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Connect

Using operational resilience regulations to drive tangible business benefits on OpenShift

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What is Operational resilience and why does it matter

- ▶ What is operational resilience
- ▶ Assessing risk in a cloud native, modern world
- ▶ Real-world resilience failures
- ▶ The limits of operational resilience

A quick reminder of what we're talking about

“Operational resilience is the ability of financial institutions to continue to deliver critical operations at a minimum level that should be maintained even in the event of system failure, terrorism, cyberattacks, infectious diseases, natural disasters, or other similar events”

Why operational resilience matters

Different stakeholder groups have different priorities when it comes to operational resilience

The banking supervisor's perspective

Banking supervisors care most about the ability of financial institutions to withstand and quickly recover from disruptions of any kind while maintaining their critical functions, ensuring data integrity, and safeguarding both financial stability and customers' interests.

The focus is on preserving financial stability and preventing customer harm

The client's perspective

Financial institutions care about having all the right systems, processes, and procedures in place to ensure uninterrupted business operations and if there is a disruption, to remain within their stated impact tolerances. Their focus is on customer trust and confidence, and the firm's reputation by safeguarding customer data and delivering service continuity, promptly addressing any issues that arise.

The focus is on delivering uninterrupted business operations

The CSP perspective

For CSPs, good operational resilience revolves around the availability, reliability, and security of cloud-based services provided to clients in alignment with agreed service levels. This requires robust infrastructure, redundancy measures, and disaster recovery to minimize downtime and maintain service continuity, as well as transparent communication to stakeholders on service status.

The focus is on respecting contractual service level targets for cloud services

Everything breaks.

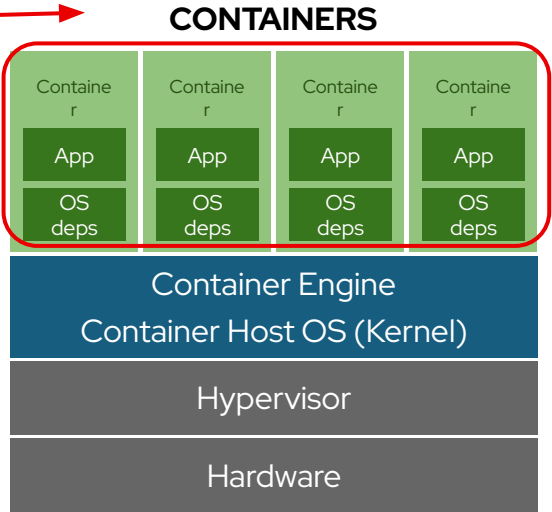
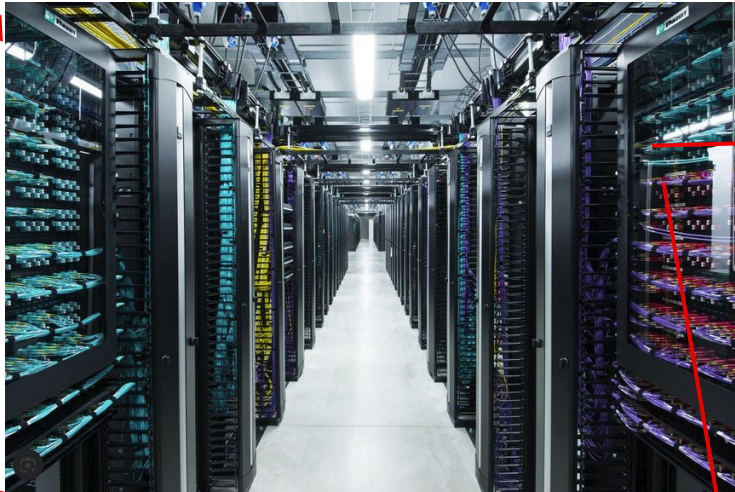
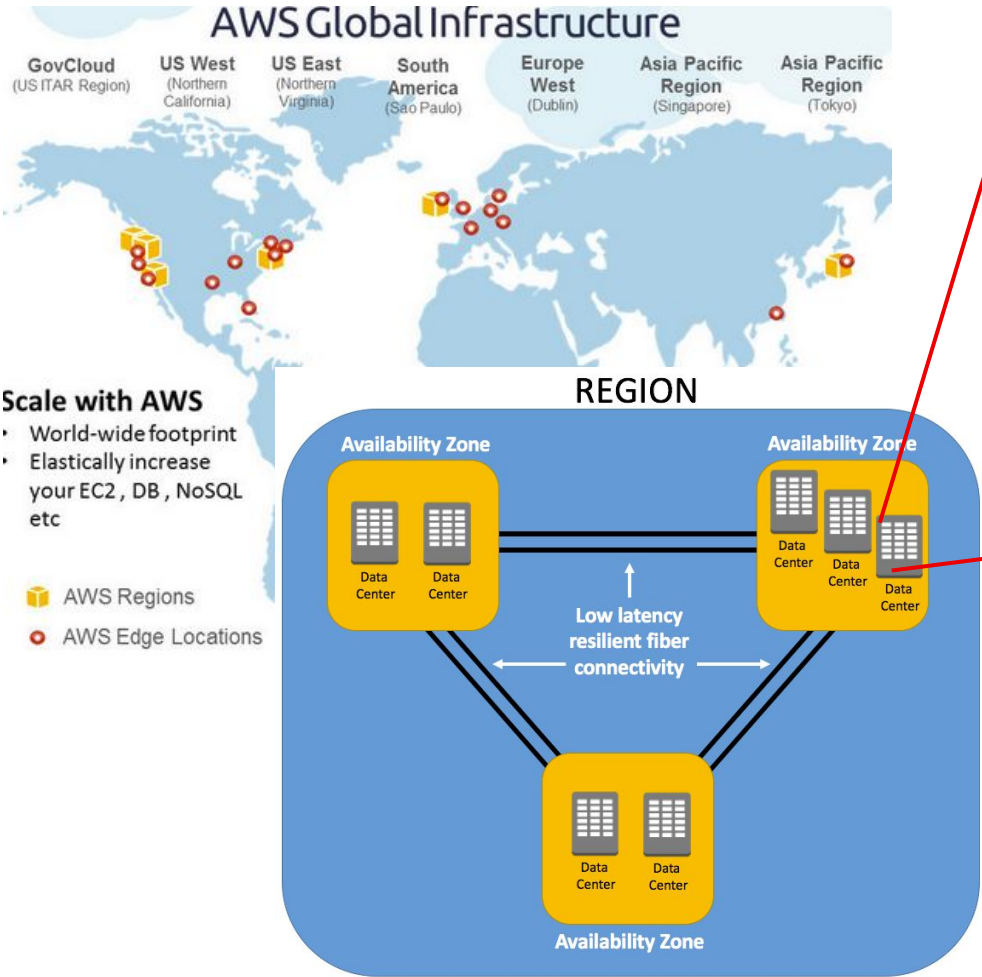
We need to plan and test for it - together

Resilient business services must mitigate disruptions coming from the f⁵:
Fires, floods, failures, and fat-fingers.



Assessing risk in a cloud native, modern world

Don't lose sight of where the risks are - it is more than outsourcing your data centre



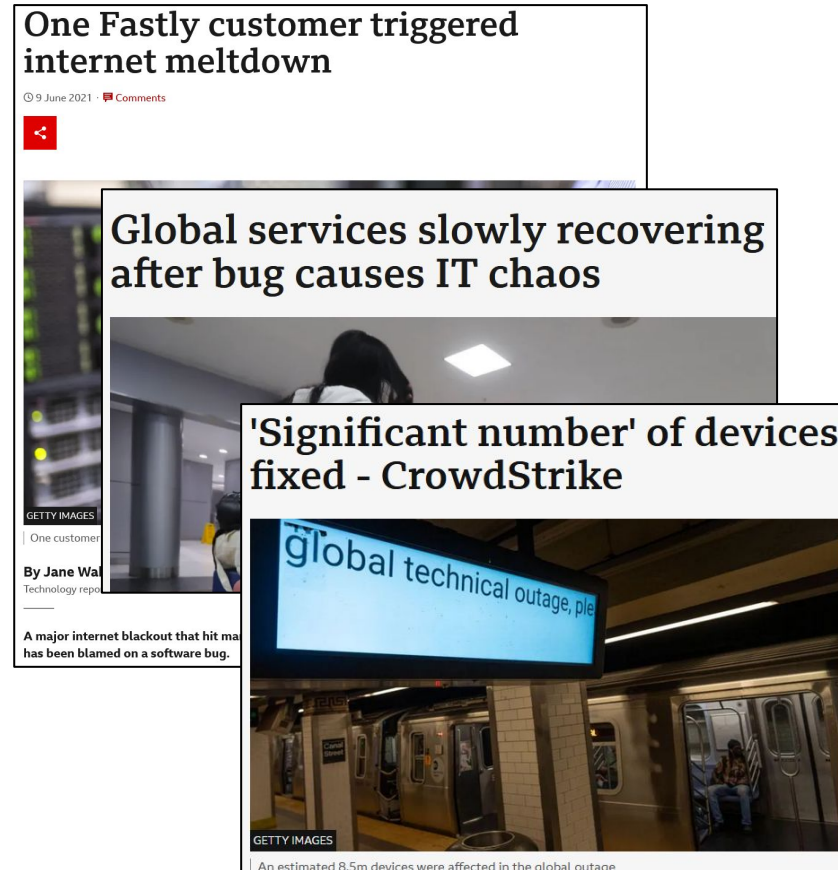
Real-world resilience failures

Examples of the changing(ED) risk landscape

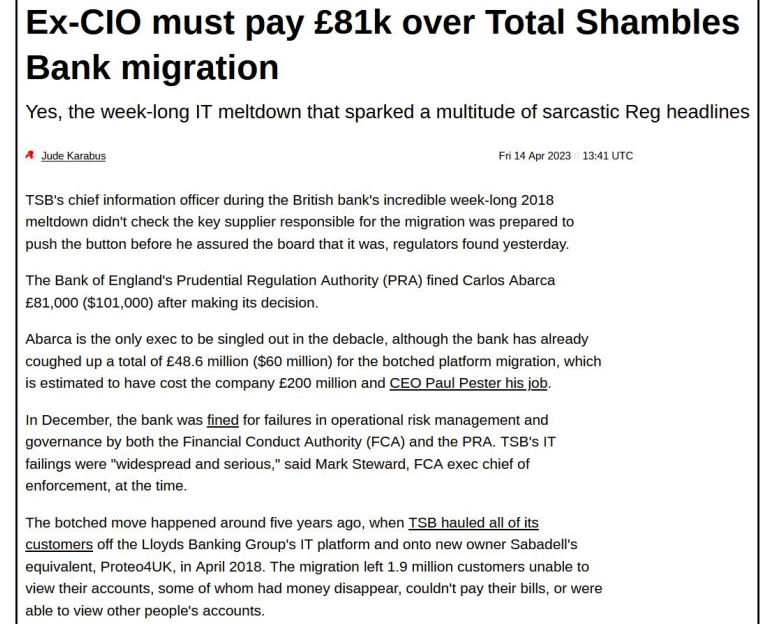
Managing your Trusted software supply chain (security)



Managing 4th & 5th parties risk

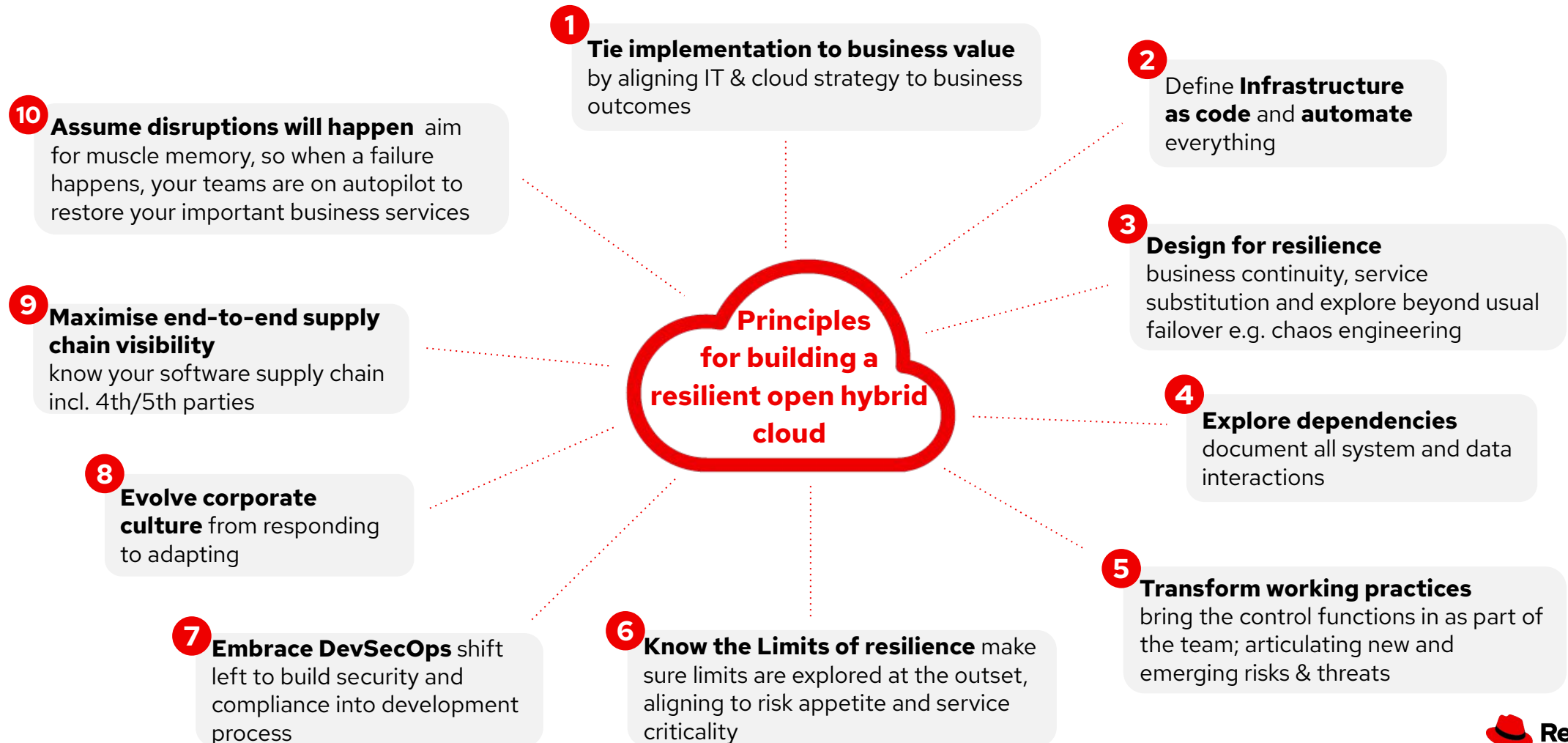


Managing delivery risk



- <https://www.bbc.co.uk/news/technology-55442732>
- <https://www.bbc.co.uk/news/technology-57413224>
- https://www.theregister.com/2023/04/14/ex_cio_tsb_fine/

Limits of technology resilience or application portability



How a container platform can support resilience

- ▶ Voice of the customer
- ▶ Why OpenShift (picture with all underlying infra options)
- ▶ An approach to platform resilience
- ▶ Simplified view of the target platform

Financial services firms are leveraging cloud technologies to modernise

Firms want to innovate, they want resilience, they want access to the best tech and they want options

Regulatory requirements are changing firms' technology expectations

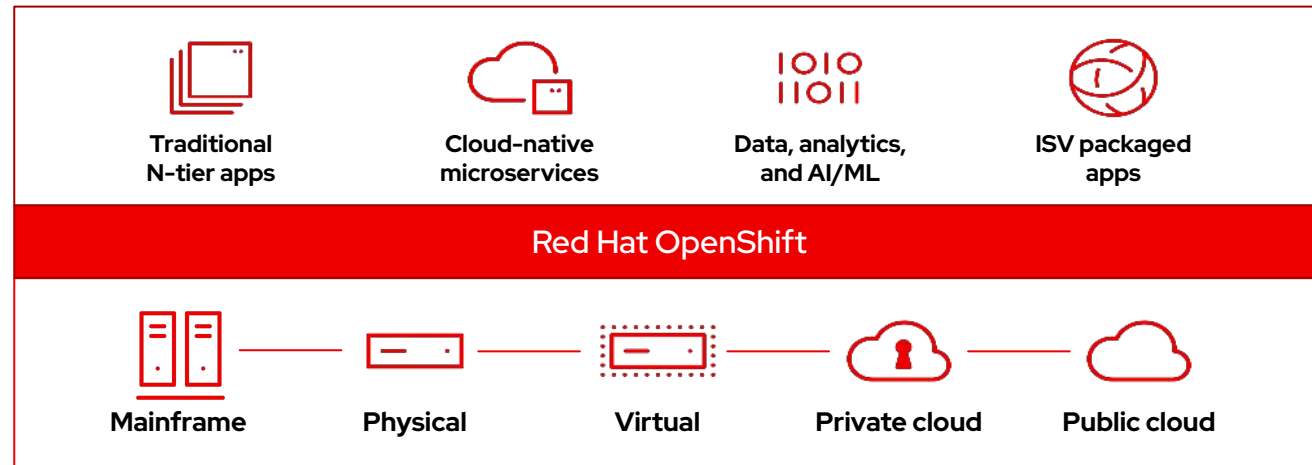
Firms remain accountable for their own risk management and compliance – but they rely on Red Hat for support as a 3rd party ICT provider



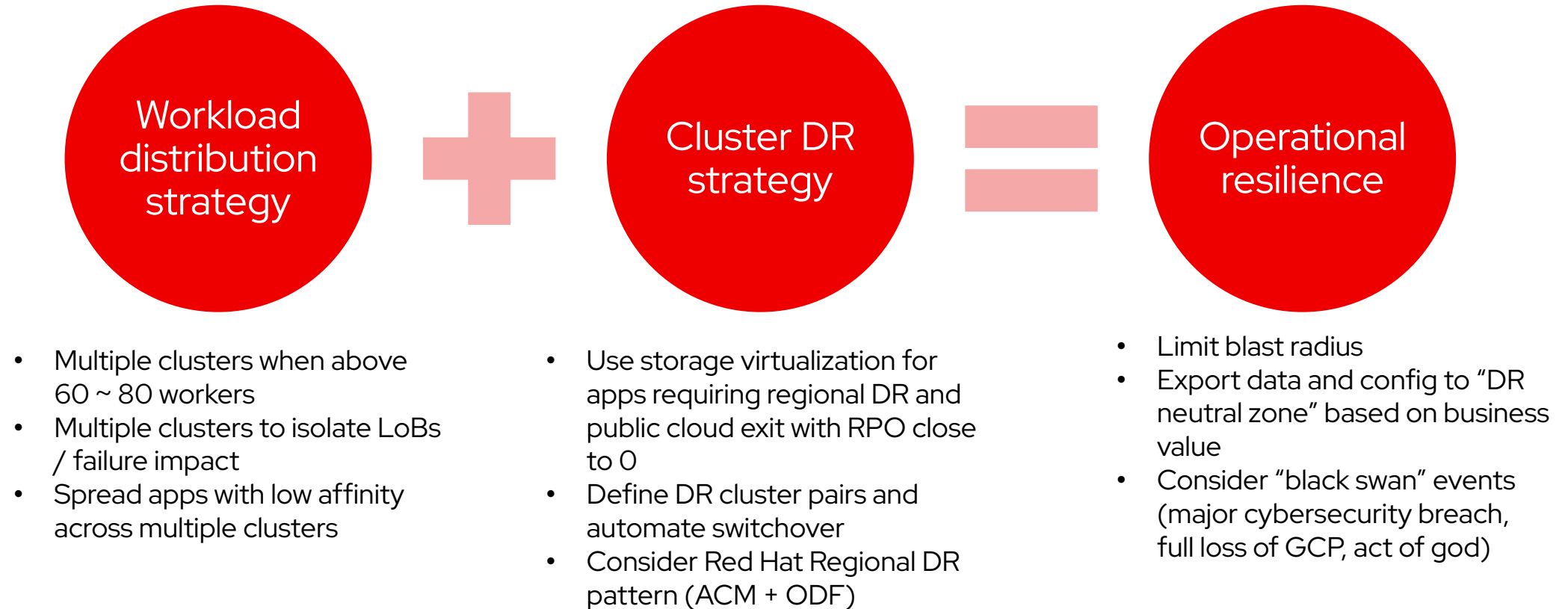
Through client-centric transformation **and acting as a trusted cloud and resilience advisor** together we

- Articulate the value of your container platform and modernisation efforts
 - Define meaningful business led KPIs
 - Define a high availability (HA) cluster strategy & architectures => failover plans
 - Created a portability demo & validated pattern
 - Define workload distribution strategy that works in a high regulated industry
 - Define new ways of working that the hybrid & public cloud worlds demand
 - Complete e2e automation assessment supporting automated management & failover
- Complete cluster health checks & migration approaches

Open hybrid cloud to drive resilience across the landscape

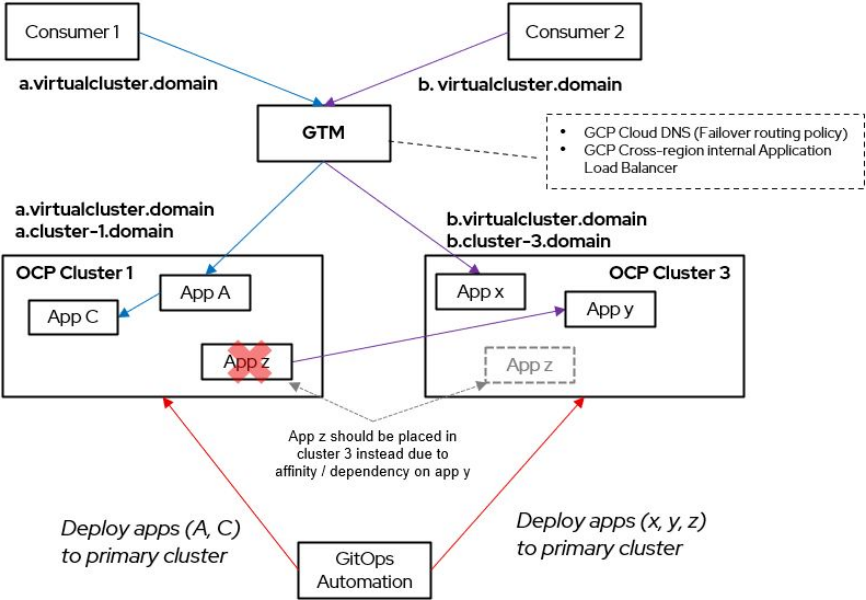


A resilient OpenShift cluster strategy

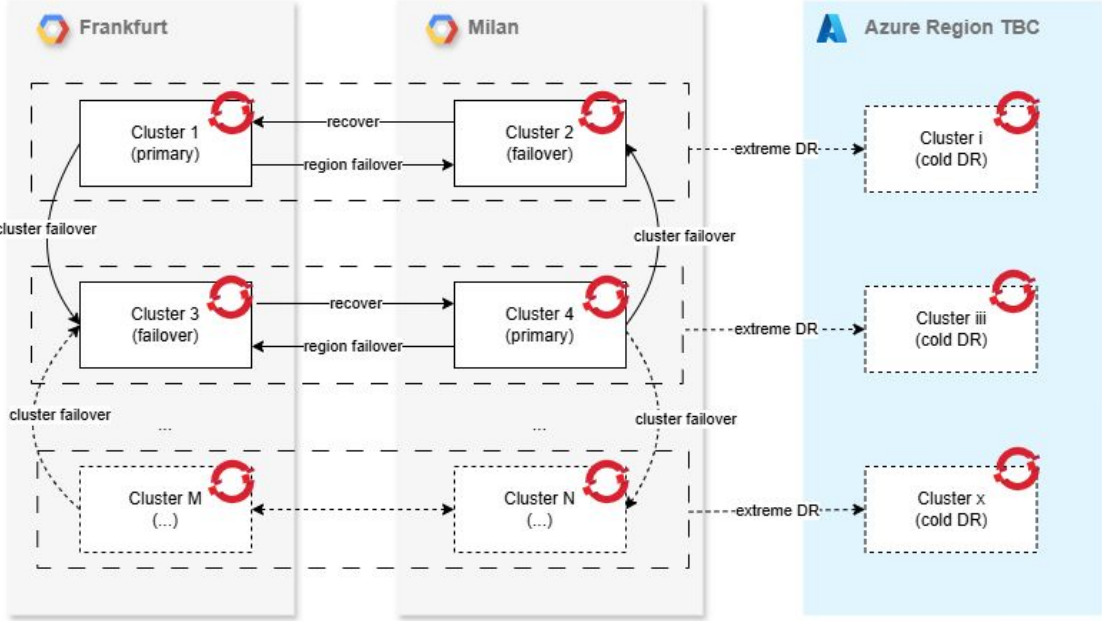


Where we ended up with cluster strategy

Workload distribution strategy



Cluster DR strategy



How to measure the value of the platform

- ▶ The importance of KPIs
- ▶ Examples considered awith our customer

The Value of your technology platform

Increase Revenue

Drive Efficiency

Client Experience

- **Improved NPS scores-internally and externally**
- Increased client stickiness

Developer Productivity

- Increase developer productivity
- **Reduce Lead time to production**

Time to Market

- **Increase software deployment frequency**
- Reduce overheads related to change projects & programmes



Improve Resiliency & Security

- **Reduce change failure rate**
- **Reduce MTTR**

Operational Efficiency

- More efficient IT infrastructure teams (DevOps)
- Reduce operating costs

Risk & Compliance

- Meet cloud portability / reversibility rules
- **Reduce security risks & vulnerabilities**

Run everywhere & anywhere

Wrapping up

Using KPIs to improve operational resilience



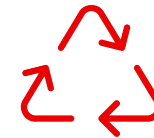
Report

Report the results of the NPS, Software delivery metrics, platform resilience tests to the people involved.



Review

Keep reviewing the results of the NPS, Software delivery metrics, platform resilience

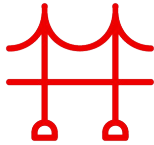


Re-evaluate

Run the tests again and again and keep track of how they have changed
Reevaluate the tests as well as the goals of resilience to grow and keep moving.

From aspiration to benefits realisation

Lessons learned from the front line



Build Resilience

- Failures are inevitable
- Simplify and standardise
- Consider hidden risks (3rd and 4th parties)



Plan for failure

- People, processes, technology
- Understand dependencies
- Test, test, test and test again



Tie implementation to business value

- Understand cost-benefit and risk of heterogeneous tech
- Use business needs to drive KPIs
- Measure value and take actions

Session: 16:50 - 17:20



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