

CloudStratex

Resilience, Integration & Efficiency

HIDDEN CLOUD
CHALLENGES

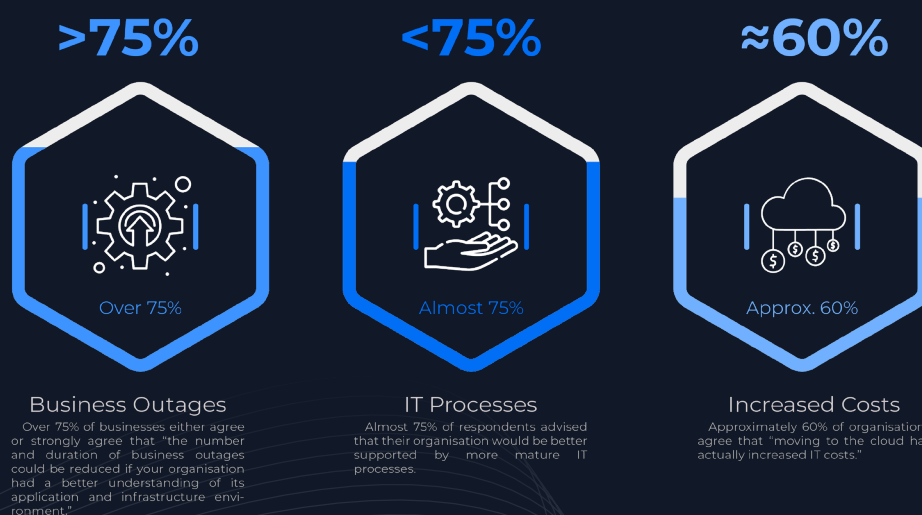
Addressing the challenges
of cloud's mid-life **crisis**.

CloudStratex Insights Report 2022

Executive Summary.

For business and IT leaders at enterprise-level organisations, IT change doesn't automatically equate to stronger operational resilience, efficiency, or integration. This is the main finding of the Resilience, Integration & Efficiency report, which surveyed representatives of enterprises across an array of sectors to assess the challenges associated with cloud adoption and technological change.

Key Findings:



Strategic Relevance

Through its analysis of these key findings, the report offers a fresh and detailed perspective on the specific areas that enterprise organisations must address in order to optimise their IT infrastructures.

This kind of optimisation is especially necessary in the context of cloud spend. The report describes huge volumes of waste and inefficiency among adoptees who have yet to embrace the cross-functional practices and new working cultures that effective cloud financial management demands.

Similarly, the report sheds fresh light on the regulatory challenges facing enterprises whose IT infrastructure needs to meet new and extensive Operational Resilience requirements.

By engaging with data regarding insufficient CMDB usage, CloudStratex offers an insightful evaluation of current resilience planning. Its report highlights the benefits of service mapping and automated discovery processes amidst a regulatory environment that places infrastructural visibility and understanding at its core.




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CloudStratex Insights Report 2022

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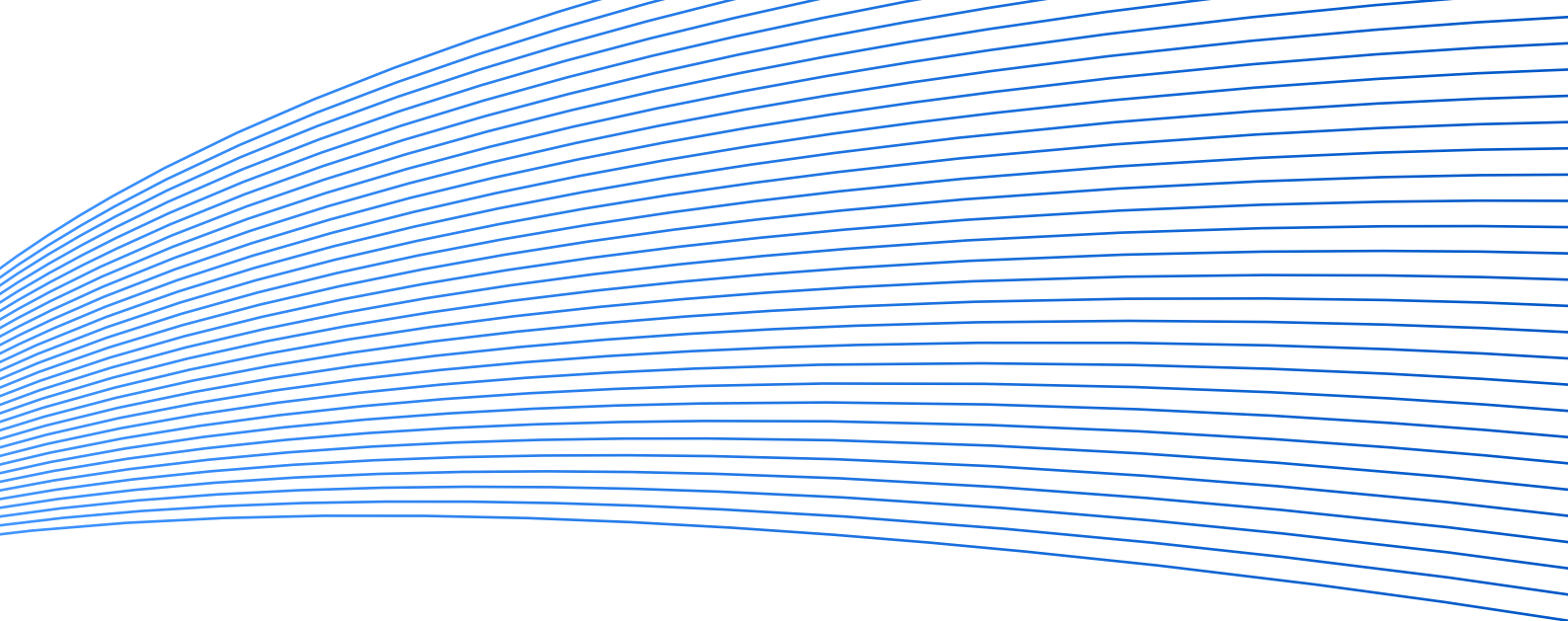
Adrian Overall

Chief Executive Officer

Foreword From The **CEO.**

It's now standard practice for commentary on cloud and technological adoption to point to the pandemic as both a catalyst for acceleration and a helpful use case that illustrates the benefits of cloud (and similar technologies) in a professional world characterised by displaced working and the ever-present threat of operational disruption.

Commentary like this isn't incorrect – Microsoft, for example, described the start of the pandemic as a process of squeezing “two years' worth” of transformation into two months, and there's no question that cloud offers much-needed agility amidst pandemic-related uncertainty – but such discussions run the risk of obscuring the important caveat that neither cloud, nor acceleration towards it, should be seen as automatically beneficial.



This isn't necessarily a sentiment that complements the commonly held view that cloud can straightforwardly resolve or mitigate the problems presented by the pandemic. However, years of long experience have taught us that cloud's complexities and challenges need to be thoroughly understood by organisations which might be lured by the unrealistic promise of simple cost reductions and uncomplicatedly attainable efficiencies. These points are especially worth making in the context of so-called "acceleration." Like cloud itself, acceleration is largely painted as a good and positive step – but, while the end goal of a well-integrated, efficient, and resilient cloud environment is absolutely worth working towards, this kind of objective needs carefully considered strategy and top-notch execution.

Neither of these are achievable by rushing, no matter what drivers may prompt accelerated IT change. Our survey has found, in fact, that a significant proportion of enterprise organisations have experienced outages as a result of IT change; lack the tools and processes to gain sufficient visibility over their IT environments; have yet to reach the right level of IT maturity; and now face IT costs that have actually increased following a transition to the cloud.

These issues won't disappear on their own – and, with regulators now expecting organisations to demonstrate a robust degree of operational resilience in their IT environments over the next few years, the clock is now ticking for firms to gain a comprehensive understanding of technology purchased at speed as the pandemic took hold.

Taken together, our findings indicate that many organisations need to take proactive steps towards improving their operational resilience, integration, and efficiency in order to feel the benefits of IT change – and that any acceleration needs to come hand-in-hand with the thought, training, knowledge, tools, and processes necessary to turn the Utopian promise of cloud into a tangibly beneficial reality.



The Data.

We conducted a survey comprising senior business and IT leaders from enterprise organisations, the bulk of which employ between 500 and 10,000 people - with 20% employing over 10,000.

Our respondents encompassed an array of diverse business sectors, with one quarter [25%] working in financial services; 17% working in professional services; 12% working in retail and leisure, and the remainder representing a range of industry sectors including legal, media, telecoms, utilities, life sciences, oil and gas, and travel, among others..

We asked each respondent a range of questions designed to prompt an evaluation of their organisation's current degree of operational resilience, the effectiveness of their cloud and legacy integrations, and the cost efficiency of their cloud financial management.

By extension, these questions allowed us to assess the challenging reality of cloud adoption, highlighting the need for a measured approach among organisations currently undergoing a process of acceleration, and articulating some of the challenges that poorly integrated or cost-inefficient organisations may be encountering without fully recognising how or why.

Our research group organisations hold a range average range of between 500 and 10,000 employees:



Our respondents encompassed an array of diverse business sectors such as:

45 %
Other

The remaining respondents within 'other' represent the legal, media, telecoms, utilities, life sciences, oil and gas, and travel industries, among others.



25 %
Financial Services

Just over one quarter of our respondents are within the financial services business sector.



12 %
Retail & Leisure

Twelve percent of our respondents are within the retail and leisure business sector.



25%

17%

12%

17 %
Professional Services

Seventeen percent of our respondents are in the professional services business sector.



Operational Resilience.

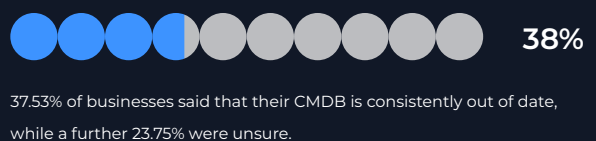
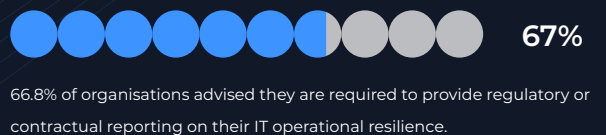
Our Findings:

- 69% of organisations confirmed they have a regulatory obligation to achieve Operational Resilience within the next 3 years
- 76% of organisations confirmed that a more resilient IT environment would increase their business productivity
- 67% of organisations advised they are required to provide regulatory or contractual reporting on their IT operational resilience
- Over 75% of businesses either agree or strongly agree with the statement: “the number and duration of business outages could be reduced if your organisation had a better understanding of its application and infrastructure environment”
- A clear majority of respondents reported that IT change has led to business outages in their organisation
- 38% of businesses said that their CMDB is consistently out of date, while a further 24% were unsure

Exploring The Data:

Increasingly stringent regulatory requirements, particularly when combined with the labyrinthine complexity of cloud infrastructure, means that operational resilience [OR] and the tools and practices needed to achieve it has never been more urgent – or difficult.

Among our respondents, an overwhelming majority reported a strong awareness of the regulatory and practical need for OR, with nearly 70% reporting compliance-related OR obligations; 66.8% required to perform contractual reporting on IT OR; and over 75% acknowledging that a more resilient IT environment leads to better productivity.





However, despite this broad understanding of OR's value and significance, our respondents also described a counter-intuitive sense of their respective organisations' fragility; in fact, over 67% were at least somewhat concerned about their organisation struggling to recover from a critical resilience event, and our data also suggests that under a quarter of respondents felt they had a truly stable IT environment. Clearly, these respondents don't feel sufficiently ready or resilient. What, then, are the barriers between such respondents and true OR? It might be tempting to assume that they don't sufficiently recognise the need for technology like CMDBs or the visibility that such relational systems provide, but the survey would suggest otherwise:

Over 75% either 'agreed' or 'strongly agreed' with the notion that better understanding of an organisation's application and infrastructure environment leads to fewer outages.

This implies that, rather than looking to a lack of resilience-related technology, we instead need to consider how such technology is leveraged. And, indeed, the survey statistics support this interpretation. Of the respondents surveyed, nearly 44% said their organisation uses manual methods for updating its CMDB – and, unsurprisingly, nearly the same proportion (39%) felt that their organisation's CMDB is consistently out of date.

Perhaps just as significantly, a further quarter of respondents to each of those questions (24.23% and 23.75% respectively) reported being “unsure” as to their CMDB's update methods and accuracy.

In this light, it's no wonder so many respondents reported a feeling of vulnerability – the data suggests that there's a barrier to achieving operational resilience which is governed, not by a lack of appropriate tech, nor by a lack of awareness that having an in-depth understanding of the technology estate matters, but by an inability to properly leverage that tech and acquire that understanding.

A high proportion of these CMDBs, as the above statistics demonstrate, are updated manually, their data is often out of date; and many respondents can't comment with certainty because they lack precisely the kind of knowledge that makes a CMDB so valuable.

In short, our survey indicates that a significant proportion of organisations are currently unable to demonstrate the in-depth understanding of their technology landscape that is required to adequately meet OR regulations, and that this lack of understanding stems from an incomplete and incorrect CMDB that lacks the robust business processes to instil confidence in its data.

Perhaps just as significantly, a further quarter of respondents to each of those questions (24.23% and 23.75% respectively) reported being “unsure” as to their CMDB's update methods and accuracy.

Commentary.

Analysis from Fred Flack, CloudStratex Practice Lead for ServiceNow.



Analysis:

These CMDB-related findings aren't at all surprising – we often work with clients who struggle to maintain their CMDBs and, to be frank, it's only with specialist advice and service management platforms like ServiceNow that CMDBs can be effectively used to help achieve the resilience that our respondents feel they're lacking.

As mentioned above, a substantial proportion [almost 44%] of our respondents still use manual methods for updating their CMDBs. This means that people need to submit any changes to their organisation's IT environment – thereby creating an administrative burden.

Fred Flack
CloudStratex
ServiceNow
Practice Lead



CMDB Improvements

Manual CMDB updates are an administrative overhead that has proven to be unreliable even when managing solely physical hardware. With the ever-increasing move to cloud however, these manual processes become yet further untenable due to the dynamic and ephemeral nature of cloud services, further increasing the delta between the data held in the CMDB, and the reality of the technology estate, presenting challenges in meeting regulatory requirements, managing vulnerabilities, and planning for the future.

ServiceNow CMDB

We've successfully addressed this issue on several occasions by implementing a ServiceNow CMDB and automating the discovery process (alongside mapping services to elements that are non-discoverable). This means that our clients' CMDBs are always providing accurate data with no administrative burden, allowing them to gain comprehensive visibility over their IT environments.



Visibility for resilience

With this visibility in place, our clients have then been able to leverage their new-found understanding of their organisation's various dependencies and vulnerabilities in order to strengthen their resilience in ways that are both compliant with new regulation and robust enough to assure our clients of their effectiveness – satisfying regulatory requirements and easing internal concerns in a single gesture.



Operational Integration.

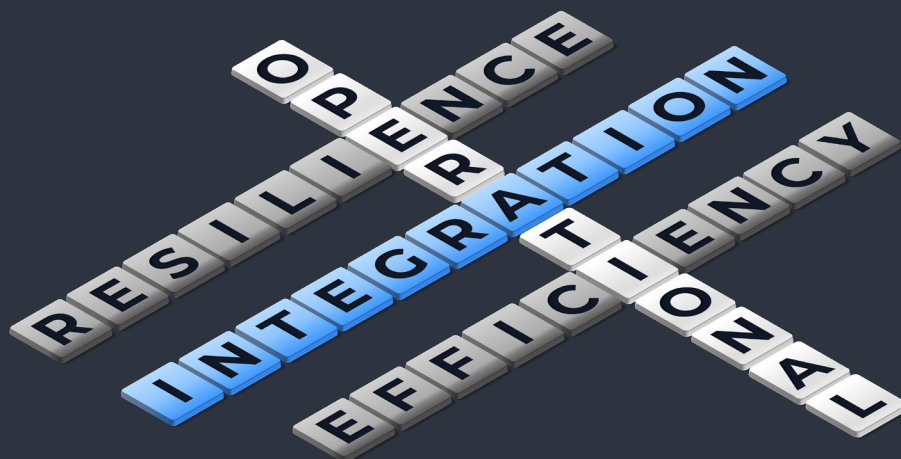
Exploring The Data:

Staggering amounts are spent by enterprise organisations that fail to properly integrate cloud and legacy IT systems. We regularly encounter and work with organisations that have spent millions on cloud, only to find themselves still reliant on, and constantly maintaining, expensive legacy infrastructure – completely undermining cloud's purported lack of initial outlay and leading to endless leakages of money as they attempt to maintain a two-tier system in which both aspects of their IT environment demand a constant and costly stream of OpEx. In this light, the almost 40% of respondents who were unable to confidently assert that cloud and legacy integrations have been effective speaks to an enormous volume of wasted expenditure, with the move to cloud swiftly transforming from an enthusiastic embrace of flashy new tech to a constant shovelling of cash into the hungry twin furnaces of cloud subscriptions and legacy maintenance.

This speaks to the reality we encounter on a regular basis, in which workloads and services stand with one foot in cloud while the other remains planted in legacy infrastructure.

ITSM Systems Aren't Operationally Integrated.

We're all aware, at this point, that plenty of organisations are inevitably left with legacy infrastructure despite their best attempts at cloud implementation – but this high proportion of organisations who can't confirm that their cloud and legacy integrations have been effective, underscores the need for effective strategy and processes to address this reality. In fact, this need for a stronger emphasis on process is heavily implied by the 40% of respondents who couldn't confidently confirm that their ITSM systems were up to date. It's no wonder that a similar proportion of respondents felt that both their ITSM systems and operational integrations aren't necessarily where they should be.



Almost 40% of respondents felt that their organisation's ITSM systems were not up to date, or were unable to confirm with certainty.



68 %
68.17% of organisations confirmed they use manual methods for updating their CMDB, or that they were unsure of the update method used



63 %
Nearly 63% of organisations advised they feel their CMDB is consistently out of date, or that they were unsure of their CMDB's accuracy



73 %
73.2% advised their organisation would be better supported by more mature IT processes



40 %
Almost 40% of respondents felt that their organisation has not effectively integrated its cloud and legacy IT systems, or that they were unsure

A need for stronger integration and strategy.

These similar proportions also serve as a reminder that it's not all about the technology. After all, ITSM isn't just a tech issue; it's equally about the delivery of services and value through smooth workflows. No amount of chatbots or predictive intelligence will help organisations which lack the appropriate strategic processes and integrations required to fully leverage cloud and legacy on a service level as well as a technological one. With almost 75% of respondents agreeing that their organisation would benefit from more mature IT processes, it's clear that this need for stronger integration and better strategising is widespread.

Commentary & Analysis from **Roger Bennett.**

CloudStratex **Enterprise Service Management** Lead.

Operational Integration.

In the context of operational integration, a more thoughtful approach towards tooling is vital for achieving the appropriate degree of observability.

Vast and complex IT infrastructure that encompasses both cloud and legacy alike requires next-generation tools in order to keep track of performance data and provide a clear, service-oriented view of performance, health, and efficiency – a view which many organisations currently lack.

It's certainly fair to say that too many organisations fall victim to the belief that cloud technology obviates the need for solid, repeatable processes. All the same, processes and governance need to be fully integrated with the appropriate tooling. The key word, here, is 'appropriate' – we've encountered a trend whereby tooling itself is widespread (to the point of sprawl, in fact), but functionality isn't being properly utilised.





Orchestration.

Ironically enough, automating key controls in the processes that capture of this kind of auditable data is best achieved through good workflow and orchestration – and, if done well, the end result is strong data quality with minimal manual effort.



Observability.

This approach is well worth pursuing – especially since the likes of ServiceNow now offer observability platforms that make monitoring increasingly accessible. Too often the consistent application of controls is not mandated in the early stages of development, with operability requirements seen as a burden – leading to their devaluation in the rush to go live.



Roger Bennett
CloudStratex
Enterprise Service
Management Lead.

Operational Efficiency.

Exploring The data:

The Utopian promise of cloud has, historically, been a best-of-both-worlds scenario in which greater agility, flexibility, and scalability are met by affordable costs – but our data confirms that this rarely happens in practice.

Of course, nobody's questioning the benefits of cloud – almost 80% [a clear majority] of respondents in our survey reported increased levels of agility as a direct result of movement towards the cloud, for example.

However, the notion that cloud represents cost efficiency has fallen by the wayside for a swathe of respondents, with nearly 58% reporting that their organisation has wasted money on cloud subscriptions as a result of ineffective cloud financial management.

Our data also provides context for this waste, with almost exactly the same proportion [57.48%] reporting that moving to the cloud has actually increased IT costs. This suggests not only that many organisations are paying too much, but they're paying more than they did prior to cloud adoption. This data doesn't indicate that cloud can't be cost efficient – but it does suggest that achieving efficiency isn't an automatic corollary to cloud adoption, and that – by extension – practices need to be in place to achieve those efficiencies.

Cloud Financial Management.

The need for better cloud financial management practices is clear among the 44% of our respondents who reported that their cloud teams don't sit outside the rest of their organisation's IT wing.

This kind of detail matters because, according to advice put forward by the likes of the FinOps Foundation, cloud teams need to be cross-functional, encompassing finance, business, engineering, and executive wings of a given organisation in a way that isn't easily achieved through incorporation into IT alone.

Cost Inefficiency.

This strongly asserted emphasis on cost inefficiency and insufficient mitigators indicates that cloud adoption comes with real and substantial risks – not necessarily in terms of security, about which over 70% of respondents were confident – but in terms of financial losses that may well be detrimental or harmful to businesses that adopt cloud without embracing the less flashy, but equally vital, financial management that cloud so urgently requires.



79 %

More Agile

79.33% of respondents either agreed or strongly agreed that movement towards the cloud made their organisations more agile in meeting business needs.

79%



44 %

IT Cloud Team

Nearly half [44.66%] of respondents said that their cloud team does not sit outside the rest of the IT wing of their organisation.

44%



44%

44 %

Wasted Money

44.7% of organisations either agree or strongly agree with the statement: "my organisation has wasted money on cloud subscriptions through ineffective cloud financial management"

57%



57 %

Increased Costs

Over half [57.5%] of organisations either agree or strongly agree with the statement: "moving to the cloud has actually increased IT costs"

Commentary & Analysis from CGO, **Jon Bennett.**

Controls & Procedures.

It's certainly no surprise to find that such a high proportion of our survey respondents report wasted cloud spend. IT spend just doesn't happen in the same way after a transition to cloud – not only due to a technological change, but also an accompanying cultural shift in which decision makers suddenly become very different people in very different roles.

In a nutshell, this means that spend-related decisions are placed on the shoulders of engineers, developers, and app teams without going through governance like finance – in fact, we find that the people now in charge of spend aren't necessarily aware of that fact, and certainly don't have the training to make these decisions by themselves.

“Although cloud itself can no longer be classed as new technology, cloud financial management is still an evolving discipline. Our partner organisation, The FinOps Foundation, advocates for a “crawl, walk, run” approach to FinOps, and we've found this sensible approach reflects our clients' relative immaturity in this space – that is, most of them remain in the 'crawl' phase.”



Save. Sustain. Systemise.

Cloud overspend is a common problem, and our solution always begins with a simple assessment of immediate savings (which can often be substantial in itself) before moving on to training, setting up cross-functional FinOps teams, and establishing capacity for automation in the long term.

As with many aspects of cloud adoption, FinOps isn't an easy process – it will involve not only the technical challenge of corraling vast quantities of billing data and the associated tools required to make sense of it, but the equally important challenge of effectively training employees to deal with FinOps and internally communicating changes and practices to the sometimes dozens of individuals who are connected to cloud spend in some way.

“Armed with a step-by-step approach and recognising the equal need for training and tooling alike, it's completely possible to realise the benefits of cloud – as our self-described ‘agile’ respondents have – without the exorbitant costs that uncontrolled spend will bring about these decisions by themselves.”

The Conclusion.

Enabling Strong Governance.

As our respondents were largely aware, regulators are increasingly demanding that IT systems are designed, introduced, and continuously assessed for operational resilience. These demands can be met through the use of modern CMDB technology coupled with solid process design, both of which – when employed in concert with one another – effectively enable strong governance in line with regulatory requirements.

Our research illustrates the challenges and pressures brought on by accelerated entry into the complex IT environment of cloud.

True Resilience.

The fact that high proportions of our respondents didn't feel truly resilient (and, indeed, remain reliant on manual CMDB updates) only underscores how much more work needs to be done for companies who have accelerated towards the complex realities of today's IT systems – especially with the spectre of non-compliance hanging over those organisations who fail to address their operational resilience obligations.

Cloud's complex realities equally made their presence felt among our respondents who reported costs that surpassed their previous IT expenditure. In this light, it's clear that both operability and financial management requirements need to be mandated and delivered as part of all IT service design and introduction.



Integrational Success.

The controls that inevitably result from such requirements provide continuous visibility of compliance, early warning of drift, and a mechanism for ensuring that integrations and resilience are consistently maintained – a highly necessary step for the swathe of respondents who remain uncertain of their organisation's existing integrational success.

Intelligent Control.

In turn, this level of integration provides a solid basis for the rigorous maintenance of financial and operational efficiency, allowing organisations to intelligently monitor and control cloud spend.

Exorbitant & Onerous.

Without these elements, organisations will remain hobbled by precisely the kind of issues that emerged in the course of our research: exorbitant cloud costs, continued instability, and onerous regulatory pressure.

CloudStratex.

We help businesses effectively leverage operational & service integration across cloud and legacy services.

From **strategy** through to **execution**, we will make your goals a reality and accelerate you towards self-sufficiency.

Contact Info

- ☎ 02030093000
- ✉ sales@cloudstratex.com
- 📍 New Broad Street House,
35 New Broad St, London EC2M