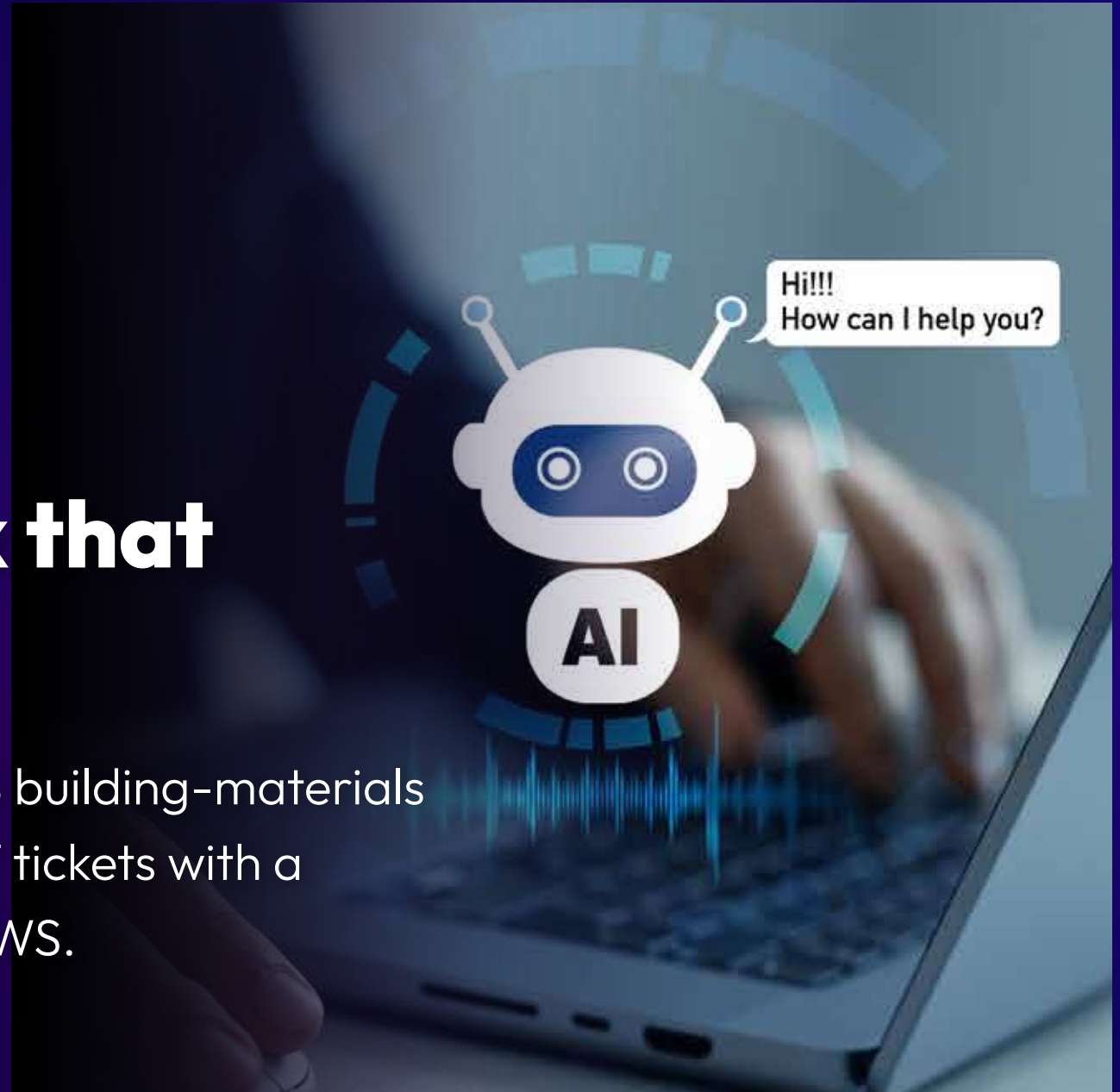




An IT help desk that answers itself

How we helped a national US building-materials distributor replace manual IT tickets with a self-service AI assistant on AWS.



At a glance

- A national US building-materials distributor ran internal support through manual Zendesk tickets, with rising workload and slow responses.
- We built an AI support assistant on Amazon Q Business, grounded in curated content and historical Zendesk resolutions.
- Employees get immediate answers with cited sources, and can open tickets from the assistant when they still need a human.
- Live in production for ~3,500 employees in under three months, across IT, HR, Finance, and Operations.

Every question, however routine, became a ticket. And every ticket waited in the same queue - behind a help desk that could only scale by adding people, not answers

Every question was a ticket

A manual, ticket-driven help desk that grew more expensive with every new employee.

Our client is a national distributor of building materials operating across the United States - a large enterprise with roughly 3,500 employees spanning IT, HR, Finance, and Operations, and steadily growing demand for internal support.

That support ran on a fragmented, manual model. Common questions and one-off issues alike were submitted

as tickets through Zendesk and helpdesk channels, then worked by hand. As the employee base grew, so did the strain: response times slipped, agent workload climbed, and support quality varied from one interaction to the next. The model could only scale by adding people - which meant rising cost, lost productivity, and a ceiling on how much support the business could provide. The opportunity was clear: a self-service layer that could answer routine questions instantly, cut ticket volume, and free agents to focus on the genuinely complex problems.

A support assistant that cites its sources

We put an AI assistant in front of the help desk - one that answers from the company's own content and knows when to bring in a human.

We built an IT Support Assistant with Amazon Q Business at its core, designed to answer employees directly from the company's own knowledge. It draws on curated support content stored in Amazon S3 alongside historical Zendesk ticket resolutions, pulled in through native data connectors - so answers come grounded in what the business already knows, with cited sources employees can trust.

Security and governance were built in from the start. Secure identity federation runs through AWS IAM Identity Center with Azure Active Directory, AWS Secrets Manager handles credentials, and Q Business Guardrails enforce responsible-AI boundaries on what the assistant will and won't do. We also developed a custom Zendesk plugin so employees can open a support ticket straight from the assistant when they still need a person - while respecting a specific governance rule that tickets cannot be closed through that same interface.

To meet employees where they work, we delivered the assistant two ways against the same Q Business backend: a custom Windows desktop application distributed through Microsoft Intune, and a web UI.

We rolled it out in phases - starting with a pilot group and hardening the solution before full production. Brillio

and AWS co-managed a dedicated test instance throughout, so issues surfaced and were resolved before anything reached production. Each stage was validated end to end: ingestion pipelines, AI response quality, security configurations, Zendesk integration, and Azure AD federation, with staged onboarding and regression checks before scaling to the full employee base.

Answers first, tickets only when needed

A unified AI support layer, live for the whole company in under three months.

The IT Support Assistant is fully in production, serving the company's roughly 3,500 employees across IT, HR, Finance, and Operations. It went from concept to a unified enterprise support layer in under three months - a fast path to value for a change this broad.

The shift shows up in how support now works. Routine queries get immediate, AI-generated answers with cited sources, and common issues resolve through self-service instead of a manual ticket. Reliance on fragmented manual channels is down, employee issues get resolved faster, and the business finally has a scalable support foundation - one that grows with demand without simply adding headcount.

The numbers behind the shift

- **3,500 employees** served across IT, HR, Finance, and Operations
- **Under 3 months** from concept to full production
- **Cited-source answers** replacing manual tickets for routine queries



ABOUT BRILLIO

Brillio is The Enterprise AI Accelerator helping Fortune 1000 companies move from AI ambition to scaled impact, faster. Powered by our AI accelerator platform – Agentic Data and Application Management (ADAM), Brillio is one of the fastest-growing digital technology service providers, delivering transformation across five core workstreams: business-led transformation, customer experience transformation, AI and data engineering, digital engineering, and infrastructure engineering.

With 14 delivery locations across North America, Europe, and Asia and a team of over 6,000 customer-obsessed professionals, Brillio combines deep industry expertise, modern engineering, and accelerators to deliver measurable outcomes. Headquartered in Dallas, Texas, Brillio serves clients globally with a commitment to speed, scale, and measurable impact.



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