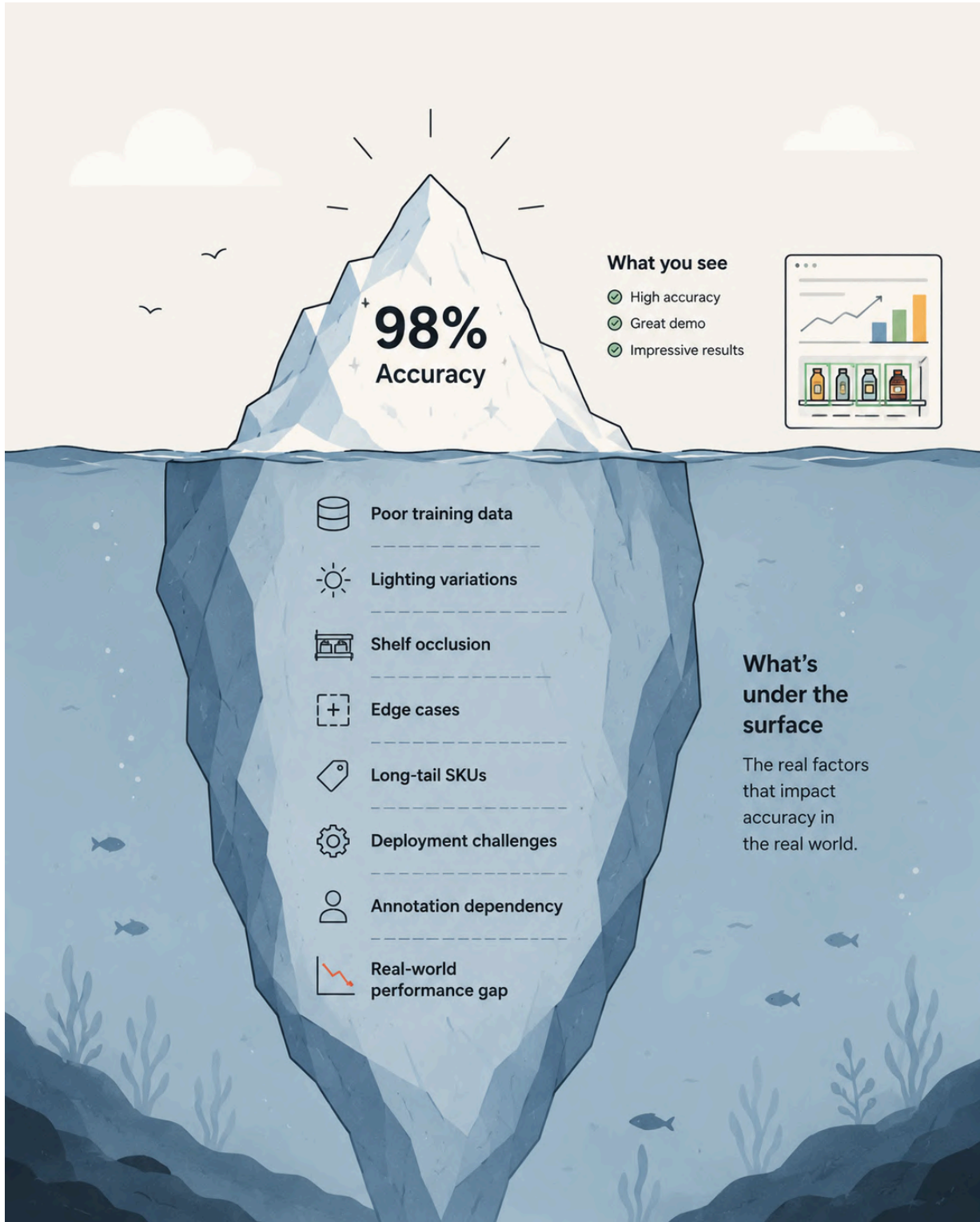


Key Things Procurement and Decision Makers Should Keep in Mind Before Selecting an Image Recognition Vendor



Selecting an image recognition vendor can feel deceptively simple.

One of the biggest misconceptions in the market is that image recognition is now a commodity and that all vendors are broadly the same.

That is not true.

Implementing image recognition, or any AI solution, is very different from implementing a deterministic software product like a CRM, ERP, or ticketing platform.

With traditional enterprise software, if the workflows are configured correctly, the software behaves predictably. AI systems do not work that way. Their performance depends on the quality of the input data, changing store conditions, packaging changes, image quality, model retraining, edge cases, and operational support.

An MIT Study in 2025 found that 95% of AI Pilots Fail — because they rely on generic tools that look impressive in demos but prove brittle within real-world workflows.

That is one reason why enterprise AI projects have such a poor success rate. An MIT Study in 2025 found that 95% of AI Pilots Fail because they rely on generic tools that look impressive in demos but prove brittle within real-world workflows. These pilots often remain trapped in a cycle of high initial adoption but low meaningful transformation.

This means CPG's sales, IT and procurement teams should be much more careful when selecting an image recognition vendor than they would be for a conventional software provider.

On the surface, most vendors make similar claims. They promise high accuracy, fast deployment, strong ROI, and scalable technology. Their demos often look polished, with clean dashboards and impressive examples.

The challenge begins after the contract is signed.

Many brands discover that the real-world performance of an image recognition solution can vary dramatically depending on store conditions, shelf complexity, image quality, category differences, and the operational support provided by the vendor.

For procurement teams and business decision makers, the selection process should go beyond feature comparisons and pricing discussions. The right vendor is not just a technology provider. They become a long-term partner that affects execution quality, field team adoption, reporting confidence, and ultimately sales outcomes.

Here are the key things procurement and decision makers should evaluate before selecting an image recognition vendor.

1. Assess Your Organization's Readiness Before You Evaluate Vendors

Before comparing vendors, assess whether your organization is prepared to implement and operationalize an image recognition solution.

A large portion of AI projects fail not because of the model, but because the organization is not ready to support, validate, and act on the outputs.

Start with data readiness:

- Do you have a clean, centralized master data repository for SKUs, brands, categories, pack sizes, and hierarchies?
- Is your product library consistent across systems and markets?
- Next, establish a performance baseline:
- Do your current manual audits produce a reliable baseline score for availability, facings, share of shelf, and compliance?
- Can you clearly define what "good" looks like so the IR system can be evaluated against it?

Plan for the initial validation phase:

- Do you have bandwidth to review IR outputs for the first 3 to 6 months after go-live?
- Who will validate predictions, flag errors, and work with the vendor to improve performance?
- Do you have a feedback loop to continuously refine models based on real store data?
- Evaluate internal experience and change readiness:
- Is this your first time implementing image recognition, or does your organization already have experience with IR deployments?
- Do you have internal stakeholders who understand how AI systems behave and where they fail?

Without these foundations, even a strong vendor will struggle to deliver consistent results. With them in place, the same vendor can drive meaningful improvements in execution quality and sales outcomes.



2. Accuracy Numbers Alone Do Not Tell the Full Story

Most vendors will present an impressive accuracy percentage.

That number is rarely enough to make a decision.

First, ask how the accuracy is being measured. Is it measured at SKU level or brand level? Is it measured in ideal store conditions or in real field environments? Does the number include difficult cases like partially blocked products, glare, poor lighting, damaged packs, tilted shelves, and crowded displays?

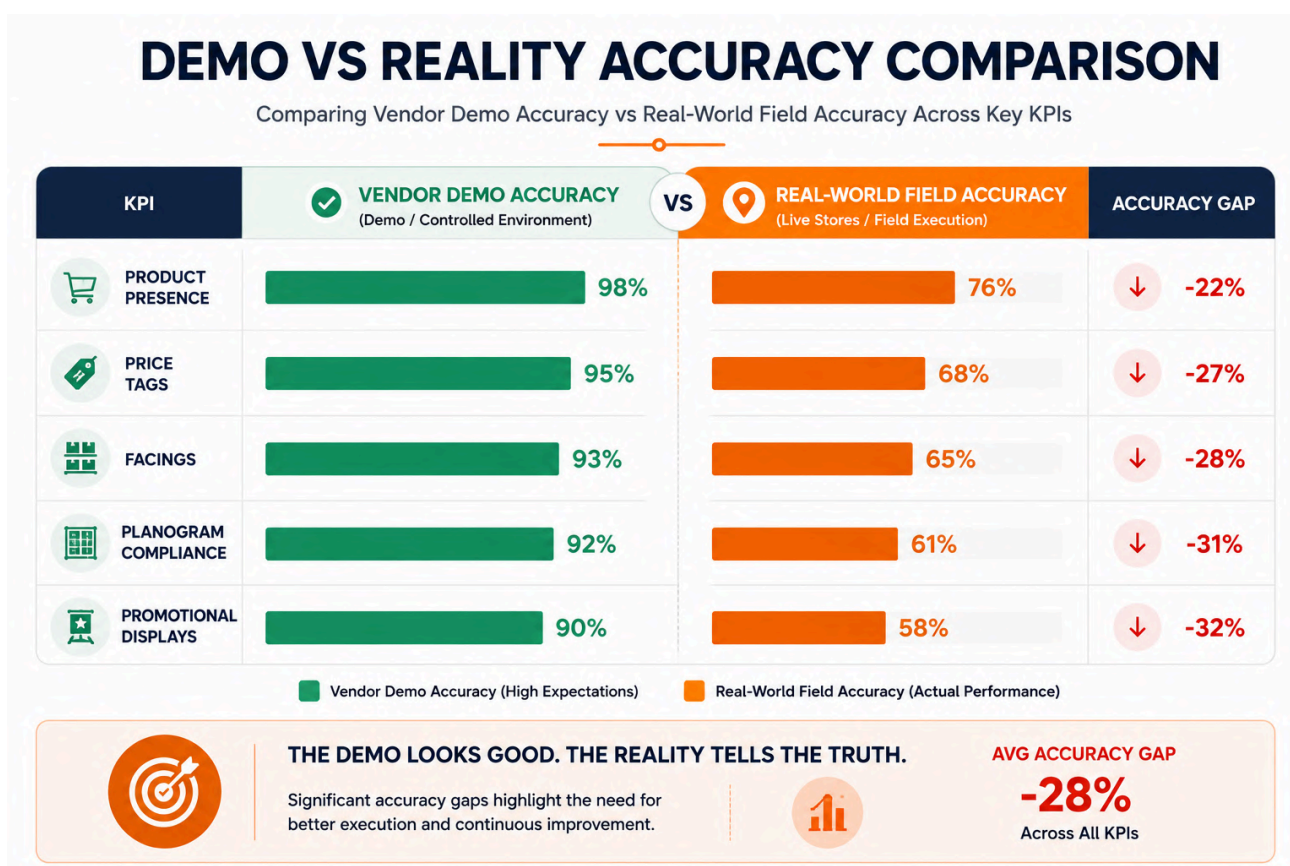
Some vendors also market very high accuracy numbers without explaining whether those figures apply only to product presence detection or also include price tags, facings, share of shelf, promotional displays, and planogram compliance.

Second, ask for performance across different KPIs.

A vendor may be very good at detecting product presence but weak at price tags, promotional displays, or facings calculation. In some categories, even a small drop in accuracy can create major trust issues among field teams.

Third, test the solution using your own images.

A controlled proof of concept using real images from your stores is often the best way to understand actual performance. Industry experts increasingly recommend running pilots using actual store images rather than relying on vendor demo environments.



3. Evaluate Performance Across Different Store Formats

Image recognition performance often changes significantly depending on the retail environment.

A vendor may perform very well in modern trade stores with clean shelves and good lighting, but struggle in general trade stores where products are stacked irregularly, lighting is inconsistent, and pack visibility is poor.

This is especially important for companies operating across multiple channels.

For example, a solution that works well in supermarkets may not work well in convenience stores, wholesalers, or small independent outlets.

Ask vendors to explain how their models perform in:

- Modern trade
- General trade
- Convenience stores
- Pharmacies
- Liquor stores
- Cash and carry outlets
- Cooler environments
- Warehouses
- Dark stores

The broader the use cases, the more important it becomes to evaluate flexibility rather than just headline accuracy.

STORE FORMAT PERFORMANCE MATRIX

Evaluating Image Recognition Performance Across Different Store Formats and Conditions

STORE FORMAT	LIGHTING CONDITIONS	SHELF REGULARITY	PACK VISIBILITY	LABEL CLARITY	IMAGE QUALITY
MODERN TRADE (SUPERMARKETS)	✓	✓	✓	✓	✓
CONVENIENCE STORES	!	!	!	✓	!
GENERAL TRADE (SMALL OUTLETS)	✗	✗	✗	!	✗
PHARMACIES	✓	✓	!	✓	✓
LIQUOR STORES	!	!	!	✓	!
CASH & CARRY OUTLETS	!	!	!	!	!
COOLER ENVIRONMENTS	✗	!	!	!	!
WAREHOUSES	✗	✗	✗	!	✗
DARK STORES	✗	✗	✗	✗	✗

Strong Performance (Works reliably)
 Moderate Performance (Inconsistent / Challenging)
 Weak Performance (Often Struggles)



KEY TAKEAWAY

Performance varies significantly by store format and environment. Evaluate vendor flexibility across real-world use cases, not just ideal conditions.

4. Ask About Deployment Timelines and Training Requirements

Some vendors can deploy quickly because they already have strong image libraries for your categories and markets. Others may require months of image collection, annotation, and model training before the system is usable.

Ask how long it typically takes to deploy:

- A new market
- A new category
- A new brand
- A new SKU
- A packaging redesign
- A competitor SKU update

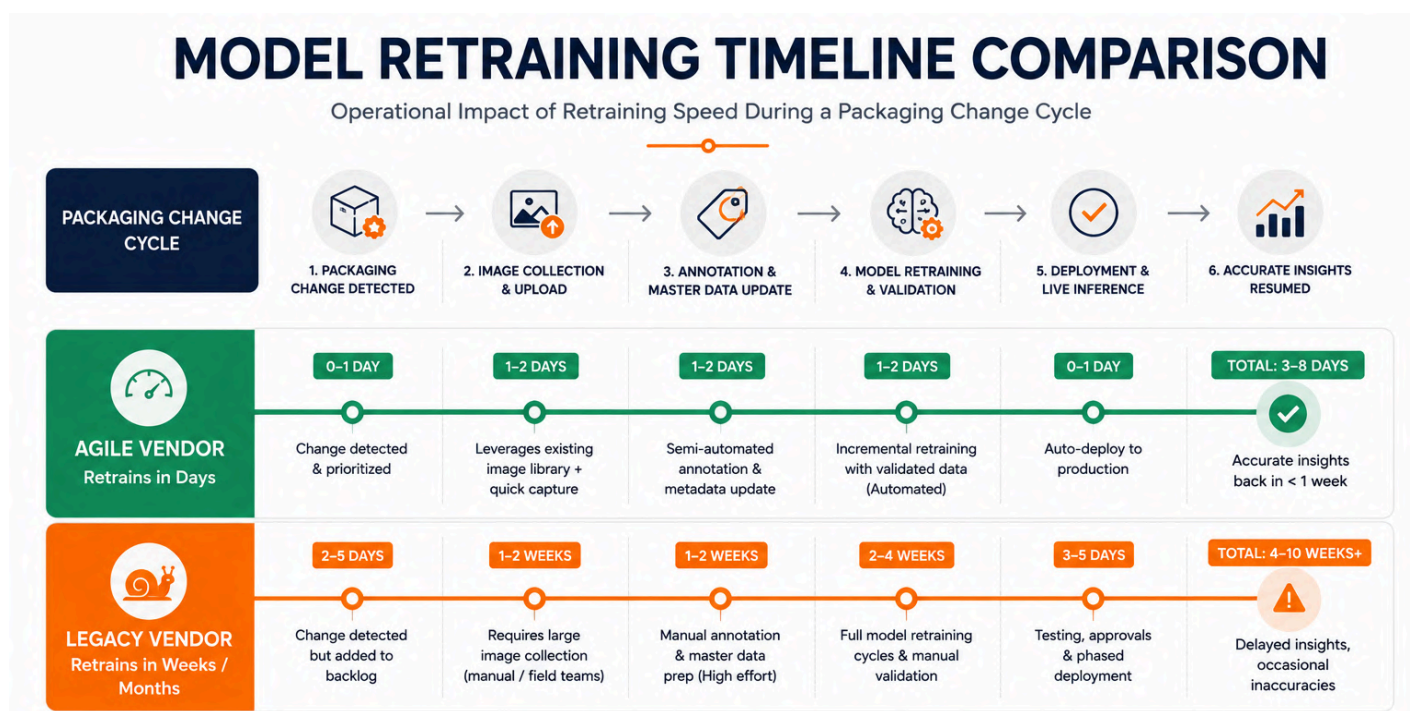
This becomes especially important in fast-moving categories where packaging changes frequently.

Many vendors underestimate how often shelves change. New SKUs are launched, packaging changes every few months, seasonal variants appear, and competitor products enter the market. A vendor that depends on heavy manual retraining may struggle to keep up.

Several industry articles note that reliable product recognition often requires dozens of labeled images per SKU, ongoing retraining, and strong annotation workflows. Some vendors can retrain models in days, while others may take weeks.

A vendor that takes months to retrain models after every packaging refresh can create operational delays and reduce trust in the system.

You should also understand how much effort is required from your side. Some vendors require large internal teams to provide images, annotations, master data, and ongoing validation support.



5. Look Beyond Technology and Evaluate Service Capability

Image recognition is not only a technology purchase.

It is also a service business.

Even the strongest algorithms need support teams to manage training data, resolve edge cases, monitor performance, onboard new SKUs, and handle exceptions.

Procurement teams should ask:

- What support model is available?
- Is there a dedicated account manager?
- Are there SLAs for issue resolution?
- How are new SKUs onboarded?
- How are model errors corrected?
- How often are models retrained?
- Is there local support in the required markets?

A vendor with strong customer success and operations teams can often outperform a vendor with slightly better technology but weak service.

6. Consider Scalability Across Countries and Categories



Many companies start with a pilot in one market and then plan to expand.

The problem is that not every vendor scales well.

Some vendors perform well in one region but struggle when expanding to multiple countries with different packaging, languages, shelf conditions, and retail environments.

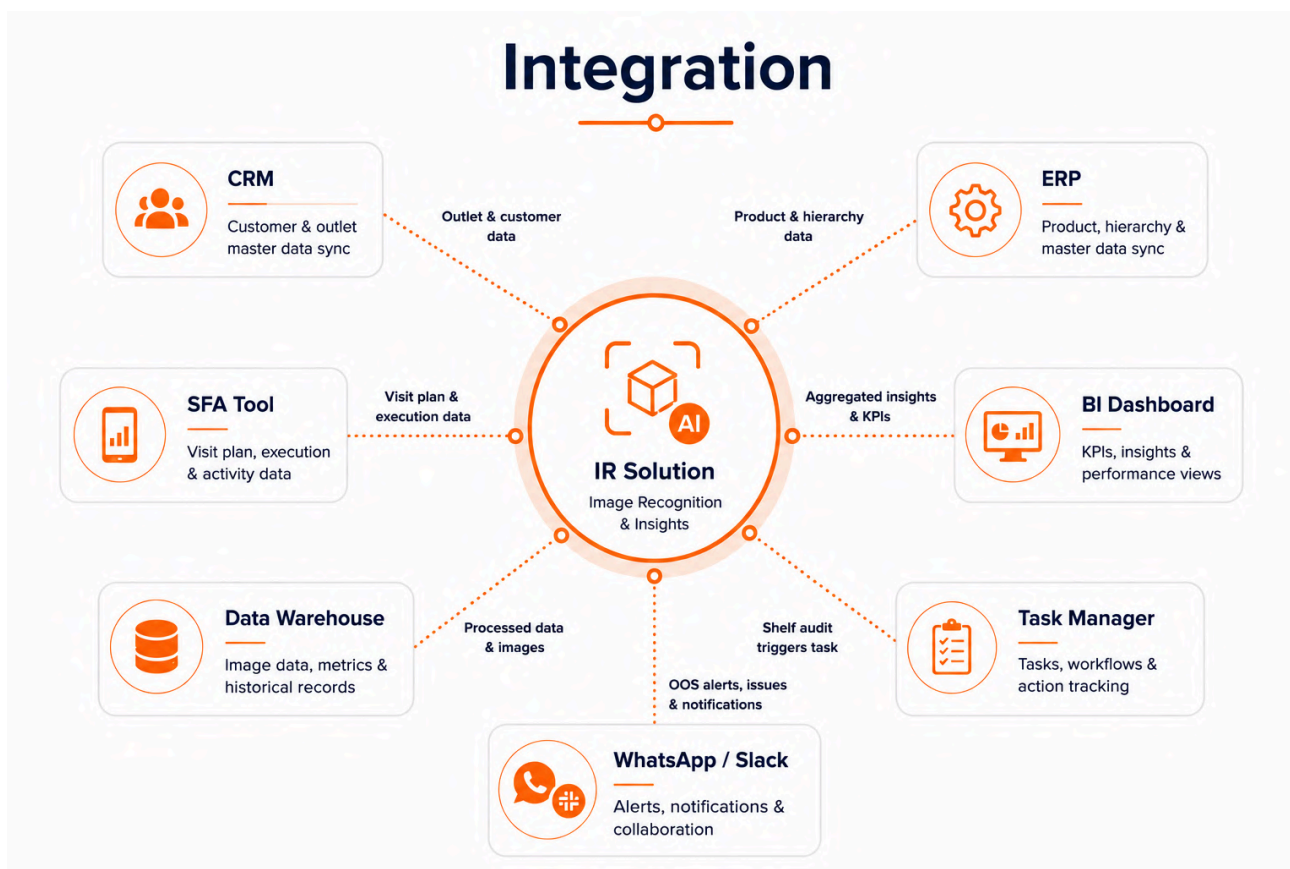
Others may have limited operational teams, making it difficult to onboard large numbers of SKUs or countries at the same time.

Decision makers should evaluate whether the vendor can support:

- Multiple countries
- Multiple languages
- Thousands of SKUs
- Regional packaging variations
- Different taxonomies and hierarchies
- High image volumes
- Seasonal products and promotions

The goal is to avoid choosing a vendor that works for the pilot but cannot support long-term growth.

7. Integration Matters More Than Most Teams Expect



An image recognition solution becomes far more valuable when it integrates with existing systems. If field reps need to jump between multiple tools, manually export reports, or re-enter information into another platform, adoption often drops.

Ask vendors about integrations with:

- CRM systems
- Retail execution tools
- Sales force automation tools
- ERP systems
- BI dashboards
- Data warehouses
- Task management systems
- Messaging tools like WhatsApp, Teams, or Slack

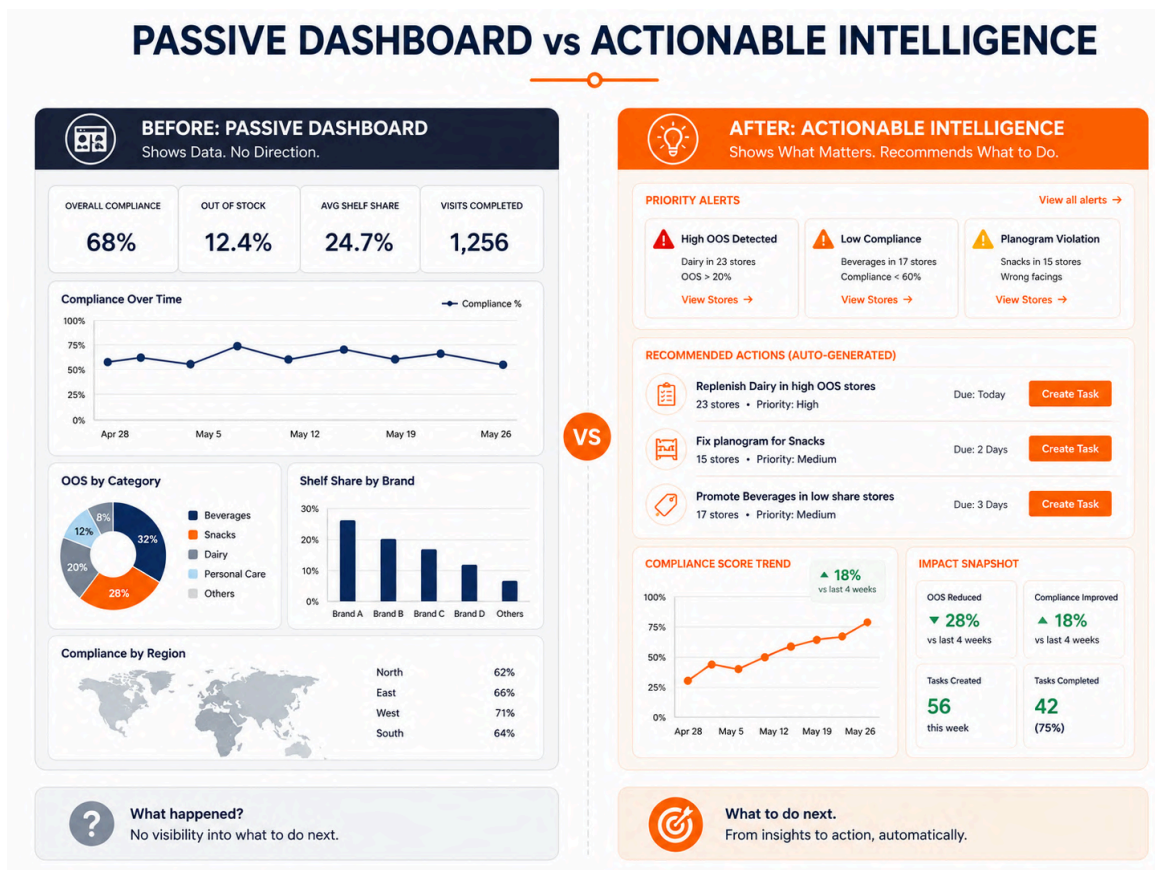
Also ask whether the vendor provides APIs and how flexible those APIs are.

A vendor with strong integration capabilities can fit into existing workflows much more easily.

Many recent computer vision deployments also rely on real-time alerts and workflow triggers rather than just static reports. For example, a shelf issue can automatically create a task, send a message to a rep, or escalate an issue to a manager. Vendors that only provide dashboards without workflow integration may create more work instead of reducing it.

A vendor with strong integration capabilities can fit into existing workflows much more easily.

8. Make Sure Reporting Is Actionable



Many image recognition vendors provide attractive dashboards.

The real question is whether those dashboards drive action.

Procurement teams should assess whether the reporting helps field teams and managers make faster decisions.

For example:

- Can reps see exactly which SKUs are out of stock?
- Can managers identify which stores have the highest compliance gaps?
- Can teams compare performance across regions?
- Can alerts be generated automatically for critical issues?
- Can corrective actions be tracked?

The best solutions do not just measure shelf conditions. They help improve them.

A growing number of vendors now position image recognition as a real-time intelligence layer rather than just an audit tool. The strongest solutions help teams move from identifying issues to fixing them quickly, whether that means improving shelf availability, reducing queue times, correcting pricing issues, or responding to planogram gaps.

Many image recognition vendors provide attractive dashboards.

The real question is whether those dashboards drive action.

9. Understand Commercial Models Clearly

Pricing models for image recognition vary widely.

Some vendors charge per image. Others charge per user, per store, per audit, per month, or per country.

The cheapest option upfront is not always the cheapest option over time.

Procurement teams should understand:

- What is included in the base price?
- Are integrations charged separately?
- Is support included?
- Who validates accuracy and how?
- Is data also reviewed by humans? If yes, who bears the cost?

It is important to model the total cost of ownership over two to three years rather than focusing only on year one pricing.

10. Do Basic Vendor Due Diligence

Before selecting a vendor, procurement teams should also perform basic commercial due diligence.

Image recognition vendors often position themselves as mature, global businesses, but the reality can vary significantly. Some vendors may have strong sales presentations but limited delivery capacity, weak financial health, or very small operational teams.

A few basic checks can provide a clearer picture:

- Review the company's presence on LinkedIn
- Check how many employees they have
- See whether headcount has been growing year over year
- Look at the mix of roles across engineering, operations, customer success, and sales
- Assess whether they appear over-indexed toward sales versus product and delivery teams
- Review how long key leaders and customer-facing team members have been with the company

It is also useful to look for third-party validation.

Review testimonials on platforms like G2 and Capterra and check whether they appear credible and specific. Generic testimonials with little detail are often less useful than reviews that mention deployment timelines, customer support quality, ease of integration, and real business impact.

You should also look for:

- Named customer case studies
- Public client logos
- Conference presentations
- Industry awards
- News about funding rounds or layoffs
- Evidence of expansion into new markets

These signals can help determine whether a vendor is growing steadily and has the stability to support a long-term partnership.

11. Request References From Existing Customers

One of the best ways to evaluate a vendor is by speaking with their existing customers.

Ask for references from companies that are similar in category, geography, and retail environment.

When speaking to references, ask practical questions:

- How accurate is the system in real life?
- How responsive is the vendor?
- How long did deployment take?
- What challenges came up after launch?
- How well did the vendor handle packaging changes?
- Did field teams actually adopt the solution?
- What would they do differently if they were selecting again?

These conversations often reveal far more than a sales presentation.

12. Evaluate the Vendor's Long-Term Product Vision

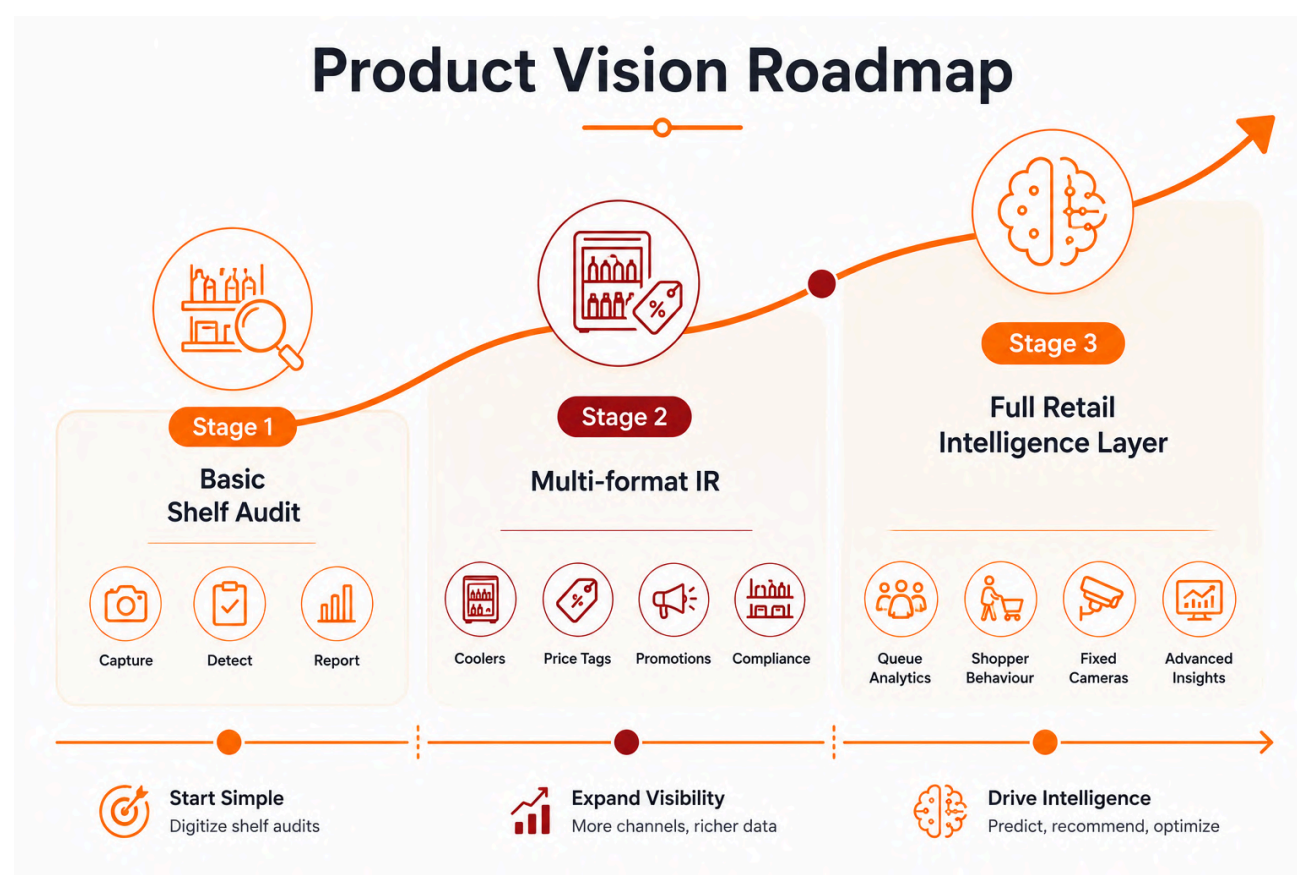
Some vendors only focus on shelf audits. Others are expanding into a broader retail intelligence platform.

That difference matters.

If your long-term roadmap includes areas like cooler monitoring, price tag recognition, display compliance, self-checkout monitoring, queue analytics, shopper behavior analysis, or fixed camera deployments, it is useful to understand whether the vendor can grow with you.

Many retail technology providers are increasingly positioning computer vision as a broader operating layer for stores, covering everything from checking compliance to driving action. That does not

mean every company needs all of those capabilities today, but it is important to know whether the vendor has a roadmap beyond basic image capture and reporting.



13. Do Not Treat AI Vendor Selection Like Traditional Software Procurement

A common mistake in procurement is assuming that prior relationships automatically translate into future success.

A vendor may have delivered a successful CRM rollout, a reporting tool, or a field force automation platform in the past. That does not mean they are capable of delivering a high-performing AI solution.

AI projects require a very different set of capabilities:















- Model training and retraining
- Data annotation operations
- Handling changing inputs and edge cases
- MLOps and monitoring
- Strong customer success teams
- Fast onboarding of new SKUs and packaging changes
- Deep domain expertise

This is why companies should be cautious about selecting vendors with little proven AI experience, even if they are strong in other forms of enterprise software.

The same applies to newer vendors with impressive presentations but limited production deployments.

When AI initiatives fail, it is often because buyers assume the technology is plug and play. In reality, successful AI deployments depend on strong processes, operational discipline, constant model improvement, and deep category expertise.

Traditional Software vs AI Vendor Requirements

 Traditional Software Vendor Requirements	 AI Vendor Requirements AI-Specific
 Configuration & Customization	 Model Training Operations AI-Specific
 Workflow Setup	 Annotation Pipelines & Data Quality AI-Specific
 SLA & Uptime	 MLOps & Deployment Automation AI-Specific
 Integrations	 Category Expertise & Image Library Depth AI-Specific
 User Roles & Permissions	 Retraining Cadence (Agility) AI-Specific
 Reporting & Dashboards	 Edge Case Handling (Poor light, occlusion, variants) AI-Specific

 AI-specific requirements that traditional software vendors typically lack

Final Thoughts

Selecting an image recognition vendor is a strategic decision, not just a procurement exercise.

Unlike traditional enterprise software, image recognition is not deterministic. It requires ongoing learning, retraining, monitoring, and support.

That is why buyers should be skeptical of vendors that position image recognition as a simple plug-and-play commodity.

The right partner is not just selling software. They are providing technology, operations, data management, customer success, and category expertise together in one offering.

The right vendor can help improve retail execution, reduce manual work, increase visibility into store conditions, and drive measurable sales impact.

The wrong vendor can create operational headaches, poor field adoption, and low trust in the data.

The most successful companies focus on more than just demos, pricing, and headline accuracy claims. They evaluate real-world performance, scalability, service capability, integration strength, and long-term partnership potential.

In image recognition, what matters most is not how good the demo looks. What matters is how well the solution performs in real stores, with real shelves, and under real-world conditions.