

CloudBolt Industry Insights Report:

The Truth About Hybrid Cloud and Digital Transformation Hybrid Cloud Management's Shaky Pillars



Setting the Stage:

Enterprises are progressing towards hybrid cloud integration and making it a core element in their IT strategy. The measure of their success largely depends on how adeptly they navigate the new hybrid cloud space. But as the conversion to hybrid cloud picks up, IT executives are often faced with challenges in areas of automation, integration, and optimization.

CloudBolt and Pulse surveyed 100+ tech executives to get a better perspective on the key elements for successful digital transformation and the challenges their organizations face when streamlining integrations with existing infrastructure, network, and security tools.

Data collected from February 24 - March 11, 2021 | Respondents: 108 IT executives (See Appendix for audience composition specifics and survey question details)

IT leaders are unanimous (94%) in their belief that a hybrid cloud approach is critical for digital transformation.

These leaders also unanimously agree (92%) that enabling end-users/developers with self-service IT capabilities is key to digital transformation and organizational agility.

Unfortunately, these leaders also recognize several challenges standing in the way of realizing their digital transformation vision. And they associate these challenges with three critical hybrid cloud management pillars today: Self-service IT, automation, and optimization.

Self-Service IT:

Easier said than done

Self-service IT, according to 71% of IT leaders, should be easy for end-users, allowing them to "order" what they want without any special knowledge or expertise. The majority of those surveyed (56%) believe that their self-service initiatives do not meet this standard.



Creating a self-service catalog giving end-users what they need, according to IT leaders, depends on the organization's ability to support new cloud environments (61%) and new third-party services (52%).



The reality is that 76% of IT leaders still find the integration of new third-party services challenging and 62% find it difficult to support new cloud environments.

Automation: Integration woes

These findings point to a serious problem:



99% of IT leaders believe streamlining integrations are key to accelerating their automation and self-service IT initiatives.



At the same time, 76% of IT leaders are still custom-coding at least a quarter of all their integrations. What's more, 70% say the need for domain knowledge of different technologies poses problems for custom-coding integrations and 61% have problems with the scripting and coding expertise these integrations require.

Optimization: Opaque visibility, limited insight

So, self-service IT, as it exists today, doesn't quite live up to its promise and multiple challenges around integration stall automation initiatives. Where does this leave us on the cloud cost optimization and security front?

Optimizing your infrastructure requires visibility into what's going on. Sadly, when it comes to visibility, we don't find much unanimity. Instead, we find IT leaders using a patchwork of cloud-native tools (66%), third-party solutions (45%), home-grown scripts (31%) and spreadsheets (28%). What this suggests is that IT leaders, because they are using a diverse set of tools, don't have any kind of unified visibility into their hybrid infrastructure.



While this fractured view poses its own problems, the real issue is the difference between insights (which should be actionable) and visibility. Being able to "see" what's going on isn't very helpful if you don't know what to do about it.

As it turns out, 78% of IT leaders say they have limited insight into who is provisioning what, where to optimize costs or how to remediate security issues.



What IT Leaders Need

While it is clear from our findings that the struggle is real for IT leaders, here's the good news: they have a clear understanding of what is required to overcome their challenges.

With regard to self-service, the reality is that it's neither easy nor self-explanatory for most end-users, so they can't actually serve themselves. A majority of those surveyed (56%) believe their self-service initiatives fall short of making things simple.



With regard to automation and integration, 62% of IT leaders seek integration approaches that don't require deep domain knowledge or special expertise. The majority also want it to be easy and inexpensive to build and support integrations so they can reach their automation goals faster.

With regard to optimization, 80% want real-time insight into cost optimization and security remediation opportunities. A majority (56%) also want continuous notification of cost overruns and security gaps so stakeholders can address them, along with automated ways to address them across cloud environments.





A Closer Look

Digital transformation and self-service IT

Hybrid cloud is key to digital transformation.

94% of IT leaders see hybrid cloud as critical to digital transformation.

Digital transformation starts with end users.

For nearly half of survey participants (42%) digital transformation focuses on empowering end-users through self-service IT for end-users.



Empowering end-users accelerates digital transformation.

92% believe enabling end-users/developers to access the resources they need when they need them through self-service IT accelerates digital transformation and increases organizational agility.

Integration is a leading obstacle to realizing the promise of automation.

72% see the complexity involved in integrating and supporting an ever-growing patchwork of tools into automation and self-service IT frameworks as their top challenge.



Want to improve the self-service IT experience for end-users? Make it simple.

71% of IT leaders believe making it easy to order the services they need through a self-service catalog is most critical for improving the self-service experience.

The ability to track resource cost and optimize spend (63%) and the ease of supporting new cloud environments for self-service (61%) were the other two leading criteria.



2 Automation and integration

Automation initiatives demand ease of integration.

IT leaders are unanimous (99%) when it comes to the absolutely essential role that streamlined integration plays in accelerating automation.

Too many integrations are custom-coded today.

76% say that at least a quarter of all their integrations are custom-coded.

Custom coding requires knowledge and skills you don't have.

The top two challenges IT leaders associate with custom coding involve domain knowledge of different tools/technologies (70%) and coding/scripting expertise (62%).



Making integration easy is a top priority.

62% want integrations that don't require deep domain knowledge of different tools and technologies. 59% want integrations that are easy to build and support. 57% also want integrations to have a lower price tag.

3 Optimization, visibility, and insight

Visibility into cloud costs and cloud security is fragmented.

IT leaders use a patchwork of basic cloud-native tools (66%), third-party solutions (45%), home-grown scripts (31%) and spreadsheets (28%) to maintain cloud visibility.

Limited visibility coupled with lack of insight gets in the way of managing costs and maintaining security.

78% of IT leaders admit they have only limited insight into who is provisioning what, where to optimize costs, and how to remediate security gaps.





Effective cost and security management without real-time insight is unthinkable.

The overwhelming majority (80%) of respondents view real-time insight into cost optimization and security remediation opportunities as being a vital necessity when evaluating any cost/security management solution. Additionally, the majority believe the continuous notification of cost and/or security gaps so stakeholders can take appropriate action and resolve them is essential.

The Bottom Line

Based on these findings, it's clear the real path to comprehensive hybrid cloud management and sustainable digital transformation depends on the ability to stand up an easy-to-use self-service offering, painlessly integrate a variety of clouds and 3rd-party tools, and automatically optimize and secure cloud infrastructure based on continuous insight.

To learn more about how CloudBolt can help your hybrid cloud strategy to thrive, please visit www.cloudbolt.io, contact us at info@cloudbolt.io, or call us at +1 (703) 665-1060.

Strengthen the key pillars of your digital transformation - with CloudBolt.



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CloudBolt Software is the enterprise cloud management leader. Our comprehensive solutions for IT automation, orchestration, self-service IT, cost optimization, and security help enterprises simplify complexity and achieve rapid time-to-value anywhere on their hybrid cloud, multicloud journey. Our award-winning cloud management platform and infrastructure integration services are deployed and loved by enterprises worldwide. Backed by Insight Partners, CloudBolt Software has been named one of the fastest-growing private companies on the Deloitte Fast 500 and Inc. 5000 lists. In addition, CloudBolt is 2020 CODiE award winner for best cloud management and featured in Gartner's Magic Quadrant for Cloud Management Platforms.

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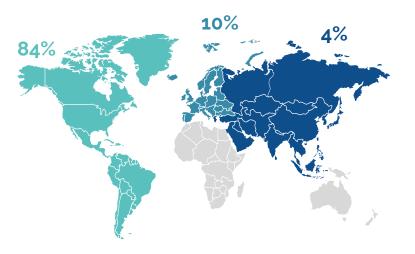


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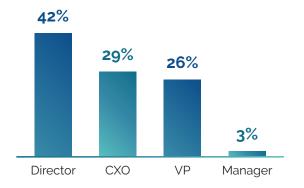
Appendix:

Methodology

REGION



ROLE IN ORGANIZATION



COMPANY SIZE

CloudBolt Software commissioned a Hybrid Cloud and Automation Strategies study leveraging Pulse's community of verified technology decision makers. 100 responses were gathered between February 24 and March 11, 2021, comprised of global Directors, VPs and C-Suite executives at enterprise organizations with more than 1,000 employees.



Pulse is a social research platform trusted by 27K+ verified CxOs and global tech leaders. These executives rely on the community to make connections, share knowledge, get advice, and stay on top of current trends in the technology space. The questions, polls, and surveys posted in the platform are curated in Pulse's reports, which reflect what tech leaders care about right now. In the rapidly evolving world of software, real-time data and insights are what matter most.



Survey Data:

To what extent do you agree to this statement: "Hybrid cloud is critical to digital transformation."

Agree		68%
Strongly agree		26%
Disagree		6%
Strongly disagree		1%
N = 108 decision makers		
	CloudBolt	D PULSE

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To what extent do you agree with the following: "To accelerate digital transformation and increase agility, enabling end-users/developers to provision resources they need (e.g., compute, storage, networking, apps, etc.) through self-service IT is important."

Agree	73%
Strongly agree	19%
	23/0
Disagree	7%
Strongly disagree	1%
Strongly disagree	1/0
N = 108 decision makers	
	D PULSE

2		
2	What are the key elements of successful digital transformation hybrid cloud enablement?	through
	Enabling self-service IT for end-users	42%
	Acceleration of automation initiatives	29%
	Optimization of cloud spend	19%
	Visibility and security compliance	9%
	Other	1%
	N = 108 decision makers	
	CloudBolt	D PULSE

4

What are your top 3 challenges you currently face when implementing self-service IT? (Select 3)

Difficult to integrate/support new third-party services (e.g., networking, security, configuration management, infrastructure-as-code, etc) for self-service 76%

Difficult to support new cloud environments (e.g., new virtualization 62% systems, public clouds, etc.) for self-service

The self-service IT experience is hard for end-users (i.e., requires a 56% certain degree of expertise in clouds, networking, storage, security, etc.)

Lack of visibility into resources deployed through self-service 55%
Lack of security/governance guardrails into resources deployed 39%
through self-service
Other 0%
N - 108 decision makers

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hrough self-service catalog, without being experts in underlying cloud/infrastructure technologies Ability to track resource cost and optimize spend for deployed 63 esources Ease of supporting new cloud environments (e.g., new virtualization 61 systems, public clouds, Kubernetes, etc.) for self-service Ease of supporting new third party services (e.g., networking, security, 525 configuration management, infrastructure-as-code, etc.) for self-service Ability to maintain security/governance guardrails for deployed 505 resources N - 108 decision makers CloudBotter © PULSI What percentage of your integrations are custom-coded/custom written across your infrastructure tools and technologies?		
hrough self-service catalog, without being experts in underlying cloud/infrastructure technologies Ability to track resource cost and optimize spend for deployed 63 esources Ease of supporting new cloud environments (e.g., new virtualization 615 systems, public clouds, Kubernetes, etc.) for self-service Ease of supporting new third party services (e.g., networking, security, 525 configuration management, infrastructure-as-code, etc) for self-service Ability to maintain security/governance guardrails for deployed 505 resources N = 108 decision makers What percentage of your integrations are custom-coded/custom written across your infrastructure tools and technologies? 25-49% 575 2-24% 245		erience for
Ease of supporting new cloud environments (e.g., new virtualization 615 systems, public clouds, Kubernetes, etc.) for self-service 625 Ease of supporting new third party services (e.g., networking, security, 525 configuration management, infrastructure-as-code, etc) for self-service 505 esources 700 PULSI Other 05 Other 05 What percentage of your integrations are custom-coded/custom written across your infrastructure tools and technologies? 575 0-24% 245	End-users should be able to easily "order" the resources they need through self-service catalog, without being experts in underlying cloud/infrastructure technologies	71%
Ease of supporting new cloud environments (e.g., new virtualization 615 systems, public clouds, Kubernetes, etc.) for self-service 625 Ease of supporting new third party services (e.g., networking, security, 525 configuration management, infrastructure-as-code, etc) for self-service 505 esources 700 PULSI Other 05 Other 05 What percentage of your integrations are custom-coded/custom written across your infrastructure tools and technologies? 575 0-24% 245		
Systems, public clouds, Kubernetes, etc.) for self-service Ease of supporting new third party services (e.g., networking, security, 525 configuration management, infrastructure-as-code, etc.) for self-service Ability to maintain security/governance guardrails for deployed 503 esources N - 108 decision makers CloudBott C PULS What percentage of your integrations are custom-coded/custom written across your infrastructure tools and technologies? 25-49% 575	Ability to track resource cost and optimize spend for deployed resources	63%
Ability to maintain security/governance guardrails for deployed 503 esources Other 03 N - 108 decision makers CloudBolt C Duby DULSI What percentage of your integrations are custom-coded/custom written across your infrastructure tools and technologies? 25-49% 575 D-24% 245	Ease of supporting new cloud environments (e.g., new virtualization systems, public clouds, Kubernetes, etc.) for self-service	61%
Ability to maintain security/governance guardrails for deployed 503 esources Other 03 N - 108 decision makers CloudBolt C Duby DULSI What percentage of your integrations are custom-coded/custom written across your infrastructure tools and technologies? 25-49% 575 D-24% 245		
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N - 108 decision makers CloudBolt PULS What percentage of your integrations are custom-coded/custom written across your infrastructure tools and technologies? 25-49% D-24% 243	Ability to maintain security/governance guardrails for deployed resources	50%
N - 108 decision makers CloudBolt PULS What percentage of your integrations are custom-coded/custom written across your infrastructure tools and technologies? 25-49% D-24% 243		- 0/
CloudBolt Constructions are custom-coded/custom written across your infrastructure tools and technologies? 25-49% 575 20-24% 245	Other	0%
CloudBolt Constructions are custom-coded/custom written across your infrastructure tools and technologies? 25-49% 575 20-24% 245		
What percentage of your integrations are custom-coded/custom written across your infrastructure tools and technologies? 25-49% 575 20-24% 245	N = 108 decision makers	
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D-24% 24 ³	25-49%	57%
		07.12
	0-24%	21%
50-74% 155		24/0
50-74% 15×	50.71%	4=0/
	50-74%	15%

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68% Agree Strongly agree 31% Disagree 2% Strongly disagree 0% N = 108 decision makers CloudBolt **PULSE** What are the top 3 problems with custom coding/custom writing integrations for your infrastructure tools and technologies? (Select 3) Custom integrations require domain knowledge of different 70% tools/technologies Custom integrations require coding/scripting expertise 61% Custom integrations are time-consuming projects 50% Custom integrations become unmanageable as I introduce more tools in 47% my enterprise Custom integrations are expensive projects 30% Custom integrations create risk of human error, visibility, and 26% governance challenges Custom integrations work up to a point, but we've hit a wall 8% Other 0% N = 108 decision makers CloudBolt **PULSE**

To what extent do you agree with the following: "It is important to streamline my organization's integrations with my existing infrastructure, network, and security tools in order to accelerate automation initiatives."



75%+

N = 108 decision makers

4%

PULSE

6

8

What are the top 3 priorities for improving integration developmen your infrastructure tools and technologies? (Select 3)	nt for
Don't require deep domain knowledge of different tools/technologies	62%
Easy to build and support	59%
Low cost to build and support	57%
Ability to build integrations once, and use them across all your tools	51%
Centralized visibility into integrations built for better governance and audit-ability	40%
Don't require coding/scripting expertise	27%
Other	0%
N - 108 decision makers	
	PULSE
CloudBolt Constraints CloudBolt Constraints Cloud Bolt Constraints	en it
CloudBolt Constant CloudBolt Constant CloudBolt Constant	en it rent
CloudBolt Constraints CloudBolt Constraints Cloud Bolt Constraints	en it rent
CloudBolic Constraints on Visibility into who is provisioning what, where to optimize costs and/or security gaps Difficulty in keeping up with spreadsheets/scripts to understand my	en it rent 78%

Use third-party solutions 45% Use homegrown tools/scripts 31% Manual (e.g., spreadsheets) 28% Other 0% N = 108 decision makers CloudBolt **PULSE** What are your top 3 most important characteristics of an advanced cost and security solution across your different cloud environments? (Select 3) Real time insights into cost optimization and/or security remediation 80% opportunities Continuous notification of cost and/or security gaps so stakeholders 56% can take appropriate action and resolve them Automated way to remediate cost and/or security gaps across my cloud 56% environments Deep insights into cost optimization and/or security remediation 52% opportunities Rich visualization into cloud cost and/or security problem areas 44%

N = 108 decision makers

Other

46%

0%

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Other N = 108 decision makers

action and resolve cost and/or security gaps

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Hard to get stakeholders (e.g., ITOps, CloudOps, DevOps, etc.) to take

12

10

Use cloud-native tools

Through what process is your organization ensuring proper levels of cloud cost visibility and security across your cloud environments (Multi-select)

66%

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0%

PULSE