Taming Legacy Platform Terror with a Global Marcomm Firm & Publisher

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THE CHALLENGE

A business services provider had so cluttered its legacy ERP with add-ons that the vendor refused to support it.

THE SOLUTION

Re-architect the system to unburden the ERP and provide cleaner, faster change data to a wide network of affiliates.

THE RESULTS

The reimagined legacy platform morphed from Achilles' heel to engine of growth.

The whole story...

Every business has to grapple with the legacy terror this client was facing: You've outgrown a core system, but it's so intrinsic to daily operations that you just can't replace it. So workarounds and add-ons keep getting slapped on until you have a teetering behemoth keeping you up at night. We were called in to (a) restore and stabilize the legacy system and (b) improve data delivery to the business service provider's clients.

While the competition was pushing off-the-shelf software products the company knew would be insufficient, Mind Over Machines won the bid by partnering with the client to establish project criteria and build a creative solution to meet them. We proposed a service bus of change events. As things happen in the ERP, they would be published out for any number of subscribers to receive. Data would be normalized, sequenced and transmitted to affiliates in under two minutes, end to end.

Agile development happened over three phases:

- Remove legacy add-ons altering the ERP schema.
- Build a basic capability for one external system to receive all the change events it needs.
- Remodel the data based on our findings and open it up to multiple systems and lines of business.

We moved the client from their highly proprietary architecture to a standards-compliant environment with JSON entities easily consumable by modern cloud-based tools like Amazon Kinesis and Azure Functions. The hybrid cloud approach spanning an on-site service bus, Microsoft Azure and AWS provides scalable flexibility to grow with the company.

Now the client delivers normalized, linear, streaming data affiliates can react to in real-time. The main feed maintains 1,000 change events per second steady state and bursts up to 10,000. It routinely generates around 25 million events per day on average and about 1 billion events per month. An elegantly simple Angular web UI continually tracks the system's two vital KPIs: end-to-end latency and transaction volume. The original latency spec was under 2 minutes, but the actual target is under 5 seconds, and the system meets it 98% of the time!

Using agile development and meticulous commitment to the criteria we worked with the client to establish, we were able to unburden the legacy platform, vastly improve data flow to the end customers, and open the entire system to easily integrate with the cloud-based data services of today and tomorrow.