

Follow the Leaders:

5 things we learned from the latest tech stack trends

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When it comes to business, getting your tech stack right is a big deal. The ideal mix of cloud, mainframe, and distributed servers can strategically slash IT costs and even outperform rival organizations. With IT now consuming over 34% of total operating costs, how businesses balance their tech stack can be the difference between leading the market or falling behind.

Last year, Broadcom partnered with Rubin Worldwide, the world's leading researcher in business and technology economics to examine how businesses are using their tech stacks and what it means for their bottom lines. What we found was compelling. Leading companies are investing more in cloud and mainframe to outpace the competition.

A lot has occurred over the past year, however. Markets have shifted. Trends have changed. GenAI has taken center stage. And consumer expectations have continued to rise. What does this mean when it comes to IT strategy and tech economics? To get answers, we tapped Rubin Worldwide again to analyze how the latest shifts and trends have impacted our inaugural "Technology Asset Class Optimization" study.

After crunching the numbers and surveying the most recent technology investment choices and performance of 2,400 global companies, this is what we found.

1

Striking the right balance reduces businesses' cost per transaction. In a first-of-its-kind analysis of the "Technology Cost of Goods" - that is, how much it costs to complete one transaction - this year's report found that companies who are running more workloads on cloud and mainframe are able, on average, to complete transactions for less cost. This means they're getting a better return on their IT investment; more for less. This trend is true across industry sectors, but especially pronounced in transportation, retail, healthcare, and finance.

For example, best-in-class airlines who invest more heavily in mainframe reduce their cost per passenger by over 35% when compared to both cloud heavy companies and average performers (e.g. \$7.63 cost per customer for mainframe heavy orgs vs \$10.78 per customer for average performers and \$11.71 per customer for cloud heavy orgs). Furthermore, mainframe heavy companies enjoy a 20% reduction in the cost per retail transaction, cost per hospital bed, and overall cost in insurance coverages when compared to cloud heavy and/or average performers. (See full chart for details).

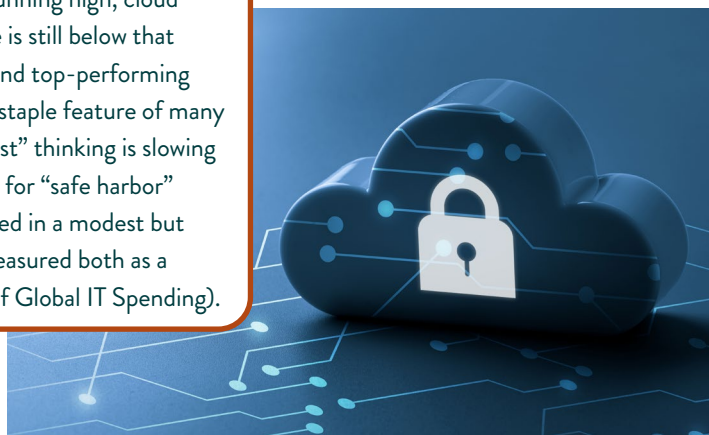


2

Hybrid IT still dominates. And for good reason. Consistent with last year's findings, a hybrid cloud and mainframe stack outperforms any individual asset class when it comes to improving lead time, change failure rates, and mean time to recovery (MTTR). It's no wonder top-performing organizations earmark the bulk of their IT spending on cloud and mainframe. More specifically, best-in-class performers invest 10% more in cloud and 10% more in mainframe on average.

3

Inflation is cooling the cloud. With IT inflation running high, cloud is getting more expensive, not less, and its usage is still below that of mainframe and distributed for both average and top-performing organizations. While cloud is undoubtedly still a staple feature of many high-performing hybrid architectures, "cloud first" thinking is slowing and becoming more selective as companies look for "safe harbor" options, such as mainframe. This trend is reflected in a modest but continued downward shift in cloud spending (measured both as a percent of Global IT Services and as a Percent of Global IT Spending).



4

The value of Mainframe continues to increase. Since last year when the first edition of this study made abundantly clear that, “[n]othing scales like the mainframe,” the latest found even more efficiencies and performance gains at leading organizations who rely on mainframe. Over the past year, the unit cost savings of mainframe increased from 60% to 67%, whereas cloud and distributed were slightly down at 20% and 10% to 18% and 9% respectively. The takeaway: hybrid organizations who lean in on mainframe are lowering their data, transaction, and overall IT costs of goods.

5

“On-premise” is still the majority. Similar to last year’s findings, 87% of global compute power happens on-premise. And as organizations rebalance their tech assets, this year’s study found that “some public cloud workloads are being repatriated to on-premise platforms.” That’s largely due to “unforeseen costs” of running certain workloads in the cloud and “unexpected expenses” to re-architect and migrate to the cloud.

In conclusion, this year’s Technology Asset Class Optimization report found that mainframes lower transaction costs of high volume environments demonstrably better than any other technology. On top of that, organizations that are “mainframe heavy” consistently outperform those with an overreliance on cloud or distributed. This is especially pronounced in travel, financial, retail, and insurance sectors. And it applies to established technologies as well as emerging ones—generative AI very much included.

The good news is we now have the data and models that allow IT leaders to evaluate and plan technology investments with the same rigor and language as financial investments. By examining their technology contracts against planned business volatilities, IT decision makers can consider the scalability of each technology asset before deciding which mix and balance is right for them.

While much has changed over the last year, one thing remains the same: Following the tech stack choices of leading organizations can have a measurable impact on your bottom line, and mainframe’s influence and value is playing an even greater role. Is your tech stack optimized to deliver the highest economic impact? To learn more, please get in touch or read the latest Technology Asset Class Optimization report.

