

ILLUSTRATIVE Hypothetical workload. Every cost is an assumption for illustration, not a quote or a forecast.

Should this workload move to AWS? A worked example

A completed comparison for a fictional application, showing the costs a real decision has to include. Change the assumptions and the answer can change.

01 THE WORKLOAD (HYPOTHETICAL)

ITEM	ASSUMPTION
Application	A B2B analytics product: a customer-facing web app and API, plus a nightly analytics batch tier
Today	Runs with another cloud provider in a US region
Comparison	36 months, in US dollars. Usage held flat so the options compare like for like
Contract	A committed-spend agreement with 14 months left, at a minimum of \$9,000 a month
Licensing	No change in third-party licence costs between options

02 CURRENT MONTHLY RUN COST (ASSUMED)

COST LINE	PER MONTH	SOURCE IN A REAL CASE
Compute	\$11,000	Current invoices
Managed database	\$5,000	Current invoices
Storage and network	\$3,000	Current invoices
Support and tooling	\$3,000	Current invoices
Total	\$22,000	

03 ESTIMATED RUN COST AFTER EACH OPTION (ASSUMED)

OPTION	PER MONTH	BASIS
A. Remain and optimize	\$19,000	Right-sizing and scheduling with the current provider
B. Move the analytics batch tier only	\$18,500	\$11,000 current provider plus \$7,500 AWS
C. Move the whole workload	\$17,500	AWS design estimate

These are assumptions. In a real case the AWS figures come from pricing the actual design for the chosen Region on a stated date, and the current figures from billing exports. No provider is assumed to be cheaper by default.

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The comparison

One-time costs, year-one cash and the 36-month total for each option, against doing nothing.

	DO NOTHING	A. OPTIMIZE	B. PARTIAL	C. FULL MOVE
One-time engineering	-	\$45,000	\$90,000	\$210,000
Contingency (20% of engineering)	-	\$9,000	\$18,000	\$42,000
Data movement and egress	-	-	\$6,000	\$18,000
Temporary dual running	-	-	\$8,000	\$60,000
Training and operating changes	-	-	-	\$10,000
One-time total	-	\$54,000	\$122,000	\$340,000
Months at today's \$22,000	36	3	4	6
Unused contract commitment	-	-	-	\$72,000
Run cost after the change	\$22,000	\$19,000	\$18,500	\$17,500
Year-one cash	\$264,000	\$291,000	\$358,000	\$631,000
36-month total	\$792,000	\$747,000	\$802,000	\$1,069,000

C keeps paying the \$9,000 minimum for months 7 to 14 after moving. Dual running in C is three months of AWS at \$20,000 while the current environment still runs. B keeps more than \$9,000 a month with the current provider, so no commitment is left unused.

WHAT THE NUMBERS SAY

- **A costs least over 36 months** and has the smallest year-one cash need above today.
- **C's lower run cost does not pay back here.** It saves \$1,500 a month against A, but costs \$322,000 more over 36 months. To match A, its AWS run cost would need to fall to about \$6,800 a month.
- **B is close to A** but adds risk and work for a small difference in run cost.

A SEPARATE, HYPOTHETICAL FUNDING SCENARIO

Not in the base case. Suppose an AWS program approved \$50,000 in usage credits, and all of it could be used against eligible AWS charges before it expires, within the 36 months. Credits offset eligible AWS usage only, not engineering fees. B's 36-month total would fall to \$752,000 and C's to \$1,019,000, so A still costs least. No award is assumed, and approval depends on AWS.

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The recommendation and the first step

In this example the evidence favors staying and optimizing now, and revisiting a partial move when the contract ends.

Recommendation: A, remain and optimize. Revisit B in month 12, ahead of the commitment ending in month 14, or sooner if the evidence below changes.

EVIDENCE THAT WOULD CHANGE IT

- A priced AWS design materially below the assumed run cost, for the chosen Region and date.
- Contract terms that let the commitment be reduced or moved.
- A product need that one platform meets and the other does not.
- Growth fast enough that the options' run costs drift apart.

IF A MOVE GOES AHEAD: GATES AND ROLLBACK

GATE	PASSES WHEN	IF IT FAILS
G0	Business case rebuilt on evidence, not assumptions	Stay with option A
G1	One analytics job migrated in staging; outputs reconciled with the current system	Fix and repeat, or stop
G2	Production cutover with the current environment kept running	Switch traffic and jobs back; reverse-sync data
G3	Stable for an agreed period; data owner signs off reconciliation	Keep dual running until it passes
G4	Old environment decommissioned	-

Data reconciliation means row counts, checksums and business totals matched between old and new, signed off by the data owner.

THE LIMITED FIRST STEP

Replace assumptions with evidence. Ninety days of billing exports, a service inventory, the AWS design priced for the chosen Region on a stated date, the commitment terms from the contract, and a test migration of one analytics job with reconciliation. The decision is then remade on real numbers.