

GenAI x IDP: 5 Takeaways from 2025

Five capability breakthroughs redefining how organizations process documents in 2026



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Introduction

Every organization runs on documents. Contracts, invoices, purchase orders, medical records, loan applications. The volume is staggering, and for most organizations, so is the cost of processing them. Manual workflows are slow, error-prone, and increasingly unsustainable at scale. Legacy automation tools helped, but only partially. They streamlined steps without solving the underlying problem: documents are unstructured, unpredictable, and endlessly varied.

Generative AI changes that equation entirely.

In 2025, GenAI moved from promising technology to production reality in Intelligent Document Processing. Organizations that adopted it didn't just improve their workflows; they reimaged them. What once required thousands of manual templates and human reviews now runs on a handful of intelligent, self-learning flows capable of handling any format, any language, any volume.

“Generative AI is the single most important change in the long history of IDP. For the first time, a computer can classify documents and extract data without human intervention, training samples, or prior knowledge. In AI terms this is known as **zero-shot learning**; in other words, the document is recognized with no prior encounter or training.”

- Dan Lucarini, senior analyst at Deep Analysis and noted IDP market expert.

"The shift is structural, not incremental."

This eBook distills five defining takeaways from 2025; the capability breakthroughs that are setting the new standard for what IDP must deliver.

Whether you lead a finance function, an operations team, or an enterprise technology strategy, these takeaways have direct implications for how your organization handles documents today and competes tomorrow.

What is Generative AI?

An area of AI that specifically refers to artificial intelligence that can respond to a query with text, images, video, and other assets.

Generative AI systems can interact with humans and are often built using large language models (LLMs). It's also referred to as "Ge-



GenAI x IDP: 5 Takeaways from 2025

2025 has been a big year for the GenAI and IDP collaboration. We're starting to see all the possible ways AI can reshape IDP for the better. Here are the biggest takeaways from 2025 on how AI is making intelligent document processing all the more intelligent.

1. GenAI is facilitating end-to-end document processing **automation**.

While conventional IDP solutions streamline several steps in the document processing workflow, the bulk of the work is still done manually. Up until a couple of years ago, end-to-end automation was more of a dream. However, advancements in GenAI are now enabling automated document processing. This means that organizations can process thousands of unstructured documents with varying layouts and formats in minutes or even seconds.

GenAI's self-learning capabilities ensure that the solution adapts to the variations in the formats and improves in accuracy the more data it processes. While data extraction is the most crucial one, document processing involves several other important steps, such as data preparation and validation. With GenAI integrated into IDP, organizations can aim for end-to-end automation for most, if not all, of their document processing tasks.

"If an organization processes a few thousand invoices daily, AI-powered IDP solutions can automate the entire process, including data preparation, extraction, validation, and conversion to a structured format. Human oversight can be optional or dependent on the confidence level, but the idea is that GenAI handles the bulk of the work while human resources perform higherorder tasks such as critical evaluation, decision-making, and data analysis."

2. GenAI is enabling **reliable** and **accurate** data extraction.

Accuracy rates of conventional IDP solutions can lie anywhere between the low 80s to high 90s in percentages, depending on who you ask. However, there shouldn't be any doubt that AI improves the accuracy and reliability of extracted data.

This improvement in accuracy is owed to AI's self-learning capabilities and adaptability, which even advanced machine learning (ML) algorithms lack. While ML algorithms can be improved by training them on large and relevant data sets, they lack the self-learning capabilities of LLMs.

What this means is that integrating AI into document processing will lead to short-term benefits over conventional IDP as AI self-learns by training on their data. Plus, organizations will also realize long-term gains as AI capabilities improve in the coming months and years.

“GenAI represents a quantum leap in how IDP solutions identify and extract data from unstructured documents like detailed financial statements and complex medical records. This leads to highly accurate and reliable data extraction, which will only get better as GenAI advances.”

3. GenAI is making **human-like comprehension** of documents possible.

Conventional IDP solutions can identify and extract data but cannot understand the context in which that data exists in the document. Plus, traditional extraction methods typically treat each piece of data as an isolated entity.

However, LLMs solve both these problems as they can analyze the context and understand the importance of that data while also establishing links between the different parts of a document. This helps in establishing a cohesive understanding of the document, much like how a human who reads the document will be able to instinctively make the connections and understand the value of the data points based on their context.

“If a financial document mentions a number, an LLM can determine whether that number represents revenue, liability, or something else entirely, depending on the context surrounding that number. Similarly, if a contract uses certain terms in multiple sections, an LLM can crossreference these terms to ensure their interpretation is correct and consistent throughout. This further increases the accuracy and reliability, bringing it closer to human-like comprehension, but of course, at much faster speeds.”

4. AI-based matching and mapping **streamlines** document processing workflows.

Enterprises deal with such volumes of data that even if the document processing itself is automated, there's still a lot of work to be done in the way of mapping data to and from the large variety of sources and destinations. For instance, once the data has been extracted, validated, and enriched, it may need to be integrated into a database, a warehousing solution, or downstream applications for analytics or business intelligence.

AI-driven matching and mapping capabilities can help simplify handling large volumes of data. Since AI can recognize different layouts, it can be leveraged to consolidate separate projects into a unified system. This minimizes the need for multiple data flows across different document formats, merging layout variations into a singular, intelligent data flow.

“AI's ability to automatically detect input formats, parse data, and map it to the target structure can facilitate higher data accuracy and minimize any discrepancies. For example, if an organization is processing invoices, contracts, and several other types of documents, AI would be able to intelligently adapt to evolving formats, which can significantly reduce manual involvement and effort and improve workflow efficiency.”

5. Self-learning AI is making **personalized IDP** assistants a reality.

We've talked about how the self-learning capabilities help improve accuracy and reliability over time as the AI is trained on your data. However, another upside is that organizations don't have to rely on a cookie-cutter solution. Even within an organization, IDP needs vary across functions, and thanks to AI's self-learning, each team can have an AI-powered, expert document-processing assistant of their own.

“With AI-powered IDP, organizations can tailor AI models to specific use cases, ensuring the solution meets their unique needs. An IDP solution equipped with self-improving feedback loops and memory can deliver GenAI agents that are continuously learning and adapting, allowing organizations to adapt and scale as their document processing needs change, whether in terms of volume, format, or both.”

Conclusion: GenAI is revolutionizing document processing

The five takeaways from 2025 tell a consistent story: GenAI is no longer a future capability for Intelligent Document Processing; it is the present reality, and organizations that embrace it are already pulling ahead.

Each takeaway represents a concrete capability shift that compounds on the others:

- End-to-end automation eliminates the manual bottlenecks that slow down document-heavy workflows, freeing teams to focus on higher-value work.
- Reliable and accurate data extraction means organizations can finally trust their automated outputs — a prerequisite for acting on extracted data at scale.
- Human-like document comprehension unlocks understanding of context and intent, transforming IDP from a data-capture tool into a decision-support system.
- AI-based matching and mapping unifies fragmented document flows into a single intelligent pipeline, reducing integration overhead dramatically.
- Self-learning personalized IDP assistants mean the system gets smarter with every document processed, tailoring itself to the unique needs of each team and function.

Together, these define what a modern IDP platform must deliver in 2026. The question is no longer “should we adopt GenAI-powered IDP?” but “how quickly can we get there?”

Docspire: Truly Intelligent Document Processing Solution

Docspire brings all five capabilities together in one production-ready platform but what sets it apart is how fast it delivers them.

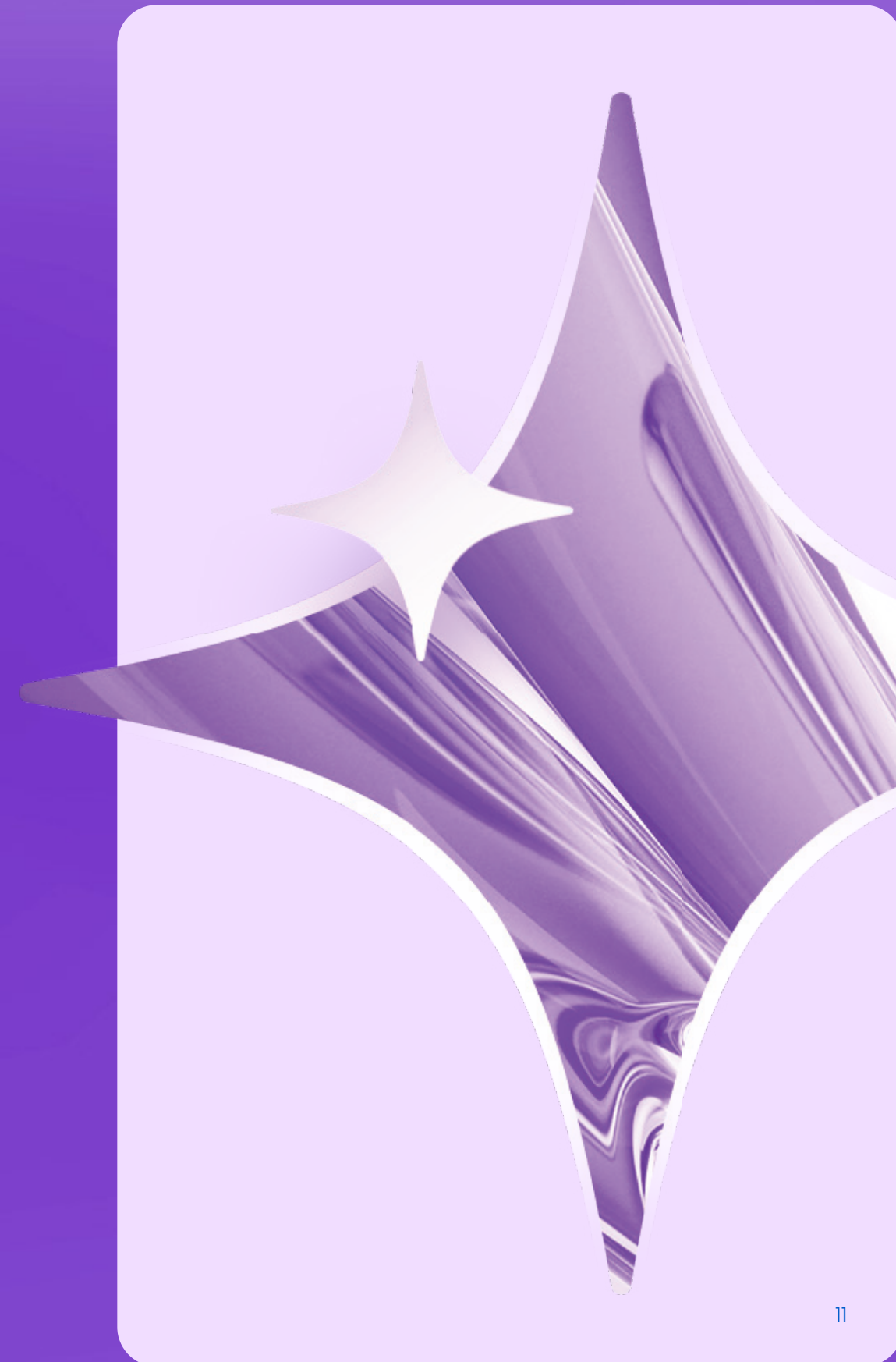
Where most IDP solutions require months of implementation, model training, and custom templates, Docspire goes live in minutes. Its agentic AI engine arrives pre-trained on real-world document workflows, so organizations aren't starting from zero.

A customer like Gap Solutions went from 6,000 manual workflows to just 12 intelligent flows; processing 150,000+ invoices across unlimited formats at 99.5% accuracy, with zero custom templates required.

Docspire's contextual extraction understands documents the way a human would; reading intent, not just fields. Its self-learning engine continuously improves on your specific documents, vendors, and formats, so accuracy compounds over time without manual retraining.

For organizations ready to move from insight to action, Docspire is the platform built to make it happen, not eventually, but now.

Experience **Docspire Intelligence** for a glimpse of the future of **AI-powered document processing**.



Endnotes

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