

The logo for akquinet, featuring the word "akquinet" in a lowercase, sans-serif font, followed by a stylized white graphic element consisting of several horizontal lines of varying lengths that curve upwards and to the right, resembling a crescent moon or a stylized 'Q'.

2026

TECH TRENDS REPORT

AKQUINET CONSULTING

LIST OF ARTICLES

- 01** **BARRIER-FREE APPLICATION DEVELOPMENT: SAP BUILD APPS**
Maciej Ołdakowski
- 02** **AXIOMATIC THEORY OF SELF-AWARENESS: SELF-AWARENESS ENGINEERING**
Krzysztof Banaszewski
- 03** **AI VOICEBOTS: OPPORTUNITIES AND RISKS AND AKQUINET'S REVOLUTIONARY NEW VOICEBOT**
Marcus Wuest
- 04** **THE CLOUD-INTELLIGENCE ERA**
Andreas Born
- 05** **MIGRATION FROM SAP ECC TO S/4HANA IN 2026**
Anna Konieczna-Garbacz
- 06** **AI REQUIRES COMPETENCE: DATA LITERACY AS A PREREQUISITE FOR MATURE AI ADOPTION**
Rafal Radecki

BARRIER-FREE APPLICATION DEVELOPMENT: SAP BUILD APPS

The time has come for SAP Build Apps—a technology that aligns perfectly with one of the most important digital transformation trends: fast, flexible, and highly tailored development of business applications. Embedded in the SAP Business Technology Platform, it enables the simple and intuitive creation of both mobile and web applications, without compromising on functionality or integration.

In an era where time to market and tool usability are becoming key sources of competitive advantage, SAP Build Apps can act as a catalyst for process modernization in any organization. The year 2026 may be the moment when companies take a decisive step forward—implementing solutions that not only accelerate daily work but also adapt to the real needs of users.

WHAT IS SAP BUILD APPS?

SAP Build Apps is a modern low-code/no-code tool embedded in SAP Business Technology Platform that enables fast and intuitive development of mobile and web applications. Thanks to its drag-and-drop mechanism, building user interfaces becomes a visual and convenient process, while built-in automatic scalability ensures that applications adapt seamlessly—from small industrial terminals to large desktop screens.

Developers can easily add logic to individual components and, when needed, extend application capabilities with custom code to handle more complex business rules. Integration and security are built into the standard—SAP Build Apps works seamlessly with SAP Identity Authentication Service, allowing applications to be connected effortlessly to corporate authentication systems such as Microsoft 365, simplifying access and user management.

Integration with S/4HANA is just as straightforward, thanks to multiple integration options, including OData services configured via appropriate destinations in BTP. Finished applications can be published in SAP Work Zone—a launchpad for mobile and web applications—and integrated with other SAP tools such as SAP Build Code or SAP Business Process Automation.

FORTACO – A STEP INTO THE FUTURE OF RF APPLICATIONS

An excellent example of such an implementation is our recent project for the Fortaco Group. At Fortaco, the decision to implement SAP Build Apps was a direct response to real user challenges. Previously used RF applications based on ITS Mobile technology supported basic scenarios but relied on an outdated and inflexible architecture.

Rigid screen dimension definitions meant that running the same application on devices with different resolutions resulted in scaling issues. Vertical and horizontal scroll bars appeared, and using the applications on smaller screens required additional clicks and scrolling, significantly slowing down work. In an environment where every second counts in production and logistics processes, this was a serious limitation.

The project team set out to create modern tools that would eliminate these constraints. SAP Build Apps running on the BTP platform was chosen for its immediate advantages—automatic UI scalability and rapid screen development from the very beginning. The project was divided into several phases: from analyzing warehouse and production processes, through creating mockups and prototypes, to deployment and testing in real operational conditions.

As a result, a suite of five applications was delivered, supporting key operations: production confirmation, stock transfers between warehouses, material issues to production, goods receipt, and inventory management. Each application was designed to require a minimal number of clicks, with the most frequently used functions available immediately after launch. Integration with SAP IAS was also implemented, enabling employees to log in using the same credentials they use in other corporate systems—eliminating the need to remember additional passwords.

After deployment, warehouse operators and production line workers gained tools that are fast and convenient to use, regardless of the device—whether an industrial scanner or a tablet. The execution time of individual operations was reduced, and workplace ergonomics improved significantly. Importantly, thanks to the low-code nature of SAP Build Apps, introducing changes and new features is much faster and easier than before, allowing organizations to respond to evolving business needs in real time.

“ SAP Build Apps is a technology designed for the needs of modern enterprises. It enables rapid deployments, combines the simplicity of low-code/no-code with the flexibility of custom code, ensures native integration with S/4HANA and the entire SAP ecosystem, and delivers excellent user experiences through automatic scalability. It is a solution that not only accelerates application development but also becomes a true engine of business innovation.

”



MACIEJ OŁDAKOWSKI
Technical Architect
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SELF-AWARENESS ENGINEERING AXIOMATIC THEORY OF SELF-AWARENESS

For years, the question “Can a machine be conscious?” was a philosophical curiosity. Today, in the era of generative models, it has become a real engineering challenge. And when we attempt to rely on existing definitions of consciousness and self-awareness, we quickly discover that they are inconsistent, imprecise, and deeply anthropocentric - rooted in human experience rather than in the properties of systems themselves.

Such approaches fail to answer whether self-awareness could exist in a simple biological organism, a computational model, an autonomous system, or any unknown form of life.

That is why we need an engineering definition - one based not on subjective experience, but on measurable properties.

A definition that answers:

- when a system can be called self-aware,
- how the level of self-awareness can be measured,
- what the minimal conditions for its emergence are.

Surprisingly, no one has done this so far. No one has asked the most fundamental question: what are the absolutely minimal features that any system must possess in order to be considered self-aware?

And this question is becoming increasingly important - especially in the context of autonomous AI and the potential encounter with forms of life that resemble nothing known on Earth. I had been working on AToS earlier, but it was a discussion under a post by Prof. Aleksandra Przegalińska about “AI consciousness” that further confirmed the scale of the problem: we lack a common language.



How would we name the simplest, most fundamental condition of self-awareness? If a system cannot determine its own state, we cannot call it conscious. This is intuitively obvious, and no one has yet provided a convincing counterexample.

Axiom 1: A system must know its own state.

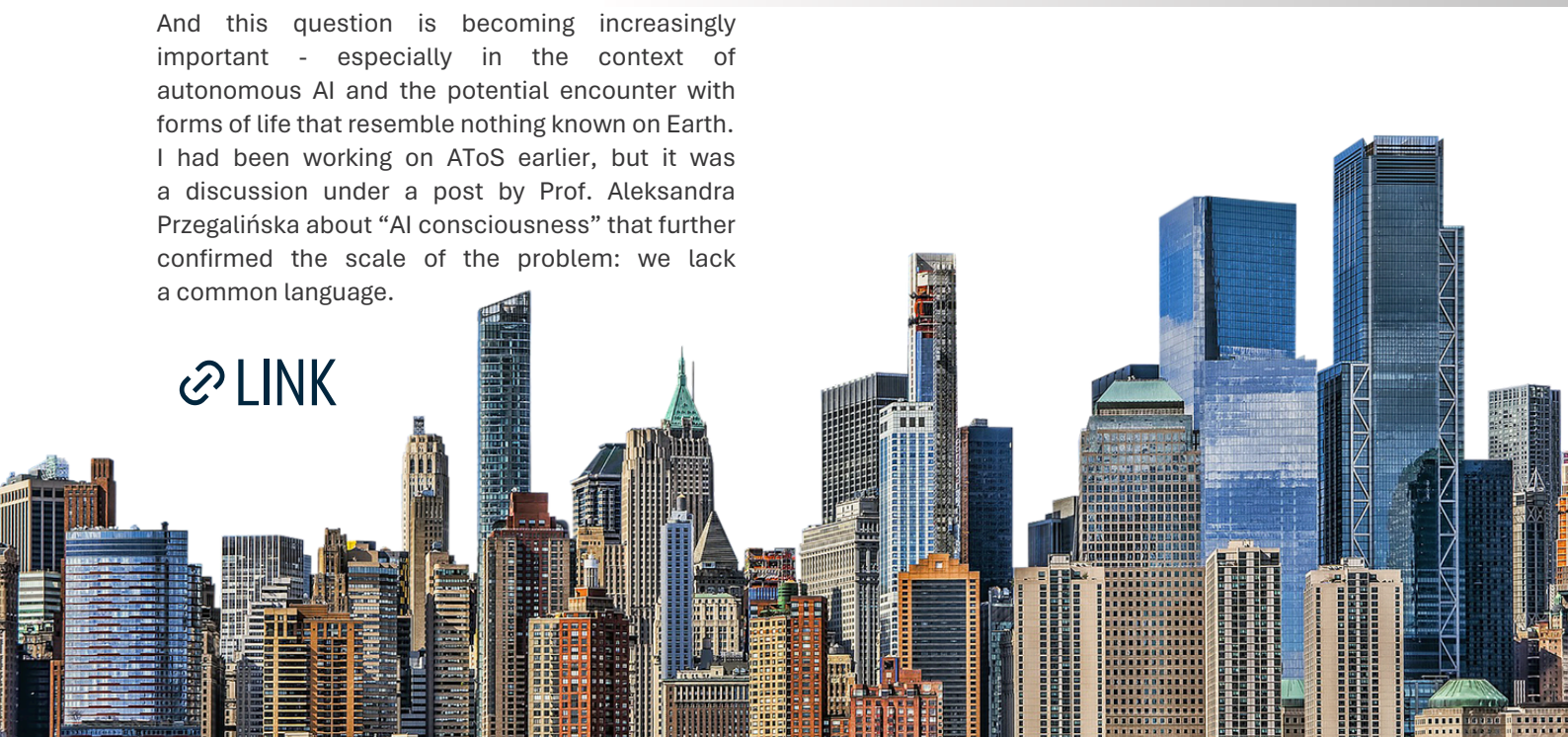
Equally difficult to dispute is the claim that a system does not necessarily need to understand what exactly has changed - but it must be able to distinguish its “state before” from its “state after”.

Axiom 2: A system must be able to detect a change in its own state.

These considerations allow us to formulate a minimal, universal, measurable, logical, and non-anthropocentric:

GENERAL DEFINITION OF SELF-AWARENESS

„Self-awareness is the ability of a system to recognize its own change and to correctly determine whether the cause of that change was triggered by an external stimulus or arose “spontaneously,” solely as a result of its own internal structures and mechanisms.“



How could a system recognize a change in its state if it had no prior notion of what its state is? There must therefore exist at least one component of a Self-Aware System whose state change the system is capable of recognizing. We call this component PAS - **the Potentially Aware Set**.

PAS — POTENTIALLY AWARE SET.

Why „Potentially”?

Because a state in itself is not “aware,” but every element of PAS has the potential to become part of a self-aware process - if its change is recognized and causally linked. Much like in the brain: a neuron may participate in a conscious process, but it does not have to.

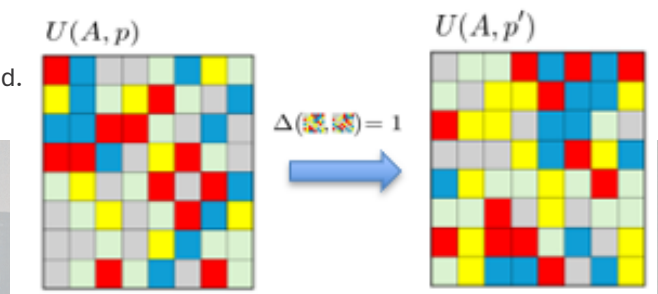
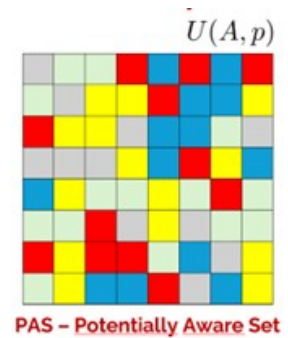
Naturally, there may be many Potentially Aware Sets. In the human brain, where neurons act as PAS elements, their number reaches hundreds of billions. For the sake of the definition, however, the existence of at least one PAS is sufficient.

How does a system distinguish “state now” from “state before”? How does it recognize that a change was significant enough to be noticed?

Without an internal measure capable of telling the system that a given configuration - no longer merely potentially aware - has become self-aware through a change in PAS, the system would remain static. And consciousness is inherently dynamic.

Therefore, there must exist a sensitivity function: $\Delta : \text{PAS} \times \text{PAS} \rightarrow \{0,1\}$, which returns:

- 1 if the system detected a significant change,
- 0 if the system failed to recognize the change, even if it occurred.



Changes in PAS cannot occur without a cause. There are only two possibilities:

1. Something acted on the system from the outside (sound, light, electrical impulse, etc.).
2. Something acted from within the system itself, without involvement of the external world.

An external stimulus, by interacting with the system’s sensors, may change the state of PAS through a state-change function ϕ_{ext} , transforming PAS into PAS'. The sensitivity function Δ recognizes this change, and the system becomes aware.

If, however, a change in PAS occurs without an external stimulus or sensor, it must originate from something internal. Since only system states exist internally, there must be another Potentially Aware Set, which we call StSe - the Stimulus Set.

StSe triggers an internal state-change function ϕ_{int} , which transforms PAS into PAS'. If $\Delta(\text{PAS}, \text{PAS}') = 1$, we can speak of a single act of self-awareness.

Because self-awareness is a dynamic process, ϕ_{int} must itself be initiated by a change in StSe. Otherwise, ϕ_{int} would activate continuously and without cause, producing potentially “manic” system states.

A crucial and elegant property of this mechanism is that the system inherently recognizes whether the change was internally or externally caused, without the need for additional indicators. The distinction is encoded directly in whether ϕ_{int} or ϕ_{ext} was triggered.

We can therefore distinguish three classes of state-change functions:



FUNCTIONS OF INSPIRATION

(Φ_{ext}) :
Triggered by external stimuli acting on the system's sensors; they record the impact of the world on the system in PAS.



FUNCTIONS OF IMAGINATION

(Φ_{int}) :
Triggered by internal Stimulus Sets (StSe); they describe changes originating "from within," without current external stimuli.



FUNCTIONS OF INTUITION

(Φ) :
State-change functions that can operate both as inspiration and imagination. In other words, transformations the system can initiate either due to the world or "by itself," rooted in prior external experience.

FUNDAMENTAL THEOREM OF SELF-AWARENESS

A system is self-aware under the General Definition of Self-Awareness if and only if within its internal structure there exists at least one Stimulus Set StSe that triggers an imagination function ϕ_{int} , causing a change of PAS into PAS' such that the sensitivity function recognizes this change:

$$\Delta(PAS, PAS')=1.$$

	$\Omega :=$ Zbiór wszystkich PAS	System rozpoznaje jego zmianę (zmianę Stanu Układu)	$\Omega := \{U(A,p) \mid A \in \mathcal{U}, p: X \rightarrow V\}$
	StSe - Stimulus Set	Wywołuje mechanizm zmiany stanu układu $U(A,p)$ poprzez wywołanie Funkcji Wyobraźni φ_{int}	$\mathfrak{S} = \{S(\varphi) \mid \varphi \in \Sigma\}$
$\Delta(\text{grid}) \rightarrow \{0,1\}$	Funkcja wrażliwości	Bada, czy System rozpoznaje, że PAS się zmienił	$\Delta: \Omega \times \Omega \rightarrow \{0,1\}$
Φ_{ext}	Wszystkie Funkcje Inspiracji	Zmienia PAS przez zadziałanie bodźca zewnętrznego	$\Phi_{ext} = \{\varphi_{ext} \mid \varphi_{ext}: \Omega \rightarrow \Omega\}$
Φ_{int}	Wszystkie Funkcje Wyobraźni	Zmienia PAS przez zadziałanie bodźca wewnętrznego StSe	$\Phi_{int} = \{\varphi_{int} \mid \varphi_{int}: \Omega \rightarrow \Omega\}$

Axiomatic Theory of Self-Awareness allows us to state very concretely what contemporary AI models lack in order to even begin talking about self-awareness:

- they have no clearly defined PAS space - states that are "attached" to the system and persistently track their own changes,
- they lack explicit StSe - internal stimuli represented as ordinary states capable of triggering further transformations,
- they lack a defined sensitivity function Δ that says: "this change is significant, and I can identify its cause (internal or external)."

In practice, this means that modern AI may appear highly intelligent (long chains of transformations), but from the perspective of Axiomatic Theory of Self-Awareness they are intuitively non-self-aware, because they lack a formal mechanism for distinguishing: “this is my change” vs “this is a change caused by the outside.”

This is not an accusation - it is a roadmap. If someone wants to build truly self-aware AI, Axiomatic Theory of Self-Awareness specifies exactly what needs to be added.

Based solely on the presented theory, and beyond the already defined notions of consciousness, self-awareness, sensitivity, and intuition, it becomes possible to formulate fully engineering-grade definitions of:

- memory,
- intelligence,
- level of intelligence,
- level of consciousness,
- Family of self-conscious Systems.
- GSAT – a test of self-consciousness analogous to the Turing Test

But that is a topic for another article...




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Download the entire article of
self-awareness engineering





AI VOICEBOTS: OPPORTUNITIES AND RISKS AND AKQUINET'S REVOLUTIONARY NEW VOICEBOT

Voice-based assistance systems have experienced a significant boost in development. More and more interactions that used to have to be led by employees are now being taken over by digital voice assistants. Whether in the call center, in technical support or at information points – voicebots offer the potential to automate communication and at the same time increase the quality of service processes.

Other fields of application will soon be added, for example in human robotics: Voice-capable assistants accompany tourists through cities or provide support in the care environment with strength and language skills.

AI VOICEBOTS TODAY: RARELY DELIVER WHAT THEY PROMISE

Despite these attractive prospects, the reality of many voicebot projects still falls short of expectations. Companies associate the introduction with clearly formulated goals: an increase in customer satisfaction, relief for employees, more efficient processes or even a reduction in staff turnover in stress-intensive telephone areas. But as soon as standard voicebots are confronted with real, company-specific requirements, fundamental technical limits quickly become apparent, as our AKQUINET team has found in many consultations. **Why is that?**

A major reason is that many systems are only supported by large language models that are optimized for a generic conversation. They can use it to manage small talk or answer general questions. However, as soon as concrete process data is required or a system-side action is to be triggered, functionality breaks off or is severely limited. For example, if a customer not only wants to know when her order is expected to arrive, but also actively wants to change the delivery date, many voicebots are already over.

For some, rigid information is stored in the form of lists or instructions. However, the depth and up-to-dateness of this data is inadequate.

HALLUCINATIONS: WHEN AI PREFERS TO INVENT SOMETHING RATHER THAN NOT ANSWER

This creates a second, equally relevant risk: hallucinations. Large language models tend to produce answers that sound convincing but don't correspond to reality. A 2023 study shows that almost 20 percent of all responses to Large Language Models (LLMs) contain hallucinations (see HaluEval: A Large-Scale Hallucination Evaluation Benchmark for Large Language Models, October 2023). Of course, LLMs evolve very quickly. Without knowing exactly how high the hallucination rate of common LLMs currently is, however, one can say: There are hallucinations, almost everyone experiences them when working with an LLM. Hallucinations can have serious consequences. Incorrectly invented system states, alleged process decisions or information on contractual details can be confusing for customers and risky for companies.

THE AI IS SUPPOSED TO ACCESS DATA, BUT HOW?

In addition, there is the technical question of system connection. If a voicebot accesses operational systems directly, this is problematic for several reasons: On the one hand, it increases the risk of unintentional interventions by AI in productive data sets. On the other hand, it often leads to performance bottlenecks. ERP or ticketing systems are not designed to handle additional load from AI requests. The result: pauses of five seconds or longer occur in the conversation. Such delays are fatal for conducting a conversation on the phone. In addition, practical operation shows that rigid voicebot architectures quickly reach their limits. As soon as requirements change, for example processes are adapted or new topics are added – this is difficult or expensive to expand in classic voicebots.

PRINCIPLES OF THE AKQUINET AI VOICEBOT

To address these challenges, our AKQUINET team's new technical approach was based on three interrelated principles:

- Receive reliable answers
- Write back information securely
- Well-defined decoupling of the system components

What did we do?

The central element for the AKQUINET AI voicebot is the introduction of an intermediate level, a so-called staging area. Enterprise systems no longer deliver their data directly to AI, but to this intermediate layer, which is permanently synchronized in real time. The voicebot only accesses this level. This prevents the AI model from interfering with operational systems in an uncontrolled manner, while keeping up-to-date data accessible.

This approach is supplemented by short-term memory based on a retrieval method. In contrast to classic long-term training, the AI receives the required information according to the situation and then discards it again. This reduces effort and at the same time minimizes hallucination risks, as the AI always works with precise and contextual information.

THE AI NEVER INTERACTS WITH THE SOURCE SYSTEM

Another core component concerns the triggering of actions. The AI does not make changes in systems itself. Instead, it has previously defined tools at its disposal, such as functions or automated process modules. The voicebot decides which of these tools is needed, triggers it, but never interacts directly with the source systems. This ensures that security requirements are met and all operations are fully logged.

Key advantages of this approach are:

- Reduction of misconduct through clear separation of data access and action logic
- Auditability of all triggered processes
- Stability even with complex requests
-

We have also further developed the technical implementation of communication. In the AKQUINET AI voicebot, we use a real-time audio model. In this case, the spoken word is not first converted into a text, but processed directly. So instead of speech-to-text and then text-to-speech chains again, there is only direct speech-to-speech. This leads to much more natural dialogues, higher speed and better robustness against accents, dialects or speech variants. A fallback mechanism ensures reliability, which automatically switches to the predefined text-based language model in the event of interruptions in the audio model and continues the dialogue – with a slight delay, but without interrupting the call.



After all, integration into existing IT landscapes plays a central role. The AKQUINET AI voicebot runs entirely on the Azure stack. If the voicebot is operated within an existing Microsoft tenant system, company data does not leave the infrastructure. At the same time, organizations benefit from the stability and documentation of standardized technologies.

WHEN INTEGRATING THE LLM, THE ARCHITECTURE IS CRUCIAL

Overall, it turns out that the success of a voicebot depends less on the size of the underlying language model and more on architectural questions: How is data provided? How is AI prevented from acting uncontrollably? How is speed guaranteed? And how does a system remain flexible enough to grow in dynamic corporate environments? The approaches described above make it clear that powerful voicebots can only be created if technological possibilities and operational requirements are carefully interlinked. They thus mark an important step towards secure, scalable and realistically usable voice assistance systems in everyday business life. With the AKQUINET AI voicebot, we have already planned these steps for your company in advance.



MARCUS WUEST
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THE CLOUD- INTELLIGENCE ERA

2026: SAP has officially announced the end of mainstream maintenance for ECC systems by December 31, 2027, making 2026 the final full year for organizations to proactively prepare for the transition to S/4HANA. This is not just a migration—it's a strategic reset. Cloud ERP transforms legacy systems into intelligent platforms, fusing real-time data and AI to drive faster decision-making and innovation. Industry analysts consistently highlight tangible business value, including accelerated insights, higher operational efficiency, and long-term resilience. Companies delaying risk accumulating “innovation debt” and falling behind digital leaders.

Key takeaways:

- **Deadline Pressure:** After 2026, ECC planning turns into a crisis of continuity.
- **Intelligent Core:** Cloud ERP integrates AI and real-time data for faster, smarter business decisions.
- **Public Cloud Advantage:** GROW customers benefit from faster innovation cycles, embedded AI capabilities, and significantly lower total cost of ownership—often achieving 30–50% savings over five years compared to traditional ECC environments.
- **Strategic Risk:** Staying on ECC means rising costs, skill shortages, and innovation stagnation. Cloud ERP unlocks AI-driven value chains and future-proof agility.

STRATEGIC CONTEXT: FROM TRANSACTIONS TO INTELLIGENCE

From Transaction to Intelligence ERP has evolved from static, back-office systems into real-time digital backbones. Traditional ECC was designed for batch reporting; cloud ERP delivers live insights across finance, supply chain, HR, and beyond. Custom dashboards show real-time KPIs—supply chain alerts, cash flow, or performance metrics—enabling proactive action.

Market surveys show that the majority of ERP users report measurable productivity gains and improved cross-functional collaboration after adopting modern ERP platforms. Real-time analytics can increase operational efficiency by up to 25%, significantly reduce reporting delays, and accelerate innovation cycles. IT budgets shift from maintenance to innovation, with potential first-year cost savings of up to 20%. The result: a digital core that pays for itself—faster closes, better forecasts, and improved collaboration.

In sum, the modern digital core pays for itself. It replaces legacy batch reporting with streaming intelligence and automation. CFOs see tighter forecasts and faster closes; supply-chain teams sense demand shifts instantly; finance and operations leaders collaborate on the fly with common data. Organizations that fully leverage real-time ERP data consistently outperform peers by converting raw information into actionable insights and shared organizational intelligence.

PUBLIC CLOUD AS INNOVATION ACCELERATOR

Public Cloud as Innovation Accelerator SAP's dual-path strategy—RISE (Private Cloud) and GROW (Public Cloud)—has strategic implications. RISE rehosts legacy complexity, extending timelines with limited innovation benefits. GROW enforces standardization, minimal custom code, and native use of SAP BTP for extensions.

GROW customers benefit from:

- Quarterly Innovation: Finance, AI, and supply-chain updates arrive continuously.
- Embedded AI: Predictive analytics, smart copilots, and anomaly detection tools.
- Clean Core Architecture: Custom logic lives outside the ERP core, simplifying upgrades.

In contrast, private-cloud approaches often retain legacy custom code, experience slower update cycles, and face rising consulting costs as ECC and ABAP expertise becomes increasingly scarce. Industry forecasts indicate that by 2026, the vast majority of new ERP deployments will be cloud-based, leaving organizations that remain on ECC at a growing disadvantage in speed and cost efficiency.



CLOUD BREAKTHROUGHS ECC CANNOT MATCH

Four innovations will define the future of ERP—none of which are realistically feasible on ECC:

1. Zero-Copy Data Sharing: Real-time analytics and ML on governed data, without duplication.
2. Enterprise-Scale AI: LLMs and smart bots automate tasks and optimize decisions in finance, SCM, and beyond.
3. Continuous Delivery: New capabilities arrive seamlessly; budgets shift from upgrades to innovation.
4. Built-in Compliance: Cross-system audits and role-based controls embedded by design.

This “Cloud-Intelligence Dividend” separates fast-movers from laggards. ECC users face rising risk and limited innovation reach.

2040 VISION: INVISIBLE INFRASTRUCTURE & AI DIVIDENDS

Future ERP systems will be invisible yet intelligent - automating decisions, forecasting shifts, and guiding strategy in real time:

- Autonomous Decision-Making: AI reacts to market signals instantly, adjusting forecasts and production.
- AI-Augmented Workflows: Bots handle approvals, while analytics support audits and planning.
- Talent Reallocation: Up to 40% of tasks automated; human roles shift to strategic focus areas.

Only cloud ERP platforms support this vision. ECC lacks the data architecture and scale required for pervasive automation.

CONCLUSION: COMPETE OR CONCEDE

ECC customers face a strategic crossroads:

- Concede: Rising costs, shrinking support, and limited AI access trap budgets in maintenance.
- Compete: Real-time insights, automation, and innovation flow make Cloud ERP becomes a long-term growth enabler.

2026 is the inflection point. Early cloud adopters gain structural advantage; laggards face strategic obsolescence. The message is clear: compete—or be left behind.



ANDREAS BORN

Andreas Born advises clients on SAP strategy and value realization across Cloud, Data & AI.

akquinet GmbH



MIGRATION FROM SAP ECC TO S/4HANA IN 2026

Migration from SAP ECC to S/4HANA in 2026 is no longer purely a technological initiative; it has become a strategic decision with a direct impact on the operational stability and competitiveness of enterprises. The approaching end of support for ECC and the rising costs of maintaining legacy systems mean that organizations are no longer asking whether to migrate, but which path to choose. Market data clearly shows that nearly one third of companies have already completed the migration, while more than 40% plan to finalize it before 2027, placing 2026 at the center of ERP migration trends.

ECC DEADLINE AS A REFERENCE POINT, NOT THE SOLE DRIVER OF DECISIONS

SAP has officially announced that mainstream support for SAP ECC will end in 2027, which is a clear stimulus for migration and ERP transformation planning. However, the deadline itself does not fully explain the motivations behind enterprise decisions. Benchmark data shows that organizations are simultaneously making these decisions due to the need for better analytics, stronger system integration, and greater process automation.

According to the SAPinsider Migration Benchmark 2025, around 34% of organizations have already completed their migration to S/4HANA, and another 41% plan to complete it before ECC support ends (by 2027). This means that nearly three fifths of companies have already made a concrete commitment to operating in an S/4HANA environment before the deadline.

These figures confirm that migration is not merely a future plan—it is an ongoing process that is steadily gaining momentum. Meanwhile, some ECC users still have not made a decision or continue to postpone it, which increases the risk of executing projects under time pressure and with limited resource availability.

PREFERRED MIGRATION STRATEGIES: PRAGMATISM FIRST

In practice, consultants and migration service providers observe that organizations increasingly choose strategies that maintain business continuity, such as brownfield or selective data transition (often referred to as bluefield) rather than a full and costly reimplementation (greenfield). This approach allows organizations to:

- preserve configurations and historical data
- reduce operational risk
- ensure a stable start in the new system

Such an evolutionary migration strategy is becoming the dominant implementation pattern in 2026.

COST AND RISK AS KEY DECISION FACTORS

Industry reports indicate that cost and technological complexity remain the primary barriers to migration. In many organizations, delays in decision-making stem from concerns about:

- project and integration costs
- data quality
- the need for extensive testing before full deployment

These risks often lead decision-makers to adopt phased strategies that minimize operational disruption and enable more predictable implementation timelines.

Najczęściej identyfikowane ryzyka migracji do S/4HANA w 2026 roku

<i>Ryzyko strategiczne</i>	Migracja traktowana jako projekt IT, bez jasno zdefiniowanych celów biznesowych i mierników wartości po go-live
<i>Ryzyko operacyjne</i>	Niedoszacowanie jakości danych, integracji oraz wpływu zmiany na bieżące procesy operacyjne
<i>Ryzyko organizacyjne</i>	Zbyt późne zaangażowanie biznesu i brak właścicieli procesów odpowiedzialnych za adopcję systemu

POST-MIGRATION VALUE: REAL BENEFITS APPEAR LATER

Experts emphasize that the greatest business benefits of S/4HANA—such as shorter process cycles and real-time analytics capabilities—usually emerge 6–24 months after go-live, provided that the migration is accompanied by a clear plan for realizing additional business value. This shifts the perspective from an “IT project” to a broader transformation program that extends well beyond the technological transition itself.

Decisions That Will Determine the Success of Migration in 2026

<i>Start with an assessment of organizational readiness</i>	SAP Readiness Check should be treated not merely as an IT tool, but as the starting point for a management decision - one that highlights the scale of risk, the complexity of the migration, and the real scope of the transformation.
<i>Choose a path that minimizes operational risk</i>	Market data indicates that phased approaches (brownfield / bluefield) help maintain business continuity and allow organizations to better control costs under time pressure.
<i>Measure value after migration, not just the go-live date</i>	The key benefits of S/4HANA emerge after the system is launched and require clearly defined KPIs and business owners responsible for delivering value - making this a board-level decision rather than purely an IT one.

KEY MARKET DIFFERENCES

Although the ECC deadline is the same globally, local markets differ in their pace of adoption, preferred migration paths, and implementation barriers. The comparison of Poland, Germany, and Austria illustrates these differences.



<i>Area</i>	<i>Poland</i>	<i>Germany</i>	<i>Austria</i>
<i>Adoption stage</i>	approx. 40% of companies after or in the process of migration	Advanced programs in medium and large companies	Growing adoption, including cloud
<i>Dominant motivation</i>	Deadline and cost pressure	Compliance, operational stability, scalability	Operational efficiency
<i>Preferred approach</i>	Brownfield / Selective data transition	Brownfield + Hybrid / cloud	Hybrid, standardization
<i>Key risk</i>	Resources and budget	Integrations and regulations	Balance between innovation and control
<i>Trend in 2026</i>	Phased migrations	Phased migrations	Phased migrations

Despite the shared migration driver, strategies vary depending on market specifics. In Poland, pragmatic decisions dominate, with a strong role played by implementation partners and phased approaches. Germany tends to invest in broader, well-planned transformations with a strong emphasis on governance and compliance. Austria combines operational efficiency needs with hybrid implementations, balancing stability with innovation.

WHICH PATH WILL DOMINATE IN 2026?

Market data clearly shows that there is no single universal migration path that will “win” in 2026. Instead, pragmatic strategies tailored to the realities of individual organizations will prevail. Brownfield approaches dominate in large organizations with significant legacy environments. Bluefield is growing the fastest as a compromise approach. Greenfield remains niche but important for cloud-first strategies.

Ultimately, the key success factor will not be the migration to S/4HANA itself, but the systematic measurement and realization of business benefits after the migration is completed.



ANNA KONIECZNA - GARBACZ
Lead for SAP Pre-Sales and Deliver Model
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DATA LITERACY AS A PREREQUISITE FOR MATURE AI ADOPTION

AI REQUIRES COMPETENCE

In 2026, artificial intelligence is no longer a technological novelty — it becomes a key element of business and digital infrastructure. Organizations are moving from experimenting with AI to implementing it at scale across operational, decision-making, and product processes.

With this transformation, data becomes a strategic foundation — its quality, governance, and the ability to interpret it determine competitive advantage and the effectiveness of AI systems. Based on this data, our AI assistant generates responses to our queries. And this is where we reach a critical point: not everyone can effectively handle the information provided by their AI assistant. Many assume that the information is correct, without deeper analysis or reflection — until, during a business meeting or even a casual conversation, someone points out that the information is false, fabricated, or — using technical terminology — a model hallucination.

AI IS BASED ON PROBABILITY, NOT ON FACTS

Generative AI models are built on vast amounts of data and probability. They analyze our prompt and generate a response based on the likelihood of certain word combinations appearing within a given context.

The creators of these models strive to maximize this probability, but it will never reach one hundred percent. As a result, errors - or hallucinations - inevitably occur in the details.

Therefore, a key aspect of using AI tools is the ability to critically evaluate the answers obtained.

This competence requires the ability to:

- read the information,
- understand its context,
- interpret its meaning,
- draw appropriate conclusions.



DATA LITERACY AS AN INFRASTRUCTURE COMPETENCE

The ability to understand and interpret data - known as data literacy - is no longer limited to analysts working in BI departments. It is becoming a universal competence - a foundation for everyday functioning in a world where nearly every decision has numerical justification.

This is no longer an additional “nice-to-have” skill. It is a prerequisite for conscious action - both professional and personal.

Modern users cannot afford to ignore data. They are surrounded by it and, willingly or not, must confront it daily. Financial, health-related, consumer, organizational and sales data constantly influence our choices.

They show us how much we earn and how much we spend. They inform us about the quality of our sleep and the condition of our bodies. They indicate which products customers purchase and which business areas are growing faster than others.



We can ignore this data. We can also uncritically accept the first interpretation - often generated by an algorithm. However, only conscious analysis gives data real value. In each of these areas, the key factor is the ability to interpret data properly - understanding context, proportions, limitations and, the consequences of decisions made.

In an era where AI can generate answers in seconds, the human ability to understand data becomes the stabilizing element of the system. Without it, technology remains fast - but not necessarily accurate. With it, technology becomes real support in making responsible decisions.

PRACTICAL EXAMPLES OF DATA LITERACY

Let us look at our finances. We are in the tax settlement period. By analyzing our annual tax declaration, we can prepare a summary of the previous year — for example, calculating our average income. It is important to remember the possibility of applying tax deductions, which also requires analyzing available options, understanding which deductions apply to us and completing the relevant sections correctly.

We must ultimately verify this ourselves. The system will not do it perfectly for us. It may attempt to, but errors are common. Of course, an accountant can handle this if we use such services. Nevertheless, it is always worth reviewing how the settlement has been prepared.

Staying with finances, we can go further. If we have income, we also have a household budget that requires management. Analyzing how we allocate our hard-earned money — bills, rent, loans, groceries, and other expenses — helps us plan appropriately.

When analyzing expenses, it is important to remember several factors. Comparing month to month can be misleading. Months have different numbers of days. For example, in February we may spend less simply because it is shorter. Holidays and public breaks also influence spending patterns. Savings from one period can be allocated to future expenses, such as vacations or planned events.

Budget analysis also allows us to prepare for unexpected situations, increasing our financial security.

Another example concerns what many of us wear on our wrist: a smart band, smartwatch, or similar device. These devices monitor our daily activities — steps, heart rate, oxygen saturation, sleep quality, and more — all of which can later be analyzed in a connected mobile application.

How many people truly take the time to analyze this data and draw conclusions? To change something — if possible — in order to improve health parameters? We do it for our health and longevity.

The challenge is that applications do not provide fully personalized benchmarks, as many variables must be considered. In such cases, we need to consult external sources or professionals — for example, a doctor — to assess whether the measured parameters are appropriate.

It is worth doing — for ourselves.



THE EUROPEAN CONTEXT

According to Eurostat data, approximately 85% of Europeans living in large cities possess basic skills in reading and understanding presented data. In smaller cities, this figure is around 80%, and in rural areas approximately 78%.

In Poland, the differences between regions are more pronounced: 88% in large cities, 83% in smaller towns, and 77% in rural areas. Meanwhile, countries such as the Netherlands, Iceland, and Norway show almost no regional differences, with data literacy levels reaching 96–98%.

Although Poland's results are relatively good, there remains significant room for improvement — particularly in raising awareness of the importance of understanding what we read, how we analyze charts, and what conclusions we should draw.

CONCLUSION

In summary, full implementation of AI tools — both professionally and personally — requires more than access to technology. It requires maturity in reading, understanding, and verifying the information we receive. Delegating responsibility for assessing data accuracy solely to an algorithm may lead to undesirable consequences — from minor operational errors to serious decisions based on inaccurate or incomplete premises.

Therefore, results generated by AI tools should always be confronted with the user's knowledge, experience, and — when necessary — additional sources.

This moment of verification distinguishes unreflective use of technology from its conscious application. Through critical analysis, the decisions we make become more accurate and better grounded in real data rather than in its seemingly convincing interpretation. As a result, we improve efficiency, enhance the quality of our actions, and increase the safety of decisions — both in everyday matters and in key business contexts. AI can significantly accelerate decision-making processes. Responsibility for their quality, however, remains with us, humans.



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