A Prompt Is A Request. A Loop Is A System.

Better prompts are table stakes now. The real productivity gains come from structured, self-improving AI loops.

SWIPE →

The architecture, layer by layer

01 Action chaining

02 Recursive refinement

03 Memory and state accumulation

Typed

Every handoff between steps is typed, not freeform

Decompose the task into discrete sub-tasks. Each call has a defined input schema, a defined output schema, and a single responsibility. Failure is localised, not catastrophic.

Critic

A second call scores and revises the first one's output

If the score falls below threshold, the revised output loops back into the generator and runs again. This is automated quality assurance at the token level — no human in the loop until it meets spec.

Four things to define before you loop

01 Maximum iteration bounds

02 What counts as valid convergence

03 When the loop halts and escalates to a human

04 How outputs are logged, versioned, traceable

Without these, a recursive loop is not a productivity multiplier. It is an autonomous process operating without accountability.

Terence Kok
Enterprise AI Strategist

Prompt-response versus closed loop

PROMPT-RESPONSE	CLOSED LOOP
One call, one output	Output evaluated against criteria
One shot at getting it right	Fed back as richer input
No memory between calls	Working memory compounds

You don’t need the full architecture. Start with two calls.

Chain a generator and a critic. Instrument the output. Measure the quality delta. That alone outperforms any prompt-optimisation effort by a significant margin. Add state and iteration bounds from there.

Check it against five criteria first

Traceability, reversibility, acceptance criteria, compliance mapping, escalation: terencekok.com/blog/beyond-prompt-ai-loop-actually-moving-needle

The foundation isn’t the agent. It’s the loop.

This is the layer beneath agentic AI that most implementation programmes skip — and the reason many pilots never scale.

Terence Kok · Enterprise AI Strategist

SAVE · COMMENT · FOLLOW