

# Introduction

- Multi-agent system architecture
- Autonomous agents collaboration
- Automates presentation creation
- Modular and scalable workflow
- Integrates advanced technologies

# Agenda

- Architecture Overview
- Key Components: Orchestrator
- Evaluator, Prompt Chaining
- Use Cases
- Benefits of n8n
- System Limitations
- Conclusion

# Architecture Overview

- Modular multi-agent design
- Parallel processing capabilities
- Automated task orchestration
- Scalable and adaptive structure
- Integration with AI and LLMs

# Orchestrator Component

- Central task manager
- Breaks down and delegates tasks
- Coordinates agent interactions
- Synthesizes agent outputs
- Ensures flexible task handling

# Evaluator Component

- Assesses clarity of content
- Evaluates logical structure
- Checks relevance to the topic
- Provides feedback for refinement
- Enhances overall presentation quality

# Prompt Chaining

- Decomposes tasks into steps
- Supports process alignment
- Facilitates structured content flow
- Ensures iterative refinement
- Enhances systematic generation

# Use Cases

- Marketing: Multistage copy generation
- Software: Orchestrates coding tasks
- Education: Evaluates lecture materials
- Translation: Refines cultural nuances
- Customer Support: Manages complex queries

# Additional Applications

- Document Management: Structured creation
- AI Systems: Manages ML pipelines
- Content Platforms: Moderation and feedback
- Business: Reviews presentation alignment
- Publication: Ensures scientific standard compliance



# Benefits of Using n8n

- Low-code rapid prototyping
- Easy API and tool integration
- Manages workflow execution
- Supports persistence and resumption
- Event-based triggers enhance automation

# System Limitations

- Lack of real autonomy
- No shared memory model
- Limited context window
- High compute demands
- Factual accuracy issues

# Further Limitations

- Base64 image errors
- No long-term memory
- Poor collaboration tools
- Complex maintenance
- Manual workflow adjustments

# Conclusion

- Recap system strengths
- Highlight integration benefits
- Address current challenges
- Envision future improvements
- Foster continued collaboration