

PRODUCT INTRODUCTION · 2026

Hancom Agentic OS

Beyond AI — A World Where Work Moves Itself

Korea's First General-Purpose Agentic OS Platform

HANCOM, INC.

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I. MARKET BACKGROUND & PARADIGM

Beyond the AI Era — The AX Era Has Arrived

What's happening on the ground at enterprises today is not simple AI adoption. The era of AI that plans, judges, and executes on its own is now fully underway.

\$24.5B

Global Agentic AI market size (2030)

≈ KRW 35T · GVR, 2024

46.2%

CAGR (Compound Annual Growth Rate)

GVR, 2024

2,000%

Max productivity gain vs. traditional AI

Mordor Intelligence

WHY NOW — THREE SHIFTS

LLM → Agent Evolution

The paradigm is shifting from 'question-and-answer' models like ChatGPT to autonomous agents that take a goal and plan, execute, and report on their own.

Multi-Agent Collaboration Goes Mainstream

Rather than a single AI, multiple specialized agents now collaborate to handle complex enterprise workflows. MCP, A2A, and ACP standards are spreading rapidly.

Pressure on Korean Enterprises to Adopt AX

Demand for workflow automation and workforce efficiency is surging across public sector, finance, manufacturing, and retail — all requiring Korea-specific security and governance compliance.

→ **What's needed is not individual AI tools, but a platform that orchestrates an enterprise's entire workflow.**

I. MARKET BACKGROUND & PARADIGM

From AI to AX — A Paradigm Shift

AI was a 'tool.' AX is a 'colleague.' Now AI agents take on the work directly and are accountable through completion.

Category	Traditional AI (Copilot)	Agentic AI (AX)
Role	Answers questions, assists with drafts	Takes a goal and plans, executes, completes autonomously
Engagement	Requires human instruction/check at every step	Human sets the goal only; receives completion report
Collaboration	Single AI, 1:1 conversation	Multiple specialized agents collaborate (multi-agent)
Scope of Work	Simple task support (search, summarize, translate)	End-to-end automation of complex workflows
System Integration	Limited (within a single app)	Full integration across ERP, CRM, MES, internal systems
Judgment	None (human judges)	Autonomous, data-driven judgment + human escalation on exceptions

Hancom's Definition — What is AX?

AX (Agentic Transformation) = The next stage of digital transformation, in which autonomous AI agents are deployed into an enterprise's core workflows to judge, execute, and report 24/7 — without human presence.

"ChatGPT answers questions. Hancom Agentic OS completes the work."

II. PRODUCT OVERVIEW & ARCHITECTURE

What Is Hancom Agentic OS?

Korea's first general-purpose Agentic operating system, connecting enterprise work systems with AI agents.

FOUR CORE VALUES

Understands Data

Uses 36 years of document technology to structure unstructured data (PDF, HWP, images, voice) into AI-readable form → ODL (Open Data Loader) technology

Controls Safely

Full control of data sovereignty, access rights, and audit logs — even within national/closed networks → Sovereignty Layer

Operates Systems

AI directly operates and executes existing infrastructure: ERP, MES, CRM, internal messengers → Execution Engine

Agents Collaborate

Supports the latest MCP, A2A, ACP standards, letting specialized agents split roles and process complex work in parallel → Orchestration

WHY HANCOM CAN DO IT BETTER

Differentiator	Hancom Agentic OS	Global Big Tech AI
Understanding the Korean Environment	36 years of accumulated experience with HWP, Korean official documents, domestic ERP — the only platform that truly understands Korean enterprise operations.	Weak Korean/HWP support; no experience integrating with domestic public/administrative systems.
On-Prem / Closed Networks	Extensive track record building in closed national networks; security certifications; delivery to public, finance, and defense sectors.	Cloud-centric; closed-network deployment impossible or extremely limited.
On-Site Support	Domestic sales, technical, and CS teams; hands-on support from consulting through deployment and operations, in Korean.	Remote-support-centric 24/7; difficult on-site response due to time-zone and language barriers.
Fast PoC & Decisions	HQ-based in Korea enables fast communication; PoC can start within 4–6 weeks.	Global processes slow decision-making; complex contracting and support structure.

Hancom is the AX partner that understands Korean enterprise operations best. **If global platforms say 'we'll install it for you,' Hancom says 'we'll build it together, on the ground.'**

II. PRODUCT OVERVIEW & ARCHITECTURE

6-Layer Architecture

Hancom Agentic OS is a complete platform composed of 6 layers, from data ingestion to sovereignty control. Hancom holds core competitive strength in the three layers — L1, L4, L6 — where competitors are weakest.

L6	Sovereignty ★	Data sovereignty, governance & security control (top-level principle)	National-network verified; public/finance references
L5	Orchestration	Coordinating collaboration across multiple agents (MCP / A2A / ACP)	Multi-agent orchestration
L4	Execution ★	Integrates with internal/external tools & systems; executes real work	ERP / MES / official-document system connectors
L3	Reasoning Engine	LLM inference & planning	Multi-LLM support: EXAONE, Gemma, Qwen
L2	Context	Memory, RAG, and ontology-based context management	Domain-specific knowledge graphs
L1	Data Foundation ★	Structuring and embedding unstructured data	36 years of document tech; ODL core technology

L1 — The Roots (Data Foundation)

36 years of original technology working with unstructured data from Korean enterprises — HWP, PDF, images, voice. The ability to convert it into AI-readable form belongs to Hancom alone.

L4 — Hands & Feet (Execution)

Not just an AI that stops at planning — an execution engine that completes real work: ERP orders, official-document processing, Slack notifications. The core of on-site integration.

L6 — Brain Shield (Sovereignty)

Security controls verified in the strictest environments — public sector, finance, defense. Full audit of where data resides, who accesses it, and what was done. An area Big Tech cannot provide.

III. SERVICE DETAILS & SUPPORT SYSTEM

Service Details: Use Case Proposal / Deployment / Operations Support

Integrated delivery — from industry-optimized AI design, to secure closed-network on-prem deployment, to hands-on support from an expert team.

EXPECTED USE CASES & IMPACT BY INDUSTRY

1	Customer inquiry / complaint response automation	Expected to offset 800+ agent-equivalent workload
2	Contract & legal document review automation	Target: 80%+ reduction in review time
3	Inventory monitoring & logistics optimization	Expected 40–60% improvement in order-processing delay
4	Regulatory / compliance monitoring	Shift to full-scope inspection; raises quality consistency
5	Sales activity logging & CRM automation	Improves productivity and data consistency
6	Financial closing & reconciliation automation	Expected up to 75% reduction in closing cycle time

1 Problem Interview → 2 Use Case Definition → 3 AI-Human Collaboration Design → 4 PoC → 5 Enterprise-wide Rollout

DEPLOYMENT MODEL

Model	On-premise (in-house deployment)
Security	Optimized for closed / air-gapped networks
Est. Timeline	3–6 months (incl. environment optimization)
Security Level	Full isolation from external networks
Infra Control	100% use of customer's internal resources
Upgrades	Periodic on-site/remote technical support & patches
Customization	Full integration with legacy enterprise systems

* Optimized for security-critical organizations requiring data sovereignty: public sector, finance, defense, large manufacturers.

CATALYST Hancom Agent Catalyst: Expert Team Support

A team of 5+ experts resides on-site for 6 weeks to catalyze AI transformation.

PM (1)

Project leadership

Use-case selection & overall schedule management

Consultant (1)

Workflow design

Use-case discovery & process optimization

Developers (3)

Hands-on build

MVP development & performance optimization

IV. INDUSTRY AGENT USE CASES

Manufacturing — Factory Operations Orchestration Agent

Unmanned Night Operations at an Auto Parts Factory

Before: Night anomaly → call staff → on-site check → manual action → hours of production downtime.

After: The agent autonomously completes everything from detection to action and reporting.

Key Metric	Before	After
Operating cost	Baseline	Up to 25% lower
Response time	Several hours	Within minutes
Maintenance	Reactive	Predictive, data-driven

- 1 Detection**
Real-time detection of Line A utilization drop (92% → 78%)
MES real-time monitoring
- 2 Root-Cause Analysis**
PLC sensor + CCTV video analysis infers vibration anomaly in Unit 3
PLC sensors + vision AI
- 3 Risk Assessment**
Calculates 87% failure probability within 1 week; checks ERP inventory
ERP + predictive model
- 4 Alert Dispatch**
Notifies maintenance team; auto-creates Jira work ticket
Slack + Jira MCP
- 5 Load Rebalancing**
Coordinates with production-planning agent to shift volume to Line B
Multi-agent collaboration
- 6 Auto Order**
Requests replacement parts from procurement agent; places order automatically
Supplier API + ERP
- 7 Reporting**
Auto-generates and sends daily report to the plant manager
Reporting agent

25%

Max reduction in operating cost (2025 baseline)

Minutes

Time to act after anomaly detection (was: hours)

Longer Lifespan

Predictive maintenance optimizes equipment upkeep

L1 (ODL): Data structuring L4 (Execution): Real execution L5 (Orchestration): Collaboration L6 (Sovereignty): Data security

IV. INDUSTRY AGENT USE CASES

Finance — Corporate Credit Review Automation Agent

SME Working-Capital Loan Application (KRW 500M)

Before: Reviewer collects documents → manual lookups across institutions → analysis → report writing (days).

After: The agent autonomously processes everything end-to-end, from intake to a completed report.

Key Metric	Before	After
Review time	3–5 business days	Within hours
KYC/AML workload	10–15% of FTEs	1 officer / 20+ agents
Consistency	Varies by reviewer	Policy-based, consistent

1	Document Extraction Auto-extracts business registration no. & financials from application PDF (OCR + NLU)	ODL document recognition
2	Tax Lookup Real-time automatic check of tax-delinquency status via National Tax Service API	Public API integration
3	Credit Analysis Credit-bureau API lookup for credit rating & industry-peer averages	Credit bureau API
4	Transaction Analysis Analyzes recent transactions to identify revenue trend and cash-flow pattern	Core banking integration
5	News/Disclosure Scan Real-time scan for risk issues related to the company and its representative	News agent MCP
6	Limit Calculation Queries internal credit policy LLM; auto-calculates approvable limit	Internal credit policy DB
7	Disposition Auto-approves and drafts agreement (escalates to reviewer if limit exceeded)	Document gen + alerts

200–2,000%

Expected gain in review productivity

Hours, not days

Review time: 3–5 business days → within hours

1 : 20+

One officer can now oversee 20+ agents

L1 (ODL): Financial statement structuring L4 (Execution): API integration L5 (Orchestration): Agent collaboration L6 (Sovereignty): Customer data protection

IV. INDUSTRY AGENT USE CASES

Retail/Commerce — Inventory & Replenishment Scheduling Agent

Unmanned SCM Operations Across Thousands of SKUs

Before: Staff checks inventory daily → manual ordering (repetitive, time-consuming).

After: Agents handle it autonomously overnight & on weekends — freeing staff for strategic merchandising and negotiation.

Key Metric	Before	After
Excess inventory	Baseline	30–40% lower
Order processing	Manual, repetitive	80% faster
SCM delay	Baseline	40–60% improved

1	Smart Inventory Detection Real-time SKU monitoring; auto-flags items below safety stock	ERP/WMS API
2	Demand Forecasting Combines sales history, seasonality, and promo calendar for optimal order quantity	Demand forecasting model
3	Supplier Selection Queries multiple supplier APIs simultaneously to compare lead time, price, MOQ	Multi-supplier API
4	Budget & Approval Review Auto-processes within approval limit; requests MD approval via messenger if exceeded	Approval workflow
5	Autonomous Ordering Auto-generates and sends purchase order via EDI; updates ERP order ledger in real time	EDI + ERP
6	Delivery & Delay Tracking Auto-logs to logistics calendar; triggers alternate-supplier review on delay detection	Logistics calendar
7	Performance Reporting Compiles order status, inventory turnover, and cost savings; auto-sends to staff	Reporting agent

30–40%

Reduction in excess inventory & lost-sale risk

80%

Reduction in order-processing time; near-unmanned ops

40–60%

Reduction in order-processing delays across SCM

L1 (ODL): Unstructured doc recognition L4 (Execution): Real EDI/API ordering L5 (Orchestration): Multi-agent collaboration L6 (Sovereignty): Data security control

IV. INDUSTRY AGENT USE CASES

AICC — AI Contact Center Inquiry Automation Agent

Multichannel Customer Inquiry Automation

Before: Agents manually collect inquiries per channel → 15–30 min avg. to classify & respond → coverage gaps at night/weekends → delays during surges.

After: The agent autonomously handles everything end-to-end, from intake to ticket creation and dashboards.

Key Metric	Before	After
Response time	Avg. 15–30 min/case	Seconds (simple cases)
Night/weekend	Coverage gaps	24/7 automated
Consistency	Varies by agent	Policy-based

- 1 Intake & Channel Unification**
 Unifies email, phone (STT), chat, web forms into a single pipeline; speaker separation & noise removal
 MCP Mail · STT · Chat
- 2 Intent Classification & Extraction**
 LLM auto-classifies intent (complaint/inquiry/feedback); parses key fields into structured form
 NLU · classification agent
- 3 Auto-Reply vs. Escalation**
 Checks FAQ/answer DB; auto-generates replies for simple cases, routes complex cases to staff
 RAG · FAQ DB
- 4 Ticket Creation & Tool Integration**
 Auto-creates Jira/ServiceNow tickets, assigns owner; generates request form and reply simultaneously
 Jira MCP · PM integration
- 5 Cumulative Analytics Dashboard**
 Aggregates data by type/frequency/client/period; updates executive insight dashboard in real time
 Analytics agent · auto-viz
- 6 Quality Monitoring & Prevention**
 Detects recurring complaint patterns and proposes FAQ updates; alerts on quality degradation
 QA agent · auto FAQ update
- 7 Reporting & Executive Sharing**
 Auto-generates weekly/monthly CS reports; escalates to leadership on inquiry surges
 Document gen · alerts

853

Agent-equivalent workload offset (global public-sector trial)

30×

Maintains quality even under 30x inquiry-volume surges

75%↓ / 89%

Response drafting time cut; 89% user satisfaction

L1 Data: multichannel/STT L2 NLU: intent class. L3 RAG: FAQ retrieval L4 Execution: ticket/email L5 Orchestration: agents L6 Sovereignty: PII protection

HANCOM AGENTIC OS

Beyond AI — Build the Agent-Driven Future of Business with Hancom.

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