

Custom API Integration Platform For a Real Estate Unicorn Startup

How automating everyday interactions between key applications enabled a real estate startup to slash data processing costs by **60%** and save up to **30 hours** per employee monthly.



Business challenge

According to McKinsey, up to 69% of data collection and processing tasks can be fully automated. Meanwhile, without automation, they become significant drains on time and resources.

Avenue One, a rapidly growing **US-based real estate startup**, discovered it firsthand. Doubling down on scaling their single-family rental (SFR) service platform, they put process automation on the back burner until it began to impact productivity.

All these problems arose from the **lack of seamless, automated communication between the client's most-used tools**, including Monday.com, Box.com, SiteCapture, Spruce, and Qualia.

Given Avenue One's AWS-based **event-driven architecture**, choosing **event-driven automation** and **connecting disparate apps through a custom multi-tool API** integration was a quick-win option. Nevertheless, this win was not easy to achieve due to other challenges:

Manual data checks, follow-ups, and the constant back-and-forth between different tools ended up wasting employees' time — 20 to 30 hours each month per person. But the time loss was just the tip of the iceberg. The manual operations:

- Created **delays** due to lack of real-time data exchange between the systems
- Led to **inconsistent, error-prone** data
- Increased **complexity** for the staff, forcing them to juggle several tools constantly

No in-house personnel

to take on this side project without trade-offs in product development.

No time

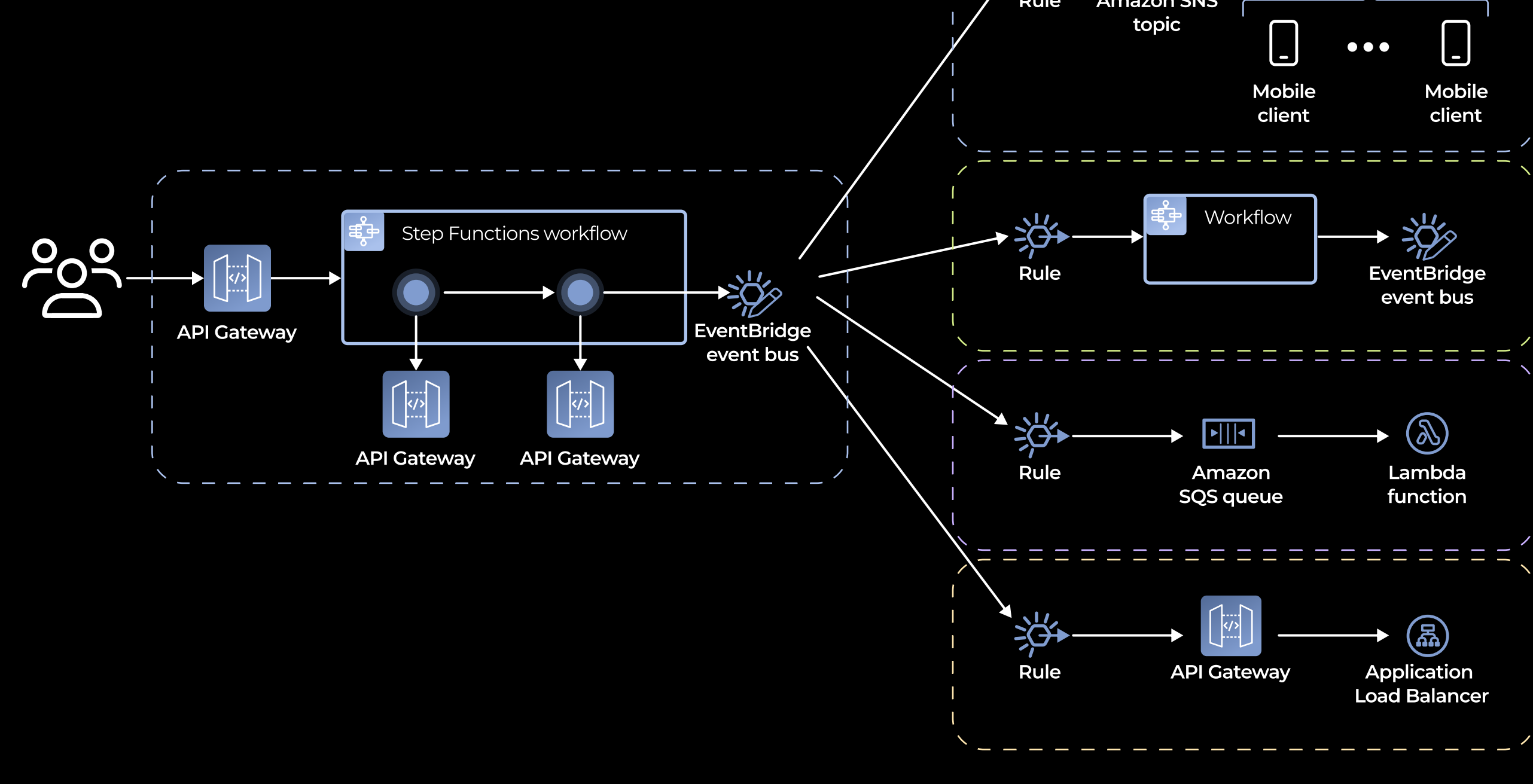
to hire new specialists on the core team, as automation needed to be done ASAP.

Expanding their in-house team with external experts was the fastest way to get things moving.

Solution

Our approach was simple yet powerful. Avenue One's AWS-heavy tech stack (including S3, Lambda, and DynamoDB) provided a solid foundation. We enhanced it with:

- **AWS Step Functions** to orchestrate automated data exchange within the client's software ecosystem
- **AWS EventBridge** to route events between Monday.com, Box, SiteCapture, Spruce, Qualia, etc.
- **Elasticsearch** for fast document indexing and company-wide search
- **Smarty API** for address validation



In just **2.5 weeks** our backend engineers created a consolidated software ecosystem with automated workflows by **designing 100+ events and setting up routes for them**.

Well-orchestrated automation also granted **seamless scalability** to the client's software ecosystem. New tools can be easily added to established workflows.

01 How our custom multi-tool API integration works in practice

The new solution **connects the client's project and document management, on-site operations, logistics, and title & closing services**. Now, tedious tasks that once bogged down employees are handled automatically. Staff can focus on real problem-solving and strategic decision-making.

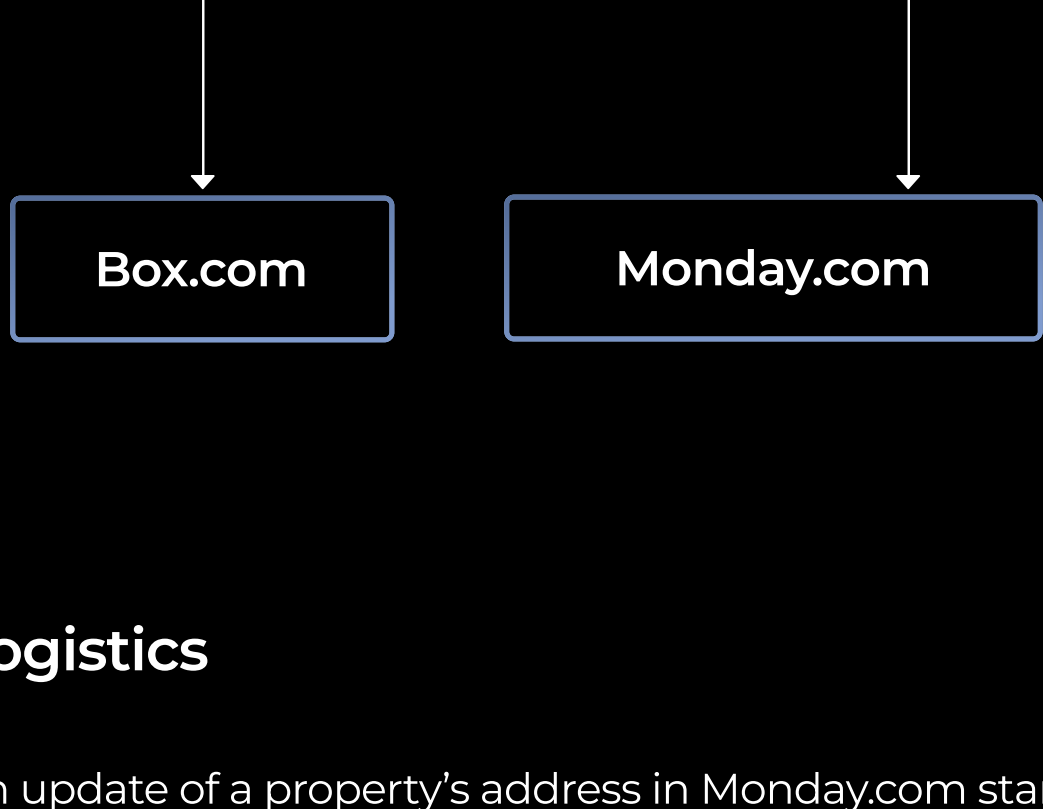
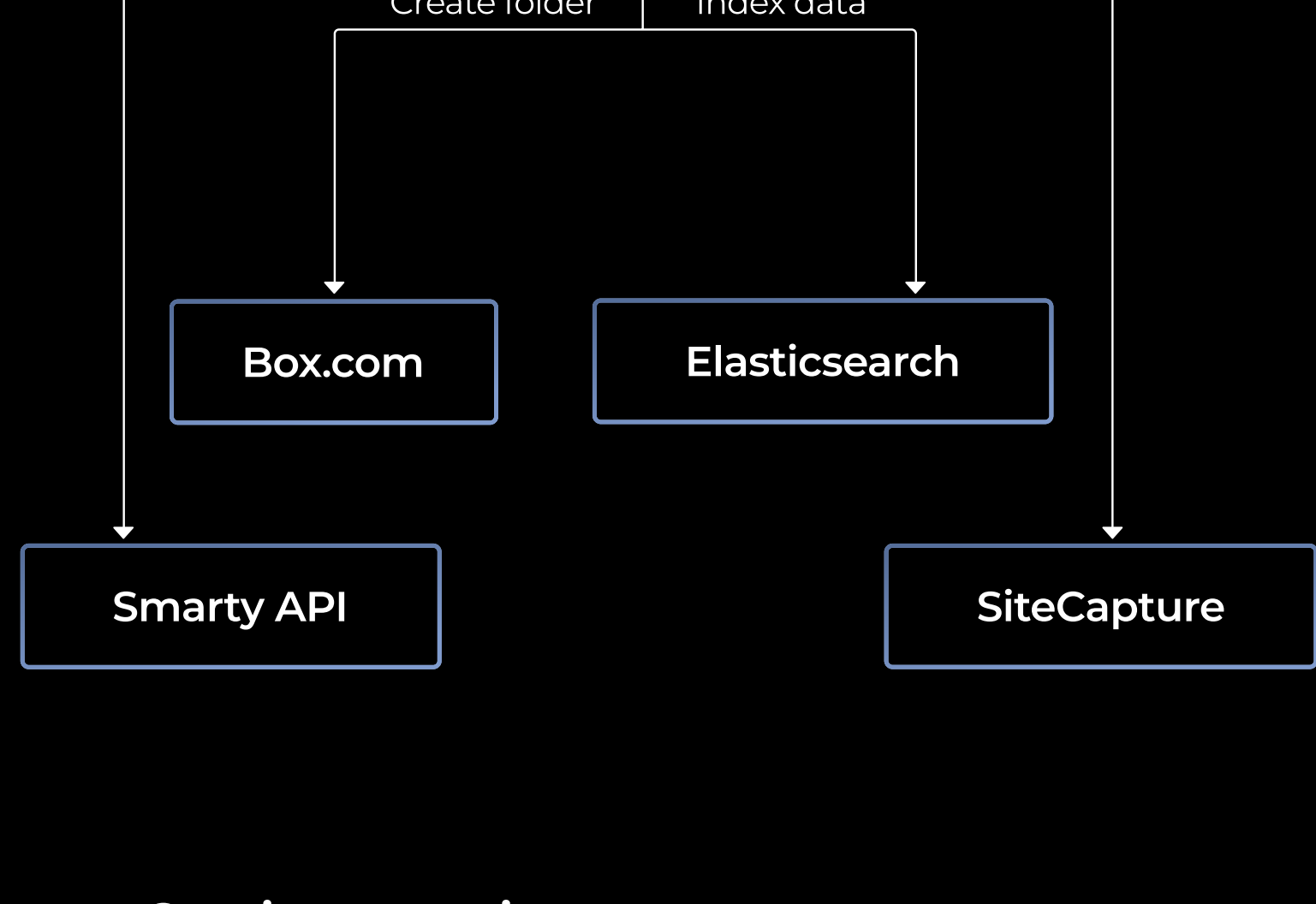
Here is how the automation powers several key workflows across Avenue One's business functions.

Project management

The creation of a project item with a new property in Monday.com triggers several parallel routes:

- Lambda validates the address via Smarty API and updates the property's entry
- A new project folder is created in Box.com for all related documents
- A corresponding new project entry is created in SiteCapture for on-site inspectors
- Key property's data is indexed in Elasticsearch for immediate searchability

That way, staff from different departments can **access error-free data on the new project within seconds**.



On-site operations

When an on-site inspector uploads the property's photos in SiteCapture, this event sets off two parallel routes:

- The photos are copied to Box.com to ensure all project files are backed up in the cloud
- A corresponding item in Monday.com is updated with a link to the photos (from Box.com or SiteCapture)

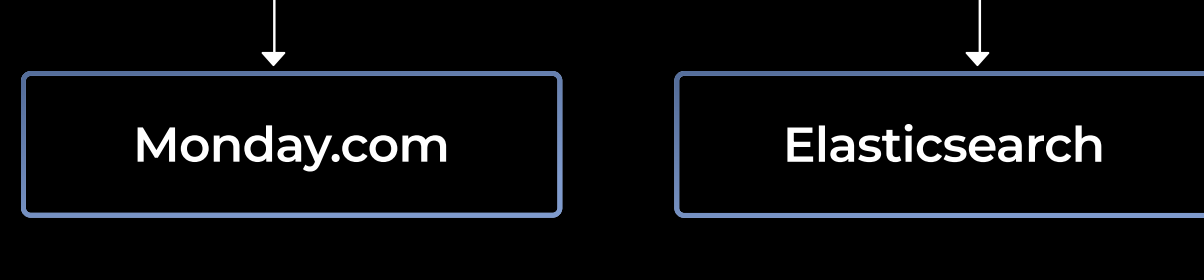
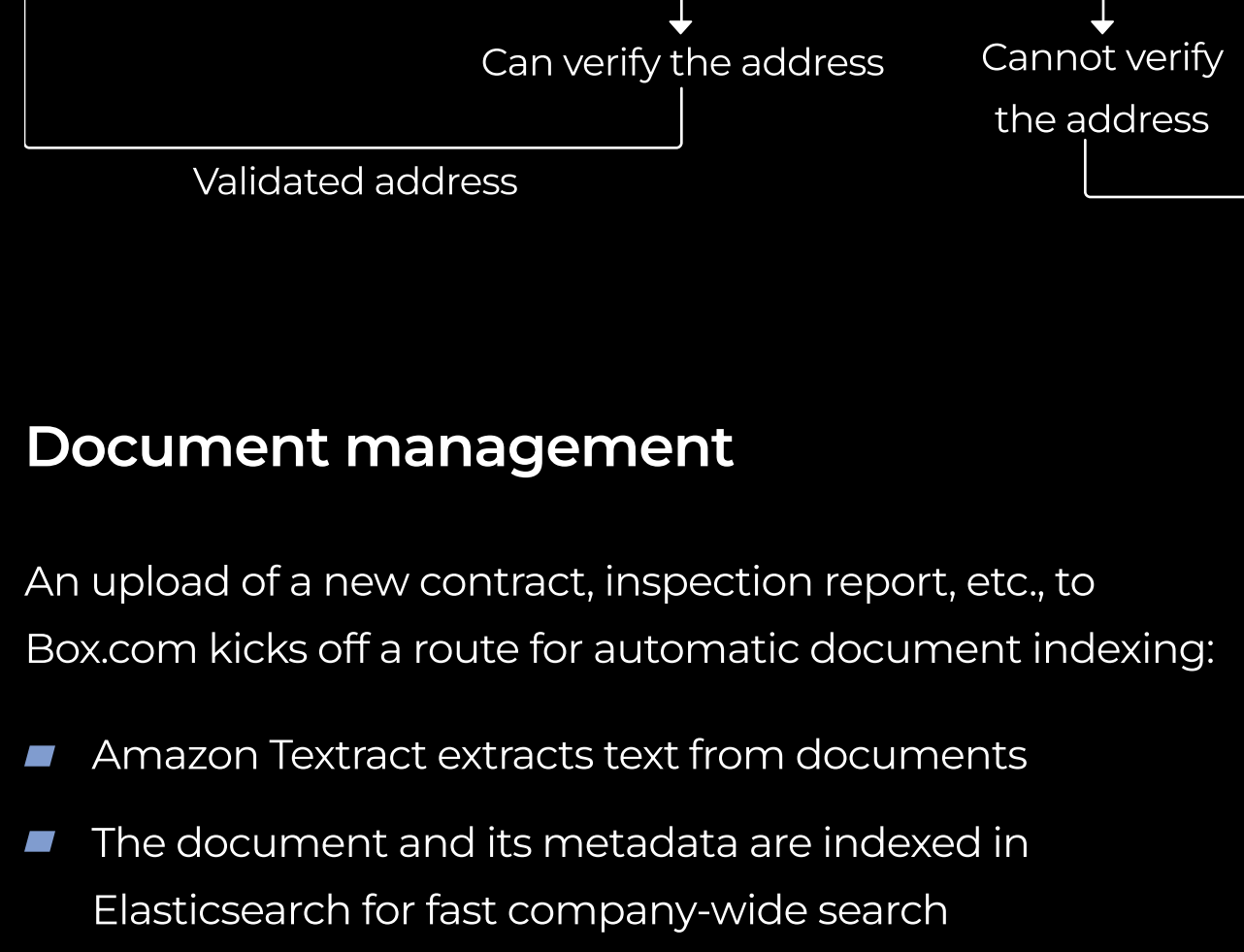
That way, essential information on the project is never lost, and **on-site workers and office personnel always stay on the same page**.

Logistics

An update of a property's address in Monday.com starts a sequence of actions:

- Lambda verifies the address through the Smarty API
- The validated address is then updated in Monday.com, with incorrect addresses flagged for review

That way, all addresses are correct from the onset, **eliminating the risk of transaction delays**.



Document management

An upload of a new contract, inspection report, etc., to Box.com kicks off a route for automatic document indexing:

- Amazon Textract extracts text from documents
- The document and its metadata are indexed in Elasticsearch for fast company-wide search

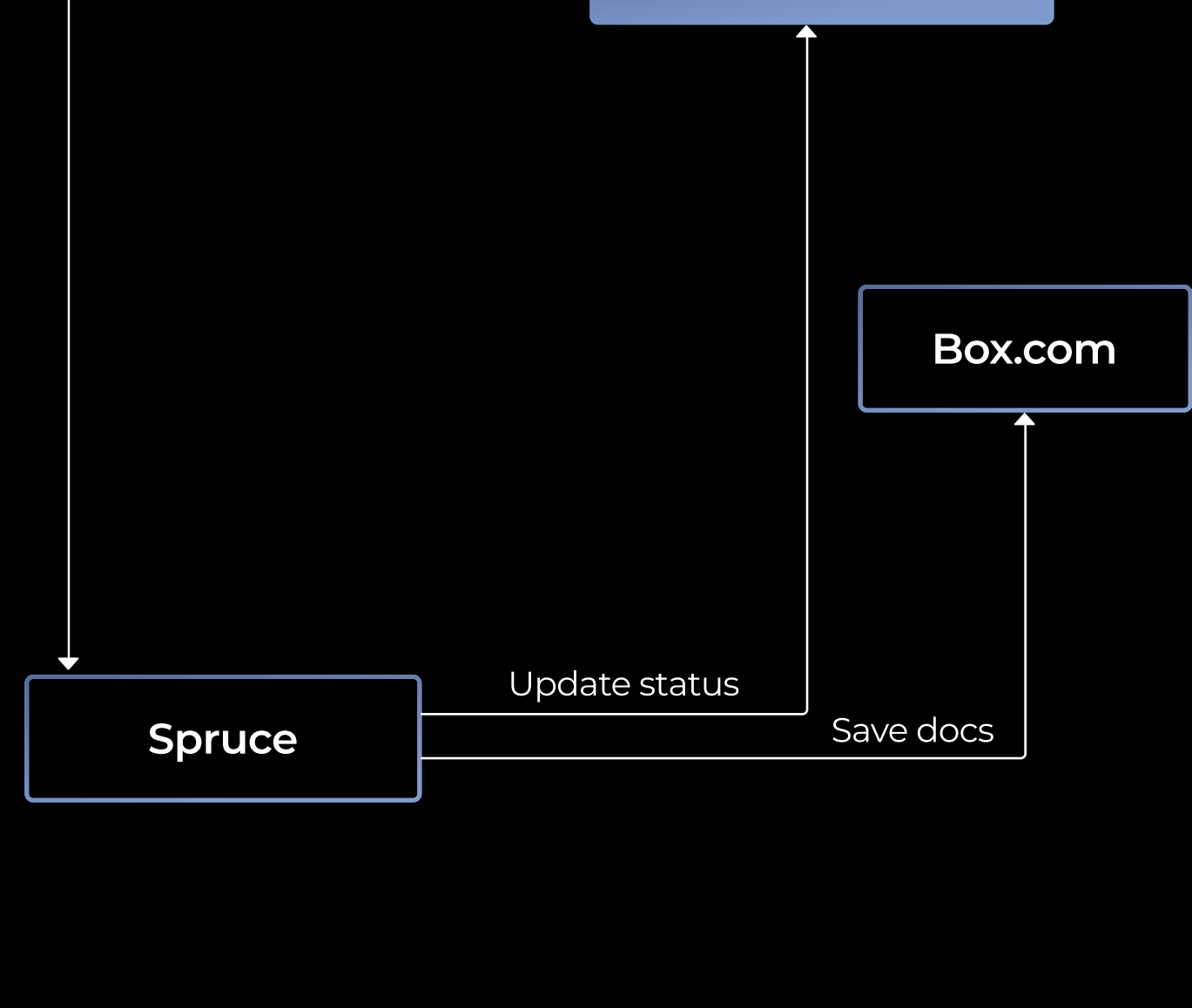
That way, **new documents become searchable company-wide within seconds after they've been uploaded** into any of the apps.

Title tasks

Moving a deal's status in Monday.com to "Ready for Title" sets in motion a multi-step route:

- The Spruce API runs a title search, validating address and buyer/seller info
- When Spruce completes the title work, it triggers two more routes:
 - Title commitment documents are automatically saved to Box.com
 - The corresponding deal status in Monday.com is marked "Title Completed"




That way, **vital real-estate documents are processed immediately and stay safe from human error**.



02 Here's how API integration streamlined our client's daily workflows

10 minutes here and 15 minutes there don't look like a big deal. Until you do the math: 10 min × number of times an employee repeats this action throughout the day × number of employees.

That's how our client **wasted hours** on repetitive mundane tasks daily. Now all these actions are done in milliseconds without human input.

Process	Before (manual)	Now (automated)
Adding photos from on-site inspectors to Box.com and Monday.com	 15-20 minutes Copying photos from SiteCapture to Box.com and updating the deal in Monday.com	Webhook → EventBus → Box.com / Monday.com
Uploading title documents	 20-30 minutes Verifying buyer/seller info, uploading title documents to Box.com, and updating deal status in Monday.com	Spruce → Box.com / Monday.com (automatic forwarding + notifications)
Address validation	 10-15 minutes Validating address by googling it or cross-referencing tax records	Smarty API + automatic validation
Reports for management	 50-75 minutes Exporting reports from Monday.com, Box.com, and Qualia and merging the data in Excel	Elasticsearch → Detailed real-time dashboards

Before

- Data siloed across disconnected apps
- Manual, error-prone updates across platforms
- Slow deal processing due to manual checks and data transfers
- Employees overloaded with repetitive tasks

After

- Disparate apps are united into a cohesive ecosystem
- Real-time, automated data exchange across systems
- Immediate actions triggered by changes in any app
- Employees freed from mundane tasks, focusing on higher-level decision-making

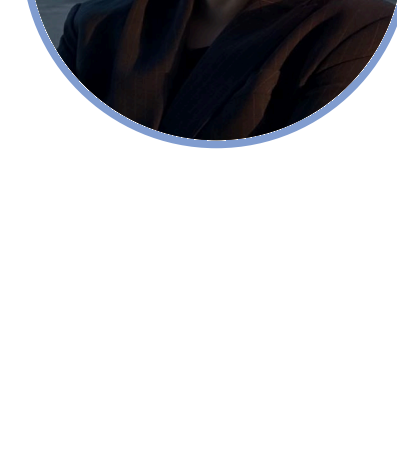
Business value

- A **completely unified and highly scalable** software ecosystem that adapts to new tools and processes
- **Real-time data exchange** across platforms
- **60% reduction** in data processing cost
- **Up to 30 hours saved** per employee monthly
- **Minimized** risk of human error

Client's testimonial



The team demonstrated effective project management, timely delivery, and responsiveness to our needs. They established open communication to facilitate ongoing dialogue and held regular sprint meetings to keep stakeholders informed and engaged throughout the development process.



Alisa Delikatna

COO, LeanSquad Software
(*Instinctools' supervising partner on the Avenue One project)

Multiplier effect

The problem of wasting employees' potential on dull work refers to industries across the board. It's easy to overlook the time spent on small tasks, but when you add it all up over weeks or months, the cost becomes significant.

Luckily, **process automation**, in all its forms — from API integrations to AI agent solutions — offers an opportunity to save time, reduce costs, and improve accuracy, unlocking your team's full potential and elevating your business to new heights.



Do you have a **similar project idea**?