicitly trained in project management, already possess the ability to address diverse challenges in the field and demonstrate knowledge that approaches professional certification standards [28]. According to Odeh, the growing pace of AI adoption and its role in driving innovation will require the project management profession to adapt and evolve its methods [29]. Using AI-generated insights and automated workflows, project managers can handle complex situations with greater adaptability and anticipation. Whether selecting and prioritising initiatives, refining processes, or strengthening decision-making, AI elevates the entire project management life cycle, and in particular the administrative workload [30].

GenAI has already been applied in IT project management for some years. Relevant empirical research is still in the early phase and there is much room for future research. However, it is essential to study empirically current IT project management practices and how GenAI can transform work through field interviews to understand the current state and future state of using AI in daily project management work. Despite conceptual

literature, empirical research on actual GenAI usage practices among IT project managers remains limited. Most of the existing work is conceptual, theoretical, or tool-focused rather than practice-focused. By directly interviewing project managers, they can tell more about how they use GenAI.

3. Method

The research is conducted qualitatively based on interviews and applying the qualitative descriptive design [7, 31] to obtain direct low-inference descriptions of the experiences and perspectives of the participants without imposing a theoretical interpretation. Qualitative descriptive research is well suited to explore how people understand and engage with a phenomenon in practice [31, 32], and it prioritises staying close to the data provided by participants [6].

3.1. Participants and recruitment

The interview invitations were distributed electronically on LinkedIn and using the Finnish Project Management Association email list (Projektiammattilaiset ry). The invitation was aimed at people with substantive knowledge of the research topic while ensuring representation in various project management roles that participants (Px) had at the time of the interviews. Twelve IT project management professionals ($n = 12$) accepted the invitation and were recruited (Table 1). This approach can be interpreted as convenience sampling [33].

Table 1. Demographics of the participants in interview order

Participant	Current role
P1	Program manager
P2	Project manager
P3	Project manager
P4	Project management office
P5	Agile coach
P6	Project manager
P7	Project manager
P8	Program manager
P9	Agile coach
P10	Program manager
P11	Program manager
P12	Project manager

3.2. Data collection

Data were collected through semi-structured interviews conducted via Microsoft Teams video conferencing, following a predefined interview guide (Appendix A). The video recordings were transcribed and saved as Microsoft Word files. The interviews covered three main areas relevant to this study: (1) professional background, (2) current use of GenAI-assisted tools in project work, and (3) views on the future role of AI in project management. Additional questions on challenges in project management and the use of traditional project

management tools were asked during interviews, but were excluded from this study because they were not considered relevant to support the answers to the research questions.

3.3. Data analysis

To follow qualitative research [31] data analysis used a mixed inductive and deductive thematic approach [34], combining inductive content analysis [35] with a deductive organisational framework derived from the interview guide and research questions. This approach is consistent with qualitative descriptive methodology, which does not require purely emergent categories, but aims to present findings in a clear and organised manner close to participants' own accounts [6, 7]. The analysis was carried out in three phases.

Phase 1: Transcription and preparation

The interviews were carefully transcribed and saved as Microsoft Word documents. The Finnish-language transcripts were read multiple times to ensure accuracy and translated into English using Microsoft Word's integrated translation function. The English versions were reviewed and corrected through repeated reading and verification as the spoken language is not necessarily precise for machine-based transcription.

Phase 2: Coding

The transcripts were imported into the Atlas.ti qualitative data analysis software. Inductive open coding was performed using Atlas.ti's AI-assisted coding feature [32], generating 424 initial codes. These codes were reviewed against the original transcripts to verify accuracy. The interview guide provided a deductive framework organised around three grouped domains:

1. Professional background and experience (context for understanding adoption).
2. Current GenAI usage practises and applications (to support RQ1).
3. Future expectations for AI in project management (to support RQ2).

Phase 3: Forming themes

Within each domain, inductively generated codes were grouped into themes based on recurring practises in participant responses. For example, descriptions of current GenAI use (RQ1) were organised into themes (and 3) such as "Communication and Documentation," "Learning and Research," "Planning and Strategy," and "Workshop and Meeting Support". These themes were not predetermined but emerged from the data.

Generative AI tools (ChatGPT and Claude) were used to assist in organising groups into tabular summaries aligned with the research questions. All AI-generated outputs were treated as preliminary drafts and systematically verified against the original transcripts, with corrections made by hand where necessary. The interpretation was maintained at a low-inference descriptive level throughout, consistent with qualitative descriptive methodology [6, 7].

4. Results

This section presents the findings of the interview organised into categories emerging from the interview guide (Appendix A), open questions, and topics raised by participants (Pn). The categories cover: participant background and proficiency (4.1), current use of GenAI for project management tasks (4.2), adopted specific GenAI tools (4.3) and expectations regarding future envisions of GenAI (4.4). Each category is addressed in subsections corresponding to Tables 2–5. The answers about Non-AI tools used in the project work were ignored as they did not provide information supporting the research questions (Appendix A, topics 2, 3).

4.1. Background and proficiency of the participants

Participants demonstrate IT project management experience (5+ years) in various projects, domains, and industries. Table 2 presents their work experience in three dimensions: industry sectors, project content areas, and project management methodologies.

Industry experience spans telecommunications, banking, cyber security, healthcare, insurance, energy, postal services, mechanics, games, and education in various unnamed companies. All participants reported on their experience with the software development project. Additional project content areas include cloud technologies, IT system upgrades, ERP implementation, IT systems integration, organisational processes, and testing.

All participants have experience with waterfall methodology, with substantial representation of agile, hybrid approaches, and SAFe (Table 2). This diversity in methodologies,

Table 2. Work experience of the participants

Type\Participant	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Industry												
Telecommunication	✓	–	✓	–	–	–	–	–	–	–	✓	✓
Gaming	✓	–	–	–	–	–	–	–	–	–	–	✓
Cyber security	✓	–	✓	–	–	–	–	–	–	–	✓	✓
Banking	–	–	–	–	–	–	✓	✓	–	✓	✓	✓
Health Care	–	✓	–	–	–	✓	–	–	–	✓	–	–
Insurance	–	–	–	–	–	✓	–	–	–	✓	✓	–
Education	–	–	–	–	✓	–	–	–	–	–	–	–
Energy	–	–	✓	–	–	✓	–	✓	–	–	–	–
Mechanics	–	–	–	–	–	–	✓	–	✓	–	–	–
Postal	–	–	–	–	–	–	✓	✓	✓	–	–	✓
Project content												
Software Development	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ERP implementation	–	–	–	–	–	✓	–	–	–	✓	✓	–
Cloud Technologies	✓	–	–	–	–	✓	✓	–	–	✓	✓	✓
Systems Integration	–	–	–	–	–	✓	–	–	–	✓	–	✓
Organisation Processes	–	–	–	✓	–	–	–	✓	–	–	–	–
Systems Upgrade	✓	–	–	–	–	–	✓	–	–	–	✓	✓
Testing	–	–	–	–	✓	–	✓	–	–	–	–	–
Project management method												
Waterfall	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Agile	–	–	✓	✓	✓	–	✓	✓	✓	✓	✓	✓
Hybrid	✓	–	✓	✓	–	✓	✓	✓	✓	✓	✓	✓
SAFe	–	–	✓	–	–	✓	–	✓	–	✓	✓	✓
Mentions in the interview	8	3	8	5	4	10	10	8	6	11	12	11

industries, and project types establishes the participant group as experienced IT project managers with diverse professional backgrounds.

4.2. Project management related tasks where participants use GenAI tools

Table 3 presents activities in which participants have used GenAI tools, categorised under six themes: Communication and Documentation, Learning and Research, Planning and Strategy, Technical and Specialised, Translation and Communication, and Workshop and Meeting Support.

Table 3. Themes where participants indicated they relied on GenAI tools, alphabetical order

Theme\Participant	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Communication and Documentation												
Creating presentations	✓	–	–	–	–	✓	–	–	–	–	–	✓
Creating templates	–	–	–	–	–	✓	✓	✓	–	–	–	–
Documentation writing	–	–	–	–	–	–	✓	✓	–	–	–	–
Improving text quality	–	–	–	–	✓	–	–	✓	–	–	–	✓
Meeting transcription/notes	–	–	–	–	–	–	✓	–	✓	–	–	–
Message/email drafting	–	–	–	✓	✓	–	–	–	–	–	–	–
Learning and Research												
Information summarisation	–	✓	–	–	✓	–	–	✓	–	–	–	✓
Learning new topics	–	✓	–	–	–	–	✓	–	–	–	–	–
Literature search	–	✓	–	–	–	–	–	–	–	–	–	✓
Technical term explanation	–	–	–	–	–	✓	–	–	–	–	–	–
Planning and Strategy												
Best practices guidance	–	–	✓	–	–	✓	–	–	–	–	–	–
Brainstorming	✓	–	–	✓	–	–	–	–	–	–	–	–
Problem-solving	✓	–	–	–	–	–	✓	–	–	–	✓	–
Project planning	–	–	–	–	–	–	–	✓	–	–	✓	–
Risk identification	–	–	–	–	–	–	–	–	–	–	✓	–
Technical and Specialised												
Building automation flows	–	–	–	✓	–	–	–	–	–	–	–	–
Creating Process instructions	–	–	–	–	–	–	–	✓	–	–	–	–
Cross-checking/QA	–	–	–	–	–	–	–	✓	–	–	–	–
Image generation	–	–	–	–	✓	–	–	–	–	–	–	–
Retrieving company data	–	–	–	–	–	✓	–	–	–	–	–	–
Translation and Communication												
Simplifying technical info	–	–	–	–	–	✓	–	–	–	–	–	–
Translation	–	–	–	–	–	✓	–	–	✓	–	–	–
Workshop and Meeting Support												
Creating action points	–	–	–	–	–	–	–	–	✓	–	–	–
Processing workshop results	–	–	–	–	–	–	–	✓	✓	–	–	–
Workshop facilitation ideas	–	–	–	–	–	✓	–	–	–	–	–	–

Communication and documentation. Three participants (P1, P6, P12) use GenAI to create presentations, particularly for client communications and stakeholder participation. Template creation (P6, P7, P8) includes generating alternatives for analyses, document structures, and Wiki documentation pages. Documentation writing (P7, P8) ranges from document templates to systematic project process instructions, with P8 demonstrating the most extensive usage by creating work cards, checklists, and implementation documentation. Text quality improvement (P5, P8, P12) involves a refinement of tone, correcting syntax, and synthesising older content into well-structured versions while maintaining business-critical details. Meeting transcription and note-taking (P7, P9) use Microsoft tools

to ease administrative burden, although with variable quality depending on the complexity of the meeting. Message and email crafting (P4, P5) serves both mass communications and overcoming writer's block, though outputs require substantial editing.

Learning and research. Information summarisation (P2, P5, P8, P12) accelerates searches through materials, categorises feedback, and synthesises documentation. Learning new topics (P2, P7) helps participants gain a basic understanding before stakeholder participation and efficiently locate relevant resources. The literature search (P2, P12) supports the finding of Finnish and international references. The technical term explanation (P6) enables non-technical project managers to understand technical concepts and assess the severity of the issue for effective team communication.

Planning and strategy. Best practices guide (P3, P6) provides examples and alternatives for professional judgement. Brainstorming and ideation (P1, P4) supports daily concept development and serves as a primary use case. Project planning (P8, P11) assists with work phase structuring and migration project frameworks, though P11's test with Gemini has not been operationalised. Problem-solving (P1, P7, P11) ranges from addressing client challenges to understanding system implementations, with P11 finding experimental results promising but not yet implemented. The identification of risks (P11) demonstrated the potential to identify the risks of typical migration projects in the tests.

Technical and specialised. Building automation workflows (P4) represents the most advanced usage, using ChatGPT API, Flowise, n8n, and Python interfaces to create automated workflows through experimental agent-driven development. Creating process instructions (P8) involves systematically writing value-stream mapping guidance and task checklists since January 20, 2025. Cross-checking and quality assurance (P8) help identify missing elements and overlaps in documentation, although it requires mandatory human verification. Image generation (P5) using Microsoft Copilot yields mixed results that require multiple attempts. Retrieving company data (P6) leverages Microsoft Copilot's internal network access capabilities.

Translation and communication. Simplifying technical information (P6) helps translate complex topics for management audiences. Translation (P6, P9) supports fast multilingual communication needs, with P9 reporting one instance of AI quality exceeding professional translation services.

Workshop and meeting support. Creating action points (P9) from meeting transcripts sometimes produces superior results to manual creation, although it requires verification. Processing workshop results (P8, P9) using AI algorithms in Whiteboard and Miro tools categorises ideas and significantly reduces processing time from 30–60 minutes. Workshop facilitation ideas (P6) provide suggestions for weekly workshops requiring new approaches.

4.3. Specific GenAI tools used by the participants

Table 4 presents the adoption of the specific GenAI tool. ChatGPT ($n = 8$) and Microsoft Copilot ($n = 7$) dominate, with Copilot accessed predominantly through organisational licences. Google Gemini represents both operational and experimental usage. Claude, OpenAI API, and Ollama appear exclusively among technically sophisticated users that require programmatic access or local deployment for data privacy. Specialised automation tools, Flowise, n8n, and Miro AI, are limited to advanced users with specific automation or platform-embedded needs. P4 demonstrates the most sophisticated tool ecosystem, using Flowise and n8n to create visual workflow automation with ChatGPT API integration.

Table 4. GenAI tools adopted by participants in alphabetic order

GenAI Tool \Participant	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
ChatGPT	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	✓
Microsoft Copilot	–	✓	–	–	✓	✓	✓	✓	✓	–	–	✓
Google Gemini	–	–	–	–	✓	–	–	–	–	–	✓	✓
Claude	–	–	–	✓	–	–	–	–	–	–	–	✓
OpenAI API	–	–	–	✓	–	–	–	–	–	–	–	✓
Ollama	–	–	–	✓	–	–	–	–	–	–	–	✓
Flowise	–	–	–	✓	–	–	–	–	–	–	–	–
n8n	–	–	–	✓	–	–	–	–	–	–	–	✓
Miro AI	–	–	–	–	–	–	–	–	✓	–	–	–

The adoption of the specific GenAI tool reveals a clear distinction between main tools for general project management tasks and specialised tools that require technical expertise for advanced automation workflows.

4.4. The future envisions of AI in project management

Participants welcome the future use of AI in project management, emphasising the automation of routine tasks and project assistance as the most beneficial applications. However, they offered few futuristic ideas beyond the current capabilities. Table 5 presents future

Table 5. Future themes envisions by participant (alphabetically ordered)

Future AI theme \Participant	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Administrative Automation												
Automated reminders	–	–	–	–	–	✓	–	–	–	–	✓	–
Calendar/meeting management aut.	–	–	–	–	–	✓	–	–	✓	✓	✓	–
Reporting automation	–	–	–	–	–	–	✓	–	–	✓	✓	–
Tool setup automation	–	–	–	–	–	–	✓	–	–	–	–	–
AI Agents												
Agent orchestration	–	–	–	–	–	–	–	–	–	–	✓	✓
Autonomous AI agents	✓	✓	–	–	–	–	–	✓	–	✓	✓	✓
Human Primacy and Concerns												
AI as assistant not replacement	–	–	–	–	–	✓	–	✓	–	–	✓	✓
Concerns about skill erosion	–	–	–	–	✓	–	–	–	–	–	–	–
Environmental impact concerns	–	–	–	–	–	–	✓	–	✓	–	–	–
Humans retain decision control	–	–	✓	✓	–	✓	✓	✓	–	–	✓	–
Intelligent Monitoring												
Dependency tracking and mgmt	–	–	✓	–	–	–	✓	–	–	–	✓	–
Deviation and problem alerts	–	–	–	–	–	✓	–	–	–	–	✓	✓
Real-time progress analysis	–	–	✓	✓	–	✓	–	–	–	–	–	–
Risk analysis	–	–	✓	–	–	–	–	–	–	–	✓	–
Quality and Trust												
Higher quality outputs	–	–	–	–	✓	–	–	–	✓	–	–	–
Privacy and data security	–	–	–	✓	–	–	–	–	–	–	–	–
Specialised or domain specific AI	–	–	–	–	✓	–	–	–	–	–	–	–
Trustworthiness (no hallucinations)	–	–	–	✓	–	–	–	–	–	✓	–	–
Strategic Support												
Best practices discovery	–	–	–	–	–	–	–	–	–	✓	–	–
Change impact analysis	–	–	–	–	–	–	–	–	–	–	✓	–
Prediction capabilities	–	–	–	–	–	–	✓	–	–	–	–	✓
Project planning from historical data	–	✓	–	–	–	–	–	–	–	–	✓	✓

AI envisions categorised into six themes: Administrative Automation, AI Agents, Human Primacy and Concerns, Intelligent Monitoring, Quality and Trust, and Strategic Support.

4.4.1. Administrative automation

Automated reminders (P6, P11) would free project managers from repetitive stakeholder follow-ups about agendas, time sheets, and approaching deadlines for work P6 describes as consuming disproportionate time. P11 envisions AI as a project assistant that manages reminders to steering groups and partners when managing multiple concurrent projects.

Calendar and meeting management automation (P6, P9, P10, P11) emerged as the most anticipated capability. Participants seek AI to handle scheduling logistics, coordinate between time zones and organisations, and identify optimal meeting slots for tasks that consume significant professional time. P10 wants an assistant who could manage global team coordination automatically. P11 envisions flight-booking-like functionality suggesting optimal times within flexible windows and automatically adjusting for conflicts.

Report automation (P7, P10, P11) addresses frustration with manual reporting burdens. P10 identifies reporting as the primary pain point, envisions AI automatically retrieving data from various systems, compiling reports without manual entry, and generating summaries to allow focus on problem resolution rather than data compilation. P11 seeks AI not only to automate existing processes, but also to suggest process improvements for complex reporting challenges. The automation of tool configuration (P7) specifically targets the Atlassian Jira configuration, which P7 describes as consistently difficult work involving numerous tasks and configurations, representing a clear opportunity for automation.

4.4.2. AI agents

Agent orchestration (P11, P12) envisions a technical architecture in which duplicable single-task agents could be orchestrated through integration services, with AI dynamically composing processes utilising agent collections based on specific requests to represent sophisticated distributed AI architecture thinking.

Autonomous AI agents (P1, P2, P8, P10, P11, P12) represent the most frequently mentioned advanced functionality. Use cases include requirements management agents monitoring specification updates (P1), knowledge base navigation for workforce planning (P2), workshop facilitation agents preparing exercises based on feedback (P8), backlog management agents providing real-time planning guidance (P8), complex task handling beyond current capabilities (P10), and agents for architectural design, coding, migration planning, and execution (P11). However, P10 frames current AI as a "twelve-year-old colleague who makes mistakes," indicating reliability concerns constrain expanded agent usage.

4.4.3. Human primacy and concerns

AI as assistant, not replacement (P6, P8, P11, P12) emphasises supporting rather than substituting professional judgement. P6 describes the envisioned AI as a project assistant, while P11 consistently frames AI as handling standard reminders and supervision according to lifecycle plans, but maintaining human control.

Concerns about skill erosion (P5) identify over-reliance as threatening employee skill development, particularly for beginners who have not developed experiential understanding.

P5 warns that AI-generated outputs prevent building relationships with the work products necessary for professional competence.

Environmental impact concerns (P7, P9) express anxiety about AI's ecological costs. P7 emphasises that environmental issues are significant yet absent from business AI discussions, questioning how company carbon footprints change with increased AI usage. Both participants view environmental sustainability as a legitimate evaluation criterion that is inadequately addressed in the current discourse.

Humans must retain decision control (P3, P4, P6, P7, P8, P11) represents majority consensus. P3 emphasises that project managers remain essential for group leadership and motivation for work that no machine can perform. P4 frames AI as "bad master, good servant." P6 and P8 particularly emphasise the irreplaceable human in facilitation, coaching, and team motivation, asking whether computers can encourage teams or motivate in ways humans can. P11 notes that even with AI architectural solutions, human verification remains mandatory for error detection.

4.4.4. Intelligent monitoring

Dependency tracking and management (P3, P7, P11) addresses visibility challenges. P7 identifies dependency management as particularly difficult for external project managers. P11 provides the most sophisticated vision: AI that analyses the impacts of changes on dependencies with automatic propagation and resource allocation recommendations.

Deviation and problem alerts (P6, P11, P12) seek active alerting rather than manual monitoring. P11 envisions sophisticated alert capabilities that monitor risk realisation signs and automatically detect when dependencies cannot be completed on schedule, providing actionable coordination recommendations beyond simple notifications.

Real-time progress analysis (P3, P4, P6) seeks automated situational awareness. P3 envisions AI collecting multi-source data, analysing progress against baselines, and providing status analyses with improvement recommendations. P4 envisions automated views that allow the focus to be on problem resolution rather than data compilation. P6 seeks AI management of all data with automated deviation alerting.

Risk analysis (P3, P11) ranges from improvement recommendations (P3) to comprehensive vision based on P11's experimental Gemini test, which successfully identified typical migration project risks. P11 envisions an AI trained on historical project data that provides risk assessments based on project characteristics.

4.4.5. Quality and trust

Higher quality outputs (P5, P9) reflect dissatisfaction with current results requiring extensive correction and editing. P5 seeks specialisation that allows more direct usage of output, while P9 describes situations where AI produces low-quality results that require abandonment in favour of manual work for negating time-saving benefits.

Privacy and data security (P4) motivates local AI installations for sensitive data, with P4 expressing hope for solutions that allow AI to use without data exposure to foreign commercial entities, representing a sophisticated awareness of data sovereignty issues.

Specialised or domain-specific AI (P5) argues that current generic AI does not serve professional work adequately. P5 illustrates with project management examples where generic LLMs produce approximately 70% usable content with 30% irrelevance, concluding

that AI specialists trained in agile methods, project management and organisational behaviour would produce substantially better quality.

Trustworthiness (P4, P10) emerges as a fundamental requirement. P4 prioritises trust above the features, identifying two dimensions: avoiding hallucinations and ensuring data privacy. P10 explicitly states the inability to trust AI for questions beyond existing knowledge, indicating that trust limitations prevent the use of AI for genuine knowledge acquisition versus information reformatting.

4.4.6. Strategic support

Best practice discovery (P10) expresses frustration that current AI cannot access paid professional knowledge databases, though concerns exist about information quality similar to web search results. Change impact analysis (P11) envisions AI analysing budget, schedule, and resource impacts of changes, providing strategic recommendations such as whether to add resources to delayed components or adjust dependent work schedules, with automatic communication to steering groups for representing sophisticated multi-dimensional impact modelling beyond current tool capabilities.

Prediction capabilities (P7) note that existing project management tool reports could be enhanced with AI-driven predictive analytics, though specific targets remain unelaborated. Project planning based on historical data (P2, P11, P12) recognises the value of accumulated organisational learning. P2 envisions AI creating basic project management rulebooks from existing research and practices. P11 provides the most comprehensive vision: systematic database development of project experience, plans, and outcomes that account for technology variations, enabling AI trained on historical data to generate planning templates based on comparable projects through structured parameters for accelerating planning with greater quality than traditional approaches.

5. Discussion

The results show that interviewed Finnish IT project manager consultants use GenAI tools today for a wide range of tasks, many of which are not necessarily directly related to project management, and tools are mainly chat based. In the future more assistive AI tools are visioned that can overtake time consuming and repetitive robot-like work. Moreover, the results reveal fragmented peripheral usage shaped primarily by organisational constraints rather than individual resistance.

5.1. Organisational constraints as primary adoption barrier

The scattered usage (Table 3) shows early adaptation to the use of GenAI tools. Furthermore, the tools are mostly generic GenAI tools and not project management specific (Table 4). The participants explicitly described the constraints for directing how GenAI can be used:

– **Approved tool lists:** Client organisations determine which tools are accessible. Microsoft Copilot dominates not because it is not necessarily superior, but because enterprise licences, sandboxed environment, and Microsoft 365 integration make it organisationally approved.

- **NDA restrictions:** Participants consistently noted that they use GenAI "like a web search"—no confidential information being shared. This fundamentally limits usage to peripheral tasks.
- **Security policies varying across clients:** As external consultants, participants navigate diverse policies ranging from complete GenAI bans to enterprise-wide Microsoft Copilot access. This structural variation indicates fragmentation of the GenAI tools that can be used.

5.2. Uneven GenAI usage reflects an early-stage and individualised adoption

The scattered checkmarks in Table 3 indicate that different GenAI assisted tasks can debatably mean that the participants use GenAI differently from each other. It should also be noted that the participants shared examples of their own GenAI assisted activities that came to mind at the time of the interviews, and not all possible activities were used. It can be assumed that, with increasing GenAI user experience, certain GenAI assisted activities may become more common or new ones may emerge.

The adoption of different GenAI tools by participants is uneven, as seen in Table 4. ChatGPT is reported to be the most widely used tool, suggesting strong familiarity and perceived usefulness among the group, but it may also indicate general public knowledge of the existence of ChatGPT. Microsoft Copilot appears as the second most common option, likely reflecting its integration into client corporate environments where participants already work with Microsoft 365 and client company information security policies affect by limiting usage of other tools. Several participants use a broad mix of tools, indicating a higher degree of experimentation or more advanced technical needs, while others rely on a single tool. Adoption of more specialised setups, such as using GenAI through the OpenAI API, Ollama [36], Flowise [37] and n8n [38], remains limited, indicating that automation-orientated or developer-focused GenAI capabilities have not become the norm within IT project management work.

5.3. AI as augmentation rather than a replacement in IT project management

Participants envision a future in which AI increasingly supports the administrative, analytical, and strategic components of project work. However, these expectations include concerns about trust, contextual understanding, and the preservation of human decision authority. Across participants, administrative automation including reminders, calendar coordination, reporting tasks, and tool configuration is identified as a domain where AI could deliver immediate value. The recurring emphasis on meeting scheduling and stakeholder follow-up indicates that inefficiencies in human coordination remain a central pain point, and participants anticipate that AI could alleviate these kinds of "monkey" work responsibilities.

Beyond administrative support, some participants articulated more advanced expectations involving autonomous AI agents. These visions ranged from relatively simple background assistance to sophisticated architectures involving orchestrated collections of specialised AI agents capable of analysing dependencies, executing migration tasks, or generating complex processes on demand. Such perspectives signal an emerging conceptual shift in which AI is not limited to assisting discrete tasks, but could operate as an integrated component or resource within project ecosystems. However, concerns about data confidentiality, hallucinations, and output quality persist, indicating that current AI capabilities

are not perceived as reliable enough either in the future or in the future. Moreover, doubts about skill erosion reflect concerns that over-reliance on AI may undermine professional expertise, particularly among junior IT project management practitioners.

Participants highlighted that even with substantial AI and automation, project leadership, stakeholder participation, and motivational work are inherently human activities. The notion of AI as a "project assistant," rather than a replacement, reflects a pragmatic orientation. Participants are willing to delegate structured and repetitive tasks, but resist the idea that AI could assume responsibilities that involve empathy, negotiation, or group facilitation as a human project manager.

Some participants also expressed expectations for AI-driven intelligent monitoring, including dependency analysis, deviation detection, and risk assessment. These visions highlight an aspiration for more proactive, predictive, and integrative project oversight that exceeds the reactive reporting capabilities of current tools.

Finally, expectations around strategic support indicate a vision for AI systems capable of synthesising historical project knowledge, offering best-practice recommendations, and modelling the downstream consequences of changes in scope or resources. However, concerns about information quality and source credibility indicate that increased access alone is insufficient.

In summary, these findings depict a future in which AI can play a substantial but bounded role in IT project management. Participants anticipate meaningful automation of repetitive, process-driven tasks and substantial augmentation of analytical and monitoring functions, while simultaneously drawing firm limits around decision authority and human-centric aspects of project work.

5.4. GenAI limitations in IT project management

Among the use of GenAI in various activities (Table 3) the participants identified several limitations of GenAI (Table 6). The inconsistent quality of the output requires human review to verify accuracy and correctness. Furthermore, GenAI struggles to fully grasp organisational context understanding. Hallucination remains a significant concern, as technology can produce inaccurate or fabricated information. Confidentiality concerns and environmental considerations were also mentioned.

Table 6. Identified limitations of GenAI use in project management

Limitation	Description
Inconsistent output quality	Participants reported that GenAI responses vary in accuracy and reliability, requiring human review to verify correctness and ensure the output is suitable for use.
Limited understanding of organisational context	GenAI struggles to interpret organisational structures, nuances, and internal practices, reducing its usefulness in context-dependent tasks.
Hallucinations	Several participants noted that GenAI can generate incorrect or fabricated information, posing risks when accuracy is critical.
Confidentiality concerns	Due to security and NDA requirements, participants avoid sharing confidential information with GenAI tools. GenAI is used similarly to public web search engines unless confidentiality can be guaranteed.
Environmental considerations	Some participants expressed concerns about the environmental impact of GenAI technologies, influencing how and when they use such tools.

5.5. Answers to research questions

Based on the discussion and qualitative analysis, we find the answers to the research questions as follows.

RQ1: How are IT project management professionals using GenAI tools today?

During the time, the IT project managers interviewed used GenAI primarily to discover knowledge and perform simple assistive tasks. They see GenAI as a helpful assistant whose outputs require refinement and verification. Client organisations where IT project management consultants work largely determine which tools are approved and available for use, thus shaping the adoption of GenAI usage. The primary GenAI usage activities are related to finding relevant information and best practices and content creation for presentations, reports, and communication materials. Moreover, quick translation needs for international projects, supporting meetings using transcriptions with relevant action point generation, and finally for brainstorming solutions seem to be practical assisted by GenAI.

RQ2: What vision do IT project management professionals have for the future use of AI?

In the future, many personal assistants, such as AI agents, are seen as important and can help with basic tasks that require less human thinking. However, control should be maintained by human IT project managers, and only assistant tasks that can be controlled and verified are assigned to AI assistants. The participants welcome agentic AI systems. They are perceived more as supportive assistants rather than autonomous peer IT project managers or instances that perform project management duties. There is also concern that training AI models on AI-generated content could lead to ”inbreeding,” potentially resulting in future AI systems that lack exposure to fresh, original data. Security and privacy concerns are viewed as significant risks in the adoption of AI.

6. Conclusions

This qualitative descriptive study documented GenAI usage examples and future expectations among 12 experienced Finnish IT project management consultants during August–September 2025. Through semi-structured interviews and hybrid thematic analysis, we examined how IT project managers currently use GenAI tools and what they envision for future AI applications in their work.

6.1. Theoretical implication

The findings indicate that the use of GenAI among the interviewed project managers follows a predominantly practical and situational logic rather than a framework-driven one. Tool usage is not systematically anchored in established project management methodologies, such as predictive, agile, or hybrid frameworks. Instead, GenAI appears to be appropriated in response to immediate cognitive or operational needs, suggesting that its role in project work is largely decoupled from formalised methodological structures. In general, the results highlight the need for project management theory to more explicitly address the informal and emerging use of GenAI technology.

6.2. Practical Implications

The findings suggest concrete implications for both IT project manager consultants and the organisations that employ them. The discussion reveals that GenAI adoption is shaped less by individual attitudes than by structural and organisational conditions, and consequently, the recommendations must address both levels. Table 7 (Page 17) identifies these challenges in targeted responses for two distinct stakeholder groups consulting project managers and their employers or client organisations structured around five key themes: organisational constraints and fragmented tool access, NDA and confidentiality restrictions, inconsistent output quality, limited understanding of organisational context, and uneven early-stage adoption. The recommendations reflect the finding that effective adoption of GenAI in IT project management consulting cannot be achieved through individual effort alone. Rather, it requires coordinated action in which practitioners continuously update a shared knowledge-base of GenAI tools and methods and disciplined working habits, while employers and client organisations provide the structural conditions by including clear policies, private deployment environments, reusable prompt resources, and knowledge-sharing forums that make responsible and consistent use of GenAI possible across diverse client engagements.

6.3. Limitations and validity

This qualitative descriptive study has several limitations that should inform interpretation and application of the findings. In qualitative descriptive research, the goal is not statistical generalisability, but transferability. The reader assesses whether the findings might apply to their contexts [6]. The detailed description of the characteristics of the participants (Tables 1, 2) and their contexts enable such transferability judgments.

With participants ($n = 12$), this study has achieved sufficient information power [39] to address exploratory research questions, given the narrow purpose of the study, the specific sample and the interview dialogue. However, fragmented usage examples (most activities mentioned by 1–3 participants) raise questions about whether a larger sample would reveal additional practices or stronger convergence practices. The project managers interviewed represent experienced professionals who can be assumed to be representative of a larger population of experts. Nevertheless, rare more specialised GenAI tool practices mentioned by single participants, for example, in Table 4, such as P4's Flowise usage, P11's Google Gemini usage may be more widespread than our sample suggests.

The interviews conducted in August–September 2025 capture a specific moment in the rapidly evolving landscape of generative AI technology. New tools, capabilities, organisational policies, and AI models emerge on a monthly basis. Specific tools (for example, the current dominance of ChatGPT and Microsoft Copilot) can quickly become outdated as others arrive. This temporal limitation is an inherent characteristic of the research on emerging technologies. The hybrid inductive-deductive analytical approach means that the findings are partially shaped by the structure of the interview guide. The five thematic domains (Section 3.3) were predetermined, while usage examples within those domains emerged inductively. Alternative interview designs (for example, fully open-ended narrative interviews) might have surfaced different themes.

The use of GenAI tools (ChatGPT, Claude) to help in transcript coding and categorisation (forming tables) represents both innovation and potential limitation. Although all AI-generated codes were manually verified and human in a loop modification required, the initial AI structure may have influenced the final coding schemes in subtle ways. This

Table 7. Recommendations for consulting project managers and their employers.

Challenge	Consulting project managers	Employers and client organisations
Organisational constraints and fragmented tool access	Maintain familiarity with multiple approved GenAI tools to remain productive across diverse client environments. Document which tools are permitted at each client engagement as part of onboarding.	Establish clear, written GenAI usage policies and approved tool lists at project start. Where possible, extend enterprise licences to external consultants to reduce fragmentation and enable consistent workflows.
NDA and confidentiality restrictions	Develop personal guidelines for classifying information before using GenAI, treating it as a public channel unless a private and confidential solution is confirmed. Use GenAI for structural, non-sensitive tasks such as templates, summaries of public information, and communication drafts.	Invest in private and confidential GenAI environments that allow consultants to work with project-specific data without breaching confidentiality agreements. Communicate data classification rules explicitly and early.
Inconsistent output quality	Use human-in-the-loop review and treat GenAI output as a first draft requiring critical evaluation rather than a final product. Build prompt refinement skills to improve output consistency over time.	Provide training on effective prompting and output evaluation. Include GenAI output quality as a topic in project quality assurance frameworks, rather than leaving verification entirely to individual discretion.
Limited understanding of organisational context	Compensate for GenAI's limited contextual awareness by supplying structured background information in prompts, such as project scope, stakeholder roles, organisational terminology, and relevant instructions. Maintain human ownership of context-dependent decisions and stakeholder communications.	Create reusable, organisation-specific prompt templates and context documents that consultants can use when engaging GenAI tools within a given client environment, reducing the burden of reinventing contextual groundwork at each new engagement.
Uneven and early-stage adoption	Proactively develop GenAI literacy beyond a single tool. Share effective use cases with colleagues to accelerate collective learning. Approach GenAI experimentation systematically by tracking which tasks benefit most from assistance.	Foster structured knowledge-sharing communities, for example internal practice groups or retrospectives, where project managers can exchange GenAI experiences. Recognise and reward experimentation to accelerate adoption beyond the current fragmented baseline.

transparency about AI-assisted analysis is methodologically important given the study's focus on GenAI adoption.

All interviews were conducted in Finnish and the transcripts were translated into English. Despite careful attention to preserving meaning, translation inevitably involves interpretation. Idiomatic expressions, cultural references, and nuanced meanings may not translate perfectly (for example, using spoken language). The interview data are based on participants' self-reported practices and recollections, which may differ from actual usage due to the following:

– memorable or recent GenAI interactions may be over-represented relative to routine usage,
– participants may over-report experimentation with innovative tools or under-report basic usage and
– unconscious habits or random usage may not be fully reported.

Despite these limitations, the study makes valuable contributions by providing systematic empirical documentation of GenAI adoption usage examples among experienced IT project management professionals during the year 2025. The qualitative descriptive approach [6, 7] offers accessible and practically orientated findings that can inform both practitioners who experiment with GenAI tools and researchers who design future studies. The documented diversity of GenAI tools, usage practices, adoption drivers, and future visions provides a foundation for understanding this emerging practice area.

6.4. Future research

This study demonstrates interest in AI assistants or agents, which opens compelling research opportunities to explore which aspects of IT project management work can be automated through cooperative AI-human collaboration. The interview data indicate areas that support further investigation in AI-assisted project management. As project management as a term is quite abstract, there are several possibilities to study. The scope and schedule of any project play a vital role, which opens up interesting research possibilities.

- Agent-assisted scope creep detection, where one can evaluate how effectively an autonomous AI agent can detect and flag scope creep in IT projects compared to PM-only monitoring, under varying project complexity conditions.
- Under what conditions does deploying an AI scheduling agent reduce project schedule variance and when might it introduce new sources of uncertainty.
- Examine human–AI collaboration dynamics to form a framework for future IT project management.

These research directions are essential for understanding the evolving nature of IT project management in organisations that are using GenAI or are beginning to use it to assist with project management tasks.

CRediT authorship contribution statement

Kari Sainio: Data curation, methodology, investigation, writing – original draft.
Petri Kettunen: Review, supervision.
Pekka Abrahamsson: Supervision.

Declaration of competing interest

The first author declares that he has no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Declaration of AI assistance in the writing process

For textual data analytics, ChatGPT by OpenAI and Claude by Anthropic have been used to process anonymised interview transcription data for coding and categorising purposes. During the preparation of this work, the first author used a generative AI tool called Writefull to improve the readability and English language. After using this tool, the first author reviewed and edited the content as needed and assumes full responsibility for the content of the publication.

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Appendix A. Interview guide

The interview was conducted in Finnish and was translated by the first author. Semi-structured interview questions were targeted at IT project managers who worked on several and different IT related projects within several client organisations. The recruitment process inherently favoured participants who had used different project management tools, either GenAI-driven or traditional.

Topics and guiding questions:

1. Work experience in project management.
   - *"Could you generally tell me what kind of experience you have in project management?"*
   - *"Can you tell us a little more about the history, more precisely what kinds of projects there have been?"*
2. Challenges in project or programme management.
   - *"What do you think have been the biggest challenges when working as project or programme management?"*
3. Non-AI tools used in project work.
   - *"What kind of tools have you used in this kind of work?"*
   - *"Have you been able to choose the tools yourself, or has the organisation required certain tools?"*
4. Use of generative artificial intelligence at work.
   - *"How have you used ChatGPT-type or similar generative AI tools in your work, and for what purposes?"*
   - *"What kind of things do you ask from artificial intelligence, and where do you seek help from it?"*
5. Future envisions for AI.

   - *"What would you like AI to do in the future to make work easier?"*
6. Autonomous AI agents.
   - *"Have you come across autonomous AI agents, and do you know what these are?"*
7. AI's influence on future project manager's job role.
   - *"How do you see artificial intelligence possibly changing your job description in the future?"*
8. Threats or possibilities of AI use.
   - *"Do you see any threats or possibilities in the use of artificial intelligence now or in the future?"*
9. The final open question.
   - *"Do you have anything else that you would like to add or ask for this interview?"*

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