PM Fest 25

Building trust in the context of GenAI adoption in projects

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Overview

1. Introduction & University Context
2. AI Fundamentals
3. Thesis Context & Motivation
4. Research Gap & Purpose of the Study
5. Research Questions & Conceptual Framing
6. Methodology & Case Study Design
7. Findings & Thematic Insights
8. Discussion & Implications
9. Limitations & Future Research

Alma Mater ECM

Located in Maribor, Slovenia (Slovenska ulica 17, 2000 Maribor)

Offers 27 study programmes across three faculties, including bachelor's, master's, and doctoral levels

Accredited by the National Agency of the Republic of Slovenia for Quality in Higher Education (NAKVIS);

holds international recognitions (e.g., ECBE, ACBSP) and operates under ISO 9001:2015 standards

Emphasis on high employability of graduates, flexible study paths, innovative teaching and strong international cooperation (Erasmus+, global partners)

Research-oriented: multiple research centres, including a Research Centre for Project Management

Alma Mater ECM

Doctor of Science in Project Management (180 ECTS / 6 semesters)

Duration: 3 years (part-time), hybrid delivery (online + on-site in Austria, Germany, Slovenia, Croatia).

Start: October. Language of instruction: English.

Courses (Year 1):

Research Design & Methodology

Quantitative & Qualitative Methods in Project Management

Project, Program & Portfolio Management

Electives include topics like:

People in Project-oriented Organisations / HRM in Projects

Competence Development in PPPM

Mega-Projects and Complex Project Management

IT in Project Management; Risk, Change & Constraint Management

Faculty & Supervisors: An international team of professors from Austria, Italy, USA, Germany, Slovenia etc.

Alma Mater ECM

Research Focus & Career Outcomes

Focus areas:

Project, Programme & Portfolio Management (PPPM) and PMO management

Emerging trends: AI in PM, digital transformation, mega-projects, and sustainability in project management

Research phase (Years 2-3):

Thesis proposal → research, case study, publishing in journals/conferences → defence.

Career outcomes: Graduates can take roles such as senior project/programme directors, PMO leaders, consultants, and academics. Working globally in private, public or NGO sectors.

Unique advantages:

Strong industry-academic links (e.g., partnership with Association of International Project Management Officers – AIPMO), enabling rapid translation of research into practice.

Flexible study mode designed for working professionals.

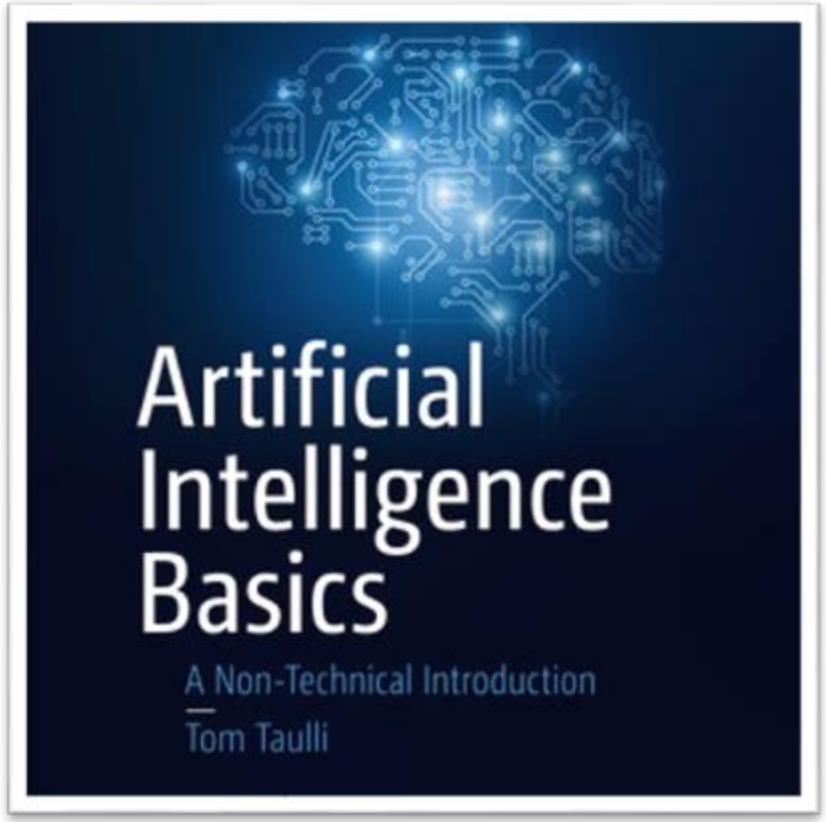
General points on AI

Artificial Intelligence (AI) refers to computer systems designed to perform tasks that usually require human intelligence.

Typical capabilities: recognising patterns, analysing data, understanding language, making recommendations, supporting decisions.

AI in practice: automated scheduling, risk prediction, document analysis, forecasting, data-driven decision support.

AI does not “think” like humans; it learns from data and applies patterns to new situations.



General points on AI

Other Types of AI Systems

1. Predictive AI

Uses historical data to forecast outcomes.
Examples include risk prediction, schedule forecasting, and cost estimation.

2. Classification & Recognition AI

Identifies patterns or categories.
Examples include document classification, anomaly detection, and image recognition.

3. Recommendation Systems

Suggests actions or options based on past behaviour or data patterns.
Examples: decision-support suggestions, resource allocation hints.

4. Automation & Expert Systems

Rule-based or semi-intelligent systems that automate structured tasks.
Examples include workflow automation and rule-driven PMO reporting.

General points on AI

What is Generative AI (GenAI)?

A class of AI that creates new content: text, images, code, reports, plans or simulations. Works by learning statistical patterns from large datasets and generating outputs that follow similar patterns.

Examples relevant to project management: Drafting project charters, reports and emails. Analysing stakeholder input and summarising requirements. Identifying risks, producing alternative schedules, and scenario modelling. Supporting PMO documentation, lessons learned and knowledge capture.

GenAI acts as a "co-pilot" for knowledge work, accelerating analysis and improving decision preparation.

Rank	AI Tool	Monthly Active Users (Approximate)	Notes/Use Case
1	ChatGPT (OpenAI)	2.8 billion	Conversational AI/chatbot
2	Google AI Overviews	2 billion	Google search AI features
3	Meta AI	1 billion	Multi-platform LLM/chatbot
4	Google Gemini	450 million	Large language model/tools
5	Canva	220 million	AI-powered design/image creation
6	DeepSeek	96–268 million	Search/model assistant
7	QuillBot	50 million	AI paraphrasing/writing tool
8	Microsoft Copilot	12–30 million	Office/Windows AI assistant
9	Perplexity	22–133 million	AI-powered search/QA
10	Claude (Anthropic)	20 million	Conversational AI

General points on AI

LRM vs. LLM: Connection and Differences

Large Language Models (LLMs)

Trained on massive text datasets.
Specialise in **pattern recognition**: predicting the next word, summarising, rewriting, and generating text.
Strength: fluency, knowledge recall, and content generation.
Limitation: can produce confident errors (hallucinations) because they rely on statistical patterns, not reasoning.

Large Reasoning Models (LRMs)

Newer models are designed to perform **logical reasoning**, problem-solving and multi-step decision processes.
Use structured reasoning chains rather than pure pattern prediction.
Strength: improved accuracy, consistency, and transparency in step-by-step logic.
Goal: reduce hallucinations and support more reliable decision-making.

Connection

LRMs evolve from LLMs; they build on the same foundation (neural networks and large datasets).
LRMs add **reasoning mechanisms** that LLMs lack.

Key Difference

LLMs generate fluent answers.

LRMs generate *reasoned* answers, making them more suitable for tasks that require logic, justification, and traceability.

PhD Thesis

Presented research as part of broader thesis

Title: *How Generative AI Adoption Reshapes Project Management*
Research focus: Project management transformation through Generative AI (GenAI)
Main question:

How does GenAI adoption in projects reshape project management?
Sub-questions:

How does GenAI contribute to developing *Socio-Technical Systems (STS)* theory in project organisations?

How can GenAI adoption be explained using *Technology Acceptance Models (TAMs)* and *Technology Readiness (TR)*?

How does GenAI influence *communication and trust-building* in projects?

What are the *role and competence* implications of GenAI adoption?

PhD thesis

Published papers

Year / Journal	Focus	Main Findings	Link to Thesis
Amfiteatru Economic (2024)	AI adoption and upskilling/reskilling strategies	AI reshapes skill requirements; defined "levels of upskilling importance."	Demonstrates how GenAI changes human–technical balance (STS foundation).
Informatica Economica (2024)	Organising projects for responsible GenAI use	Compared traditional vs GenAI-driven PM roles; proposed role transition and competence model.	Shows how project roles are reshaped by GenAI tools.
Issues in Information Systems (2024)	**Building trust through responsible GenAI usage**	**Case study (Calor Gas Ireland); trust affected by policy, ethics, competence.**	**Addresses communication and trust question.**
*AI_PM Adoption Study (2025)	Extended TAM model (UK & Ireland)	PU → Intention → Use (R^2 = 0.72); TR-motivators strong; social influence weak.	Provides empirical explanation of adoption using TAM + TR.
*under review			

PhD thesis

Status and completing the thesis

AI adoption transforms work and skills → new competence models and upskilling priorities (Amfiteatru Economic).

GenAI reshapes project roles and structures → emergence of AI-enabled roles and ethical frameworks (Informatica Economica).

Trust and communication evolve → responsible GenAI use builds transparency and confidence in teams (Issues in Information Systems).

Adoption is driven by usefulness and readiness → empirical TAM-based evidence from UK & Ireland confirms how perceptions and motivation predict actual use (AI PM Adoption Study).

How Grounded Research Connects It All

Uses **data-driven coding** across studies and new interviews to reveal core patterns behind GenAI adoption.

Integrates **technical, social, and behavioural dimensions** into a single explanatory theory of how GenAI *reshapes project management*.

Produces a grounded model linking **TAM factors**, **STS alignment**, and **emergent competencies**—showing the shift from traditional control-based management to adaptive, AI-augmented leadership.

Purpose of the Study

- **Objective**: To investigate how the responsible usage of Generative Artificial Intelligence (GenAI) influences trust within project teams.
- **Key Focus**:
- Understanding the factors that affect trust when using GenAI in project management.
- Identifying strategies to maintain or enhance trust in project teams through responsible GenAI use.

Research Gap: Trust in How GenAI Is Used in Project Teams

- Trust has been widely studied in project management and in AI, but rarely at the intersection of GenAI usage inside project teams.
- Existing AI trust research primarily focuses on trust in system performance, rather than trust in colleagues' use of GenAI.
- There is limited empirical evidence from real organisations on how responsible GenAI practices can build or erode trust in projects.
-This case study addresses that gap in a project-oriented energy company.

Research Questions

RQ1: How does the use of GenAI tools in project management generate trust issues in project teams?

RQ2: What are the main perceptions that affect trust among project team members when GenAI is used?

RQ3: What strategies and actions are most effective for ensuring responsible GenAI tool usage in project management?

Conceptual Framing: Two Layers of Trust with GenAI

Trust in GenAI tools: confidence in reliability, safety, data protection and quality of outputs.
Trust in GenAI usage: confidence that team members are using these tools responsibly, transparently and competently.
The study focuses on the second layer – trust in how people use GenAI in projects, not on pure system trust.
Trust is treated as dynamic: it can be built (e.g. transparent use, careful checking) or eroded (e.g. opaque use, lack of oversight).
The social aspects of socio-technical systems are foregrounded; technical properties are treated as a context.

Methodology of the Research

- **Research Design:**
Exploratory case study within an Irish energy company.
- **Participants:**
30 employees, including project managers, team members, and functional managers.
- **Data Collection:**
Open-ended questionnaires were distributed in March 2024.
12 valid responses were analysed.
- **Analysis Method:**
Thematic analysis to identify key themes and patterns related to trust and GenAI usage.

Table 2: The respondents' socio-demographic profile

Respondent code	**Gender** (M-male, F-female)	**Age group** (G1: 21-30, G2: 31-40, G3: 41-50, G4: 51-60)	**Activity area** (BI-Business improvement, IT, O-Operations, S-Sales)	**Job title** (Pm-project manager, Fm-functional manager, Ptm-project team member)
R1	M	G2	BI	Pm
R2	M	G2	IT	Pm
R3	M	G3	IT	Pm
R4	F	G3	O	Fm (with PM experience)
R5	F	G3	S	Fm (with limited PM experience)
R6	M	G4	O	Fm (with limited PM experience)
R7	F	G3	BI	Ptm
R8	M	G1	IT	Ptm
R9	M	G2	IT	Ptm
R10	M	G3	IT	Ptm
R11	F	G3	IT	Ptm
R12	M	G3	IT	Ptm

Case Study Strategy and Rationale

Design:
Single-case, exploratory case study in an Irish energy company using GenAI in project work.
Unit of analysis: Project work and trust relationships within project teams where GenAI tools are used.

Rationale for single case:
The organisation is project-based and actively discussing the use of GenAI and internal policies.
Provides a rich, real-world context to explore how responsible GenAI usage affects trust.

Orientation:
Analytic generalisation (insights and patterns) rather than statistical generalisation to all organisations.

Methodological grounding:
Follows qualitative case study guidance (e.g. Yin, Creswell) for context-rich, theory-informed exploration.

Questionnaire Design and Data Validity

Instrument:

- Open-ended questionnaire with 9 core questions plus socio-demographic items (age group, activity area, gender, role).

Alignment with Research Questions:

- Q1: Contextual – perceived extent of GenAI usage in the organisation.
- Q2–Q3: Impact of GenAI usage on trust and competencies in project teams (RQ1).
- Q4–Q7: Perceptions of quality, reliability and confidence in work when GenAI is used (RQ2).
- Q8–Q9: Recommended strategies and policies for preventing trust erosion and building trust (RQ3).

Administration and Anonymity:

- Online distribution to 30 employees in March 2024 (project managers, team members, functional managers using or expected to use GenAI tools).
- Responses anonymised to encourage open and unrestricted opinions on trust and GenAI usage.

Validation and Data Quality:

- 12 complete questionnaires retained after checking for consistency and completeness.
- Socio-demographic profiles reviewed to ensure a balanced structure of respondents and avoid obvious structural bias in opinions.

Case Context: Project-Based Energy Company and GenAI Usage

- Organisation: leading LNG distributor in Ireland, approx. 160 employees
- GenAI tools in use: stand-alone tools (e.g. ChatGPT, Gemini) and integrated solutions (e.g. Microsoft Copilot in existing platforms).

- No formal internal policy on GenAI yet, but the need for regulation is actively discussed.

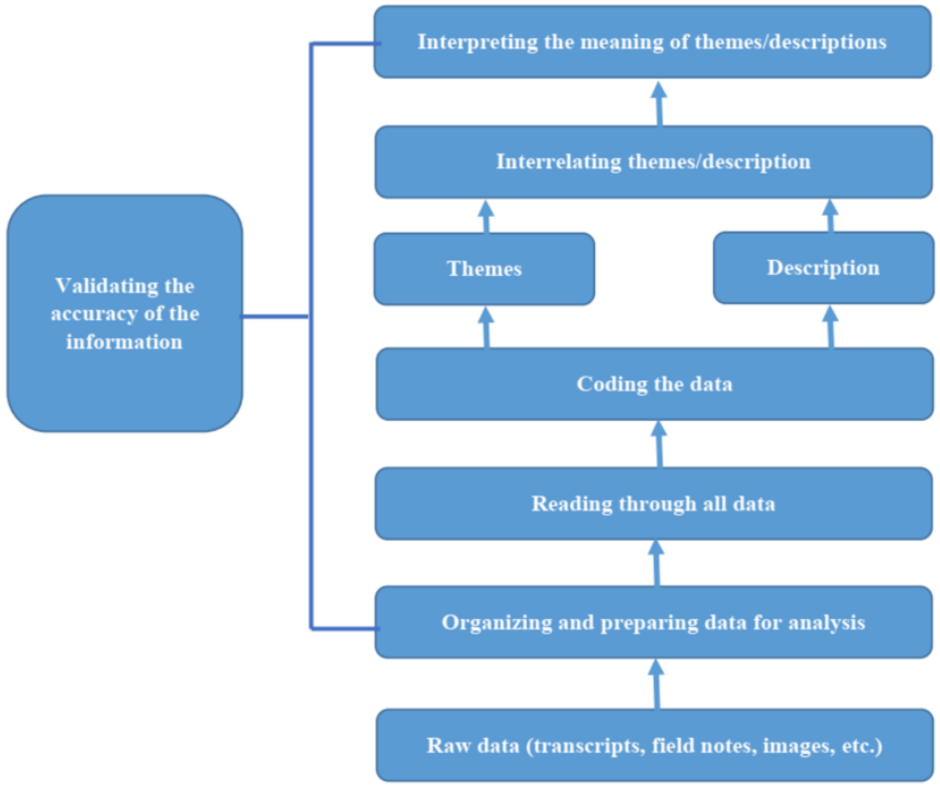
- Perceived extent of GenAI usage varies strongly among staff (from “extensive use” to “<5% of project personnel”), indicating limited visibility and shared understanding.

Respondent Profile: Who Informed the Findings?

- 30 employees invited; 12 complete and valid questionnaire responses analysed.
- Roles: project managers, project team members, and functional managers (some with project management experience).Activity areas: Business Improvement, IT, Operations and Sales – ensuring views from different parts of the organisation.
- Age groups: mainly 31–50, with both male and female respondents.
- Answers were anonymised to encourage open discussion; validation showed adequate completeness and no obvious structural bias.

Thematic Analysis: From Responses to Trust-Related Themes

- Iterative reading of all open-ended responses to gain familiarity with context and meaning.
- Initial coding: Identification of key ideas in each answer related to GenAI usage, trust, perceptions and strategies.
- Categorisation: Grouping similar codes into broader categories (e.g. trust-related issues, negative perceptions, strategies, actions).
- Theme development:
- Factors of trust-related issues.
- Negative perceptions about GenAI usage.
- Strategies for building trust.
- Actions for building trust in projects.
- Output of analysis: The themes summarised later in tables and used to answer RQ1–RQ3.



Creswell Model of Qualitative Data Analysis (Creswell, 2009, p. 181)

Data Analysis

Key Themes Identified:

Factors of Trust-Related Issues:

Inadequate GenAI testing and oversight

Competence deficit in using GenAI

Strategies for Building Trust:

Increasing awareness of GenAI's positive impacts

Establishing formal internal policies

Actions for Building Trust:

Enhancing collaboration and information sharing

Continuous learning and policy alignment

Table 3: Summary of the thematic analysis

Themes	Categories	Codes
Factors of trust-related issues in projects	Inadequate usage of GenAI	testing (no), review/checking (no), clarifications (no), regulations (no), control (reduced)
	Negative impact on project work and project organization	laziness, quality (decrease), workload/effort (increase), info leaking, privacy/confidentiality, communication (reduced), interactions (reduced), confusion
	Competence deficit	de-professionalization, lack of competences
	Negative perceptions	fear (losing job), appreciation (unjustified), credibility (reduced), prestige (reduced), prejudices, suspicious (authorship)
	Reluctance to use GenAI	conservative, learning motivation (not present)
	Similarity with other IT tools	IT tool (common), added value (common)
Strategies for building trust in projects	Increase awareness on the positive impact	performance (increase), workload/effort (decrease), quality (increase)
	Enforcing project control	double checking of the work results
	Making cultural changes	transparency, engagement, expertise (as value)
	Internal policy development	alignment (with European/ international ones), alignment (with tools characteristics), prejudices, focus (transparency, inclusivity, accessibility, ethics, data security, privacy, permissions), periodic review/update
	Responsibilities for the internal policy	security officer (mainly), all government roles
	Developing versus adopting existing regulations	regulations (not needed), regulations (needed)
Actions for building trust in projects	Fostering collaboration and info sharing	workshops, communication (enforced)
	Increase competences through learning	IT-related competences, AI literacy, cognitive skills (critical thinking, strategic thinking, holistic thinking, innovative/creative thinking, Interpretative/ analytical thinking), personal communication (openness, transparent), ethics, honesty, reliability, adaptability, continuous learning motivation, competences (on PM processes)
	Assuring the alignment with internal policy	open discussions (about AI-related issues), forums, trainings

Answered Questions

RQ1: How does the use of GenAI tools in project management generate trust issues in project teams?

RQ2: What are the main perceptions that affect trust among project team members when GenAI is used?

RQ3: What strategies and actions are most effective for ensuring responsible GenAI tool usage in project management?

RQ1: GenAI tools can generate trust issues when used inadequately, mainly if there is a lack of proper testing, review, and control.

RQ2: Negative perceptions such as fear of job loss, reduced credibility, and concerns over the quality of AI-generated outputs affect trust within project teams.

RQ3: Effective strategies include increasing transparency, implementing comprehensive internal policies, and fostering a culture of collaboration and continuous learning.

Discussion and Conclusions

Factors of Trust-Related Issues in Projects

Inadequate Usage of GenAI:
Lack of testing and review processes can lead to errors.
Reduced oversight diminishes trust within the team.
Example Quote: "The person responsible for using the GenAI tools does not check/test any work that has been created through those tools." - Respondent R9

Negative Impact on Project Work:
GenAI usage can confuse task ownership.
Diminished trust in AI-assisted tasks if not carefully managed.
Example Quote: "Trusting AI would depend on the human it uses. If the person is always diligent, I would have more trust..." - Respondent R4

Competence Deficit:
GenAI cannot replace human expertise; competence is essential.
Trust declines when team members need more AI-specific skills.
Example Quote: "If the competencies to assess the AI-generated reports are missing, the trust is diminished." - Respondent R2

Discussion and Conclusions

Strategies for Building Trust in Projects

Increasing Awareness of GenAI's Positive Impact:
Emphasise the benefits of GenAI to enhance work quality and efficiency.
Promote GenAI literacy among all team members.
Example Quote: "GenAI tools have the potential to significantly improve the quality and efficiency of our work, assuming they are used correctly." - Respondent R11

Enforcing Project Control:
Ensure transparency about GenAI usage to maintain trust.
Implement clear policies for reviewing AI-generated content.
Example Quote: "Clarity is key and not to be over-reliant on virtual assistants to complete reports." - Respondent R6

Making Cultural Changes:
Foster a culture of open communication and collaboration.
Encourage continuous learning and adaptation to new technologies.
Example Quote: "Embracing new technologies demonstrates willingness to learn and adapt and should be encouraged." - Respondent R2

Discussion and Conclusions

Actions for Building Trust in Projects

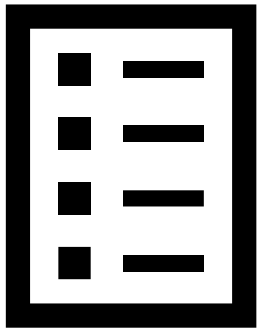
Fostering Collaboration and Information Sharing:
Develop guidelines for identifying AI-generated content.
Increase transparency about AI tools used within the team.
Example Quote: "Project team members should establish guidelines for flagging AI-generated content and ensure everyone understands the tool's limitations." - Respondent R2

Increasing Competence Through Learning:
Focus on developing AI literacy and critical thinking skills.
Provide training on how to use GenAI tools effectively.
Example Quote: "Strategic thinking and the ability to make sound decisions based on AI-generated insights will become even more crucial." - Respondent R2

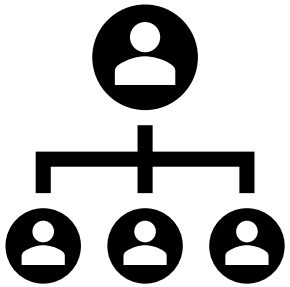
Aligning with Internal Policies:
Ensure that all team members follow internal policies on GenAI usage.
Regularly update policies to reflect the latest best practices.
Example Quote: "Open communication, focus on expertise, transparency, and collaboration should be proactively used to prevent trust erosion." - Respondent R2

Practical Implications

For Project Managers:
Develop and enforce internal policies for responsible GenAI usage.
Prioritise training and competency-building initiatives.
Promote open communication to address negative perceptions and maintain trust.



For Organizations:
Align internal policies with broader regulations.
Regularly update guidelines to keep pace with advancements in AI technology.
Ensure transparency in the application of GenAI tools across projects.



Limitations and Directions for Future Research

Limitations

- Single-case, exploratory design in one Irish energy company; 12 respondents – findings are analytic, not statistical generalisations.
- Focus on the social dimension of trust; technical characteristics of GenAI are treated mainly as background.

Future Research

- Repeat the case study in the same company in several years to track how GenAI usage and trust perceptions evolve.
- Study how GenAI reshapes project organisation: roles, information flows and stakeholder engagement.
- Explore the need for new or adapted project management standards in response to AI/GenAI adoption.

Thank You

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