

BRIEF

Build vs. Buy in the AI Era

Why custom embedded analytics got harder, not easier

THE SHORT VERSION

01

AI changed the cost of writing software. It did not change the cost of owning it.

02

External analytics delivery is now two problems, not one: delivering the analytics, and governing the AI output that reaches people outside your organization.

03

Build or buy is the wrong frame. The right frame is which layer you build, and which layer you should never own.

01

SECTION 01 What changed

The classic trade off still holds. Build gives you control and customization at the cost of expertise, resources, and maintenance. Buy gives you speed and supported maintenance at the cost of some customization. That framing is now incomplete for three reasons.

- 1 The first version got cheap.** Scaffolding an embedded report viewer with Entra ID authentication is well patterned work, and AI assistants do it in days rather than weeks. A team reaches a convincing demo in a sprint.
- 2 The requirement moved.** External users now expect to ask a question in plain language and receive a written, correct, data specific answer. That is a second system, not a feature.
- 3 The consequences hardened.** An AI generated statement delivered under your brand to a customer or a regulated counterparty is a contractual and compliance event, not an internal disagreement about a number.

NET EFFECT

The cheap part of a build got cheaper and the expensive part got more expensive. Anyone comparing build and buy on first version effort is comparing the smallest and fastest shrinking component of the total cost.

02

SECTION 02

The demo is not the product

Embedded analytics has a flattering demo. One report, inside your own application shell, with your logo on it, looks finished. It is the part AI now generates quickly, which is exactly why it is no longer a useful signal of progress. Separate two states:

DEMO COMPLETE

One report renders for one user in one tenant on a test environment.

DELIVERY COMPLETE

Every customer sees only their own data, under their own branding, with their own user administration, an auditable access model, a support path, and survival of the next Power BI platform update.

COMPONENT OF A REAL BUILD	WHAT IT ACTUALLY REQUIRES	HOW MUCH AI HELPS
Embedding and authentication	Service principal management, token lifecycle, secret rotation, session handling.	HIGH Fast to scaffold.
Multi tenant data isolation	Row level security design, tenant to identity mapping, proof that tenant A cannot see tenant B.	LOW The code is easy. The proof is not.
External user administration	Invitation, provisioning, deprovisioning, roles, self service access, support tooling.	MEDIUM This is a product, not a feature.
Capacity and cost management	Capacity sizing, scale and pause logic, noisy tenant handling, per customer cost attribution.	LOW Needs live load and commercial judgement.
AI question answering	Tenant scoped grounding, retrieval design, model hosting, output logging, hallucination controls.	MEDIUM for a prototype. Low for production.
AI governance and approval	Source attribution, human review before publication, audit evidence, retention.	LOW Process and architecture, not code.
Lifecycle maintenance	Power BI API changes, Azure service changes, dependency and security patching.	MEDIUM and permanent. This cost never ends.

03

SECTION 03

The cost nobody planned for: governed AI to external audiences

Adding AI to an internal tool and adding AI to an external portal are not the same project. The difference is not model quality. It is everything that has to be true around the model before an answer is allowed to leave your organization.

Tenant scoped grounding, so an answer can only be built from data the recipient is entitled to see.

Source attribution, so any answer traces back to the dataset and calculation behind it.

Human approval before publication for anything carrying commercial or regulatory weight.

An audit trail of what was asked, answered, used and approved. This is the artifact enterprise customers ask for.

Retention and deletion, because prompt and output logs are customer data.

Inference locality, because many regulated buyers will not accept data leaving their tenant for inference.

Defined behaviour under uncertainty, so the system says it does not know rather than answering confidently.

Each is buildable. Together they are a subsystem with its own architecture, testing burden and compliance evidence. They are not a sprint, they are a roadmap, and they are what procurement and risk teams now ask about directly.

THE QUESTION THAT DECIDES MOST BUILD PROJECTS

~~Not can we build AI question answering on our Power BI data:~~

But can we prove, to a customer's risk team, how every AI statement we sent them was produced, grounded, reviewed and retained.

04

SECTION 04

What most build estimates leave out

- 01 Scope to delivery complete rather than demo complete, including isolation testing and external user administration.
- 02 Annual maintenance as a percentage of the original build cost, every year, indefinitely.
- 03 Absorbing Power BI, Entra ID and Azure platform change on Microsoft's timeline rather than yours.
- 04 Security questionnaires, penetration test evidence and architecture review, repeated per enterprise deal.
- 05 AI governance costed as a separate project, not a feature of the analytics work.
- 06 Opportunity cost and key person risk. The engineers building delivery infrastructure are not building your product.
- 07 The delay. If buying reaches production two or three quarters earlier, that revenue belongs in the comparison.

05

SECTION 05

When building is the right call

Build when most of these are true. If three or more are false, the build will be approved on its first version cost and paid for at its total cost of ownership.

- ☐ The delivery interface itself is your differentiation and customers choose you for it.
- ☐ You have permanent platform engineering capacity across Power BI, Azure, identity and front end, budgeted for years.
- ☐ Your embedding, identity or data model requirements fall genuinely outside what any platform supports.
- ☐ You have no external AI requirement, or you already run a governed AI platform.

06

SECTION 06

The third option: buy the delivery layer, keep the platform

Build versus buy implies one decision. There are three layers, and most organizations should choose differently at each. Keep Power BI, it is your asset. Buy the governance around AI intelligence, because building the model layer is achievable but building the proof around it is the expensive part. Buy governance and delivery outright, because it is infrastructure rather than differentiation and it looks identical across every organization that needs it.

This is where Reporting Hub sits. It is the layer after Power BI: **governed delivery of analytics and AI intelligence to people outside your organization, under your brand, inside your own Azure tenant.**

Branded portals per customer, with no additional Power BI licences and no exposure of your internal workspace.

Multi tenant by design. One deployment serves every audience with its own branding and access rules.

AI that shows its work. Every answer traces to the data behind it, and nothing publishes externally without your approval.

Deployed in your own Azure environment. Analytics and AI inference run in your tenant, with no data egress.

Commercially packageable, so analytics and AI become a tiered product rather than a free feature.

WHAT YOU ARE BUYING

What you are buying is not a report viewer. That is the part AI already writes for you. It is the governance model, the security posture that survives enterprise review, the ongoing absorption of Microsoft platform change, and an organization accountable for all three.

07

SECTION 07 Quick check

Score these honestly. Every answer in the right hand column is a reason the build will cost more than its estimate.

QUESTION	POINTS TO BUILD	POINTS TO BUY
Is the delivery interface itself your differentiation?	Yes, customers choose us for it.	No, they choose the underlying service.
Do you have permanent platform engineering capacity?	Yes, budgeted indefinitely.	No, or it is on the core product.
Do external users need AI question answering?	No, or we govern AI already.	Yes, and we have not built AI governance.
How many external audiences will you serve?	One or two, stable.	Many, each needing its own branding and rules.
Will enterprise or regulated buyers review your architecture?	Rarely.	Yes, and each review is new work for a build.
How quickly do you need production?	Timing is flexible.	This quarter or next.

THE LAYER AFTER POWER BI

Reporting Hub delivers **governed analytics and AI intelligence** to audiences outside your organization, under your brand, inside your own Azure tenant.

“The Reporting Hub, integral to our Microsoft Power BI Embedded solution accelerator program ... significantly speeds up time-to-market by seamlessly integrating with existing authentication systems.”

Principal Program Manager, Power BI Embedded, Microsoft

4.5 / 5

on G2 across Small Business, Mid Market and Enterprise segments

300,000+

active users across more than 30 countries

**Microsoft
Solution
Accelerator
Partner**

a recommended Power BI Embedded accelerator solution

30 days

free trial, no credit card required

Get the full analysis

A full length analysis of the build decision, including a three year cost of ownership framework, a risk register and an engineering question set, is available on request.

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