

How Flash Storage is Changing the Economics of SaaS Businesses

The most successful Software-as-a-Service (SaaS) businesses adopt infrastructure strategies that deliver the economics, agility, and user experience that support customer acquisition and retention.





“Customers are demanding intimacy, and competition is more prevalent than ever. While this is perhaps most evident in the so-called subscription economy typified by software-as-a-service (SaaS), the impact of this shift now permeates every aspect of enterprise technology.”

Mastering Revenue Lifecycle Management: Customer Engagement Leads to Competitive Advantage,
Forbes Insights, 2016.

The trick is scaling the application infrastructure for a superior customer experience while constraining both CAPEX and OPEX costs.

This eBook will examine how advances in all-flash storage are reshaping strategies for application delivery infrastructures and changing SaaS business economics. Those who are moving to all-flash storage gain new cost efficiencies, along with the performance, scalability, and agility required to deliver higher quality business applications.

SaaS organizations with forward-thinking application infrastructure strategies will be more successful in attracting – and keeping – customers.

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Trends Driving the Change

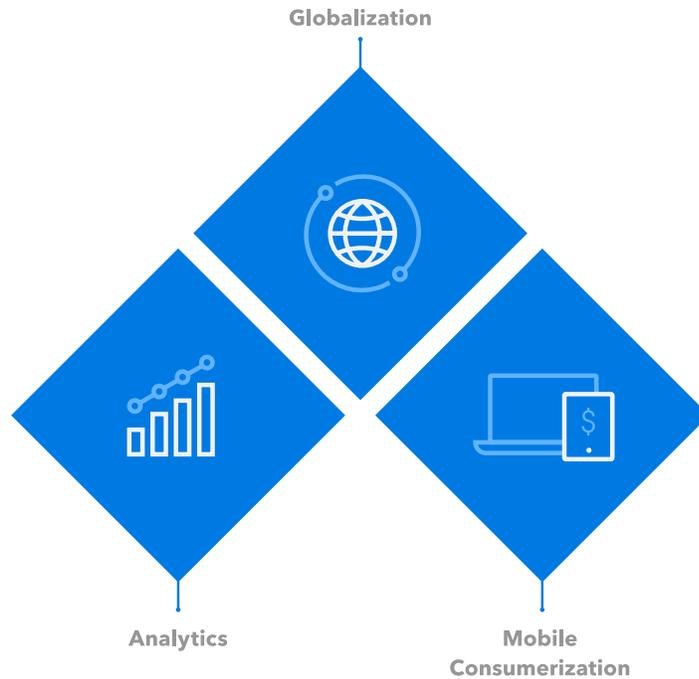
Organizations in every sector are turning to SaaS to better engage their customers, employees and partners - and take advantage of undeniable economies.

Growing demand means not just newer, "born digital" SaaS vendors entering the market, but also traditional Independent Software Vendors (ISVs) driven to add SaaS offerings to their portfolios. Staying ahead of escalating competition means performing better, scaling economically, and greater agility in tailoring services to attract and retain customers.

The biggest challenge? More data.

“SaaS business process applications represent about one-third of the market currently and will grow by 24% in 2016, significantly faster than the overall market, which has a 12% growth rate.”

Hamerman, Paul D. and Andrew Bartels, "The Business Applications Landscape 2016 To 2020: SaaS Disruption And Vendor Proliferation Landscape," Forrester Research, February 1, 2016.



Moving Forward With More Data

End-users of SaaS are storing more data because of globalization, dispersed workforces (mobility), and increasing user expectations (consumerization and richer functionality). Data growth is also driven by a desire to capture and use intelligence about their own customers, and let's not forget regulatory compliance.

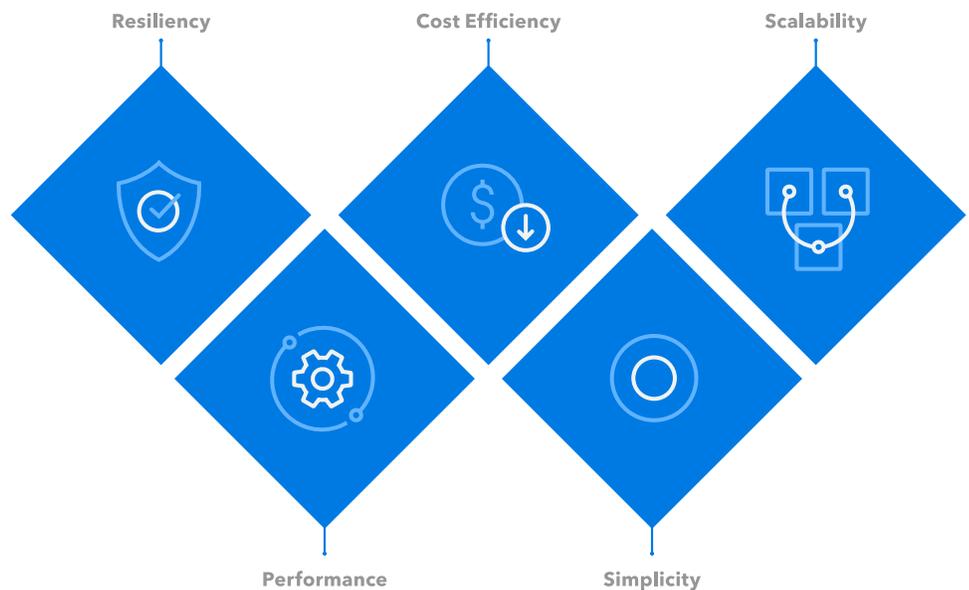
At the same time, SaaS businesses themselves are storing more data about their users and service performance. Optimizing performance requires more monitoring, alerts and analysis - ergo, yet more data.

Moving forward: A key competitive advantage will be the ability to better manage and leverage data in real-time.

5 Ways Storage Strategy Drives Success

Storage has always been a critical component in an application delivery infrastructure. The right storage strategy is key to enabling a SaaS business to:

- Continuously improve profitability;
- Maximize customer satisfaction to minimize churn;
- Quickly seize opportunities to up-sell and expand;
- Stay agile and innovative;
- Maximize availability and business continuity.



Cost-Efficiency

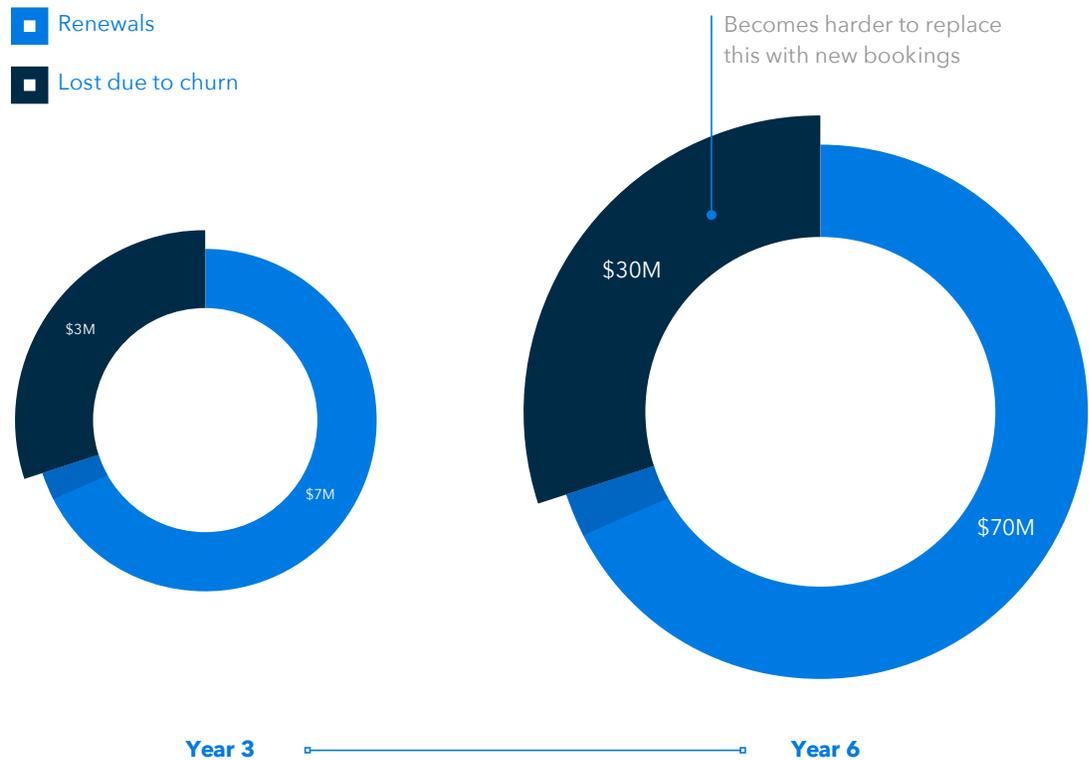
The most cost-efficient SaaS businesses constrain and accurately predict storage CapEx and OpEx – even as they scale to accommodate more users, continue to improve service performance, and enhance their value with innovative new features.

All-flash storage offers opportunities for improving cost-efficiency over HDD arrays; but for SaaS they should also:

- Allow SaaS businesses to add infrastructure seamlessly as they grow;
- Scale in a way that significantly reduces cost per GB;
- Minimize the need for specialized storage to run different workloads.

“Our number one factor was the cost/GB. We felt that many of the pure flash arrays were either too costly or not production worthy. Kaminario impressed us as being both enterprise ready and cost effective.”

James Price, Director of Product Development, Clearwater Analytics



Skok, David, Managing Customer Success to Reduce Churn, forEntrepreneurs.com, 2014.
<http://www.forentrepreneurs.com/customer-success/>

Applications need consistently fast IO no matter what the volume of data—or the nature of the workload.

Maximize Customer Satisfaction to Minimize Churn

For the SaaS licensing model to pay off, keeping existing customers satisfied and minimizing churn is as important as acquiring new customers. Maximizing customer lifetime value is inherently linked to providing a good customer experience.

Service performance is key to preventing churn – and storage strategy can make a huge difference. All-flash storage can be faster than traditional systems, but a SaaS business needs more than speed to satisfy customers.

SaaS businesses need fast, unlimited ability to non-disruptively scale up (add storage capacity) and out (add I/O capacity) while delivering consistently high application performance.

Seize New Opportunities to Up-Sell and Expand

To maximize the return on up-front investments, SaaS businesses need to scale, build out their base, and offer more services to existing customers.

Traditional storage infrastructures have been based on either scale up or scale out architectures. Scale out storage platforms scale performance and capacity seamlessly, but are less flexible and more costly. Scale up storage scales capacity more cost efficiently but over time can lead to isolated islands of storage that must be managed independently. Modern storage strategies should employ both scale up and scale out capability.

Stay Agile and Innovative

The real test of a storage strategy comes over time. SaaS businesses need storage that stays simple as it scales, helping IT reduce the complexity, risks and expense of operations like data migrations and forklift upgrades. They need to be innovating 24/7 to stay ahead of the competition (and needs of customers).

- Agile SaaS businesses must leverage the newest technologies in networking, computing and storage to improve their cost-efficiency and service value to customers.
- Fast, easy provisioning enables more agile data center operations and promotes innovation through a more responsive Dev-Ops environment.



Maximize Availability and Business Continuity

Resiliency is paramount to a SaaS business—not just to ensure revenue flow, but to keep the brand strong in attracting new business.

A storage challenge unique to SaaS is unpredictable customer behavior across a multi-tenant environment. The right storage strategy can help ensure the performance and resiliency of a SaaS application.

- Guarantee data availability despite variable customer behavior.
- Beyond no single points of failure, the storage strategy should accommodate smooth upgrades and scaling, maximizing service availability.

Kaminario's Unique Approach

Kaminario enables SaaS businesses worldwide to achieve the optimum balance between seizing opportunity and controlling cost.

Kaminario's K2 all-flash array leverages a unique software-defined architecture that delivers cost-efficiency, predictable performance and scalability that change the economics of SaaS businesses.

“You can focus on metrics all you want, but at the end of the day in our business it is customer satisfaction that matters. Kaminario enabled us to deliver lightning fast performance to our customers: physicians serving their patients.”

David Schlaifer, CEO, DAShealth™



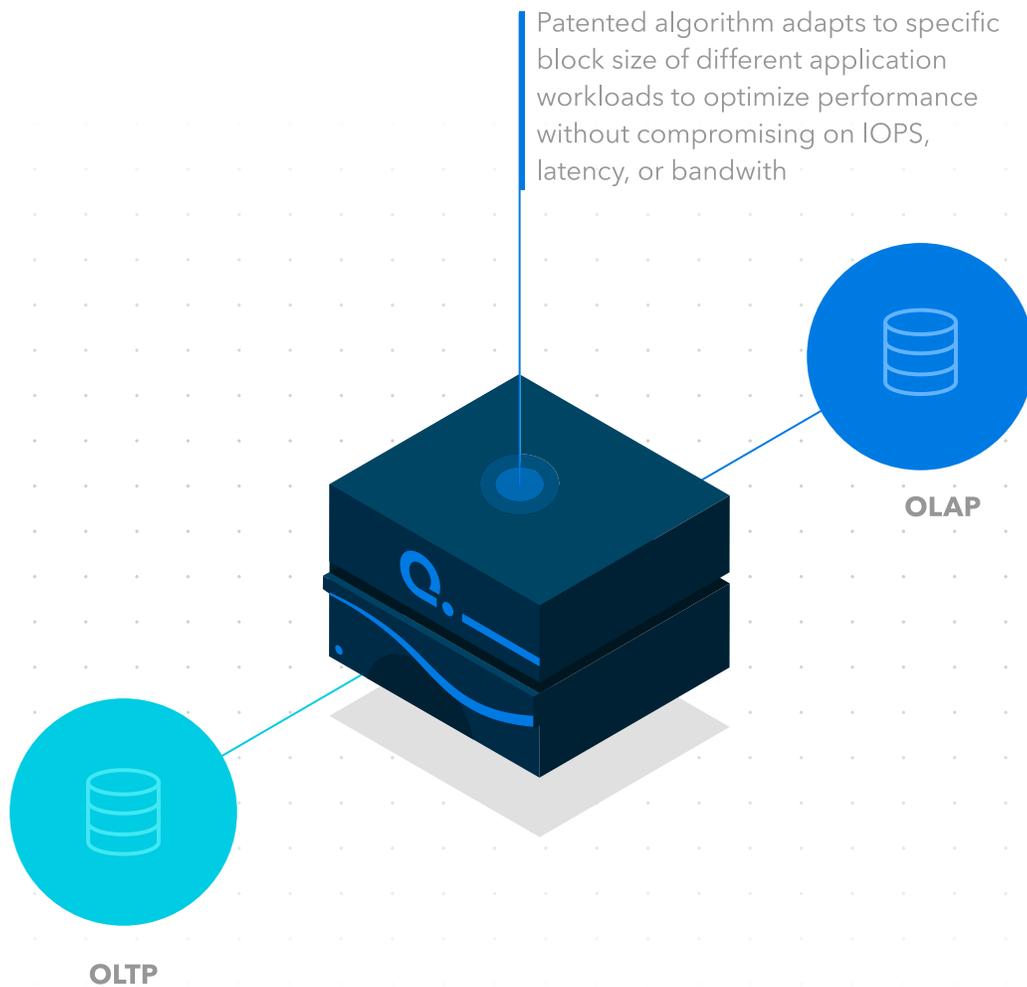
Cost Efficiency: Continuously Improve SaaS Profitability

Kaminario's software defined architecture enables rapid adoption of the latest advances in commodity hardware (flash media, cpu, and network) letting SaaS customers take maximum advantage of commodity economics.

Kaminario's unique capability to both scale up and out allows businesses to buy a single right-sized platform for all types of workloads—and easily scale up and out as they grow, for lower cost/GB.

Perpetual Array™ functionality allows SaaS businesses to incorporate the newest flash, CPU, and network technologies into existing implementations, retiring older components when convenient and without disruption.

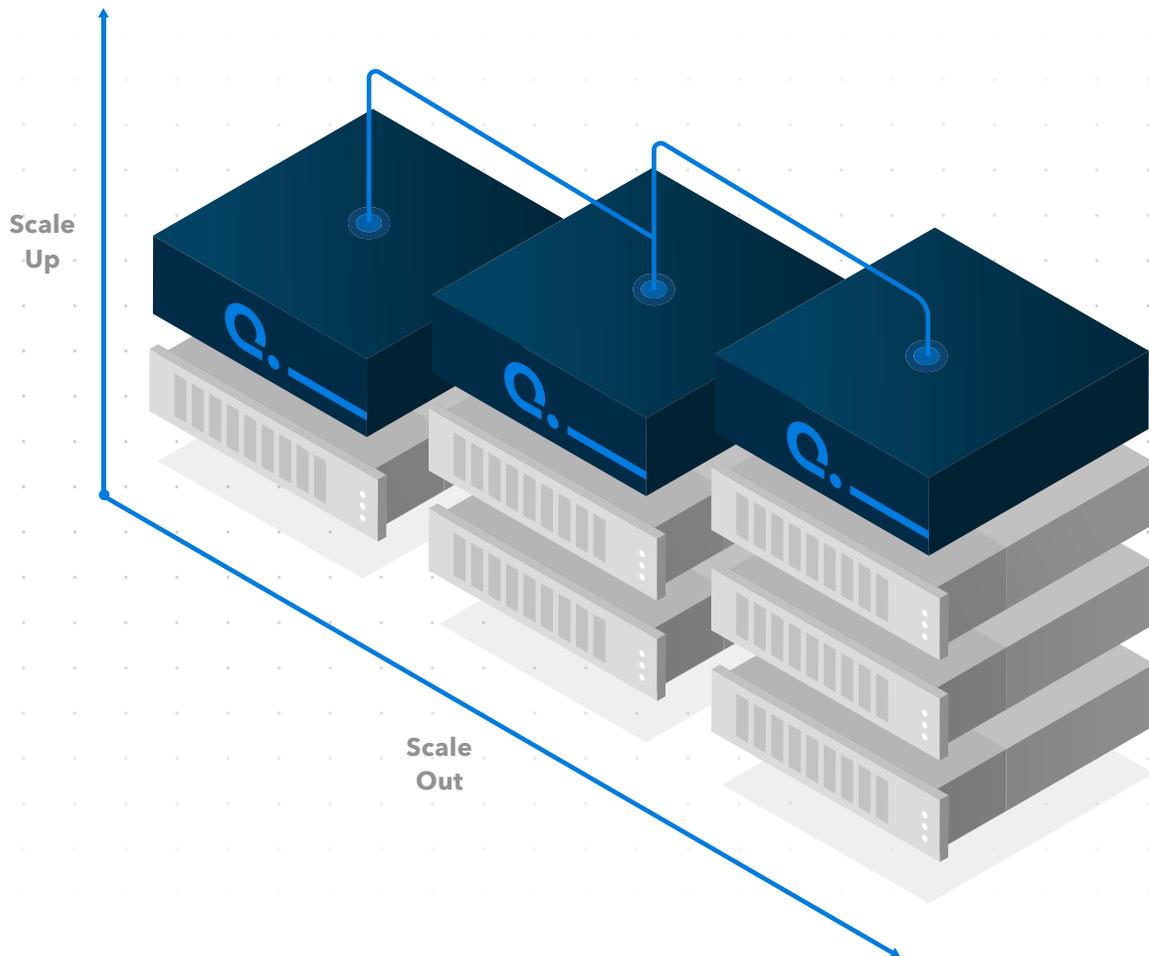
Kaminario offers highly predictable, industry-leading capacity efficiency with best in class RAID efficiency, thin provisioning and global inline deduplication and compression.



Performance: Maximize Customer Satisfaction to Minimize Churn

Kaminario takes the high performance of flash storage media and adds its own capabilities to let SaaS businesses scale out while ensuring consistent IO performance.

Analytics and OLTP workloads have different IO profiles but Kaminario delivers consistent performance under dynamic mixed workloads.



Scalability: Seize New Opportunities to Up-Sell and Expand

Highly agile architecture supports both scale up and scale out architectures. Add capacity and performance capability independently to optimize cost and better match the needs of your application.

Simplicity: Stay Agile and Innovative

Deploying K2 is quick and simple, and does not require any changes to applications. Non-disruptive updates allow maintenance whenever it is convenient, with no downtime or loss of user productivity.

Software defined architecture enables flexible and non-disruptive expansions, easily scaling up and out.

A browser-based GUI provides an easy management interface providing immediate access to all critical information: health, volumes, hosts, performance, data protection, system and events.

Resiliency: Maximize Availability and Business Continuity

K-RAID, a unique version of RAID-6, enables continued processing under several media failure conditions at a very low capacity cost.

Active-active controller architecture, high availability features, and native replication combine to deliver best-in class availability and resiliency.

HealthShield™ offers proactive and preventive serviceability.

Always-on, data-at-rest
256-bit AES encryption
capabilities support
compliance and security
in a multitenant
environment.



“With the increasingly popularity of software as a service (SaaS), enterprise software vendors today cannot afford to be without a cloud strategy. As a result, traditional vendors have introduced various forms of hosted, hybrid, and SaaS deployment options.”

Rafael Asor
CTO ActiveTrail

SaaS Success Stories



SaaS Email Marketing

With Kaminario, queries run, on average, 13 times faster than on NAS devices, with a 92% improvement in reporting. Kaminario has enabled this business to add more advanced features to its services, such as smart analysis of user behaviors using filtering and segmentation.



BigData SaaS

Kaminario helped this business improve ETL response time, maintain lower latency and realize 16x IO performance improvement benefits that will continue even as the organization scales up and out.



Financial Services

Kaminario's unique capabilities reduced reconciliation load times by 75%, while long-running report load times improved by 65%. The business was also able to accelerate software development and QA cycles.



Healthcare

Kaminario reduced IO latency 70% in SaaS-delivered Practice Management and Electronic Healthcare Record applications. With over 300 databases under management, Kaminario reduced patient record page load times from over 10 seconds to under 2 seconds.

Improve the Economics of SaaS with Kaminario



The most successful SaaS organizations scale easily and flexibly, to grow their subscriber base and increase revenue streams, while continuing to accurately predict and constrain both CAPEX and OPEX costs. Kaminario provides a next generation storage solution uniquely designed for cost-efficiency, scalability, and predictability to improve the economics of the most resource intensive SaaS businesses—guaranteed.

Contact

Contact a business development representative to answer any questions you may have.

Schedule a Demo

Schedule a demo with an engineer and learn if Kaminario's solution works for you.



Request a Quote

Request a quote for your application from our business development team.

About Kaminario

Kaminario makes the all-flash data center a reality with storage solutions that get businesses from now to next. The K2 all-flash array is built to scale up, out, and forward just like our customers' businesses. With a highly flexible software-defined architecture that fully leverages the economics of commodity hardware, the K2 delivers much needed predictability for the unpredictable world of the modern data center. Kaminario is headquartered in Needham, MA with offices in Israel and the U.K. and an extensive network of resellers and distributors. For more information, visit www.kaminario.com