

- Was proposed to transform static L.M. into dynamic goal-driven entities capable of addressing more complex problems than typical NLP tasks

Intelligent Agent (AI Agent)

- An entity that perceives its environment, takes actions autonomously to achieve goals
- May improve knowledge through machine learning or by acquiring knowledge

Why

- Faster
- Increased efficiency through automated tasks
- Can process large amounts of data quickly and respond promptly
- Ideal for fast decision making

Agent ≠ Application

- An agent acts on behalf of user with a degree of autonomy
 - May be seen as the next generation of due to
- An application performs a specific task or set of tasks for a user

Example: A Travel Agent

1. LLM
 - Task: book a flight & find hotel
 - Details: departure/arrival
2. Planning (Goal Decomposition + Strategy)
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3. Memory (Tracking state and context)
 - Preferred airlines or hotels
4. Tools (Action Execution in the Real World)
 - Various APIs

LangChain

- Most popular modular agent construction
- Built around 3 core components

AutoGen

- Framework for creating multi-agent AI applications that can act autonomously