

Gartner: The Broken State of Backup



Dave Russell

Vice President, Storage
Technologies and Strategies

Gartner®

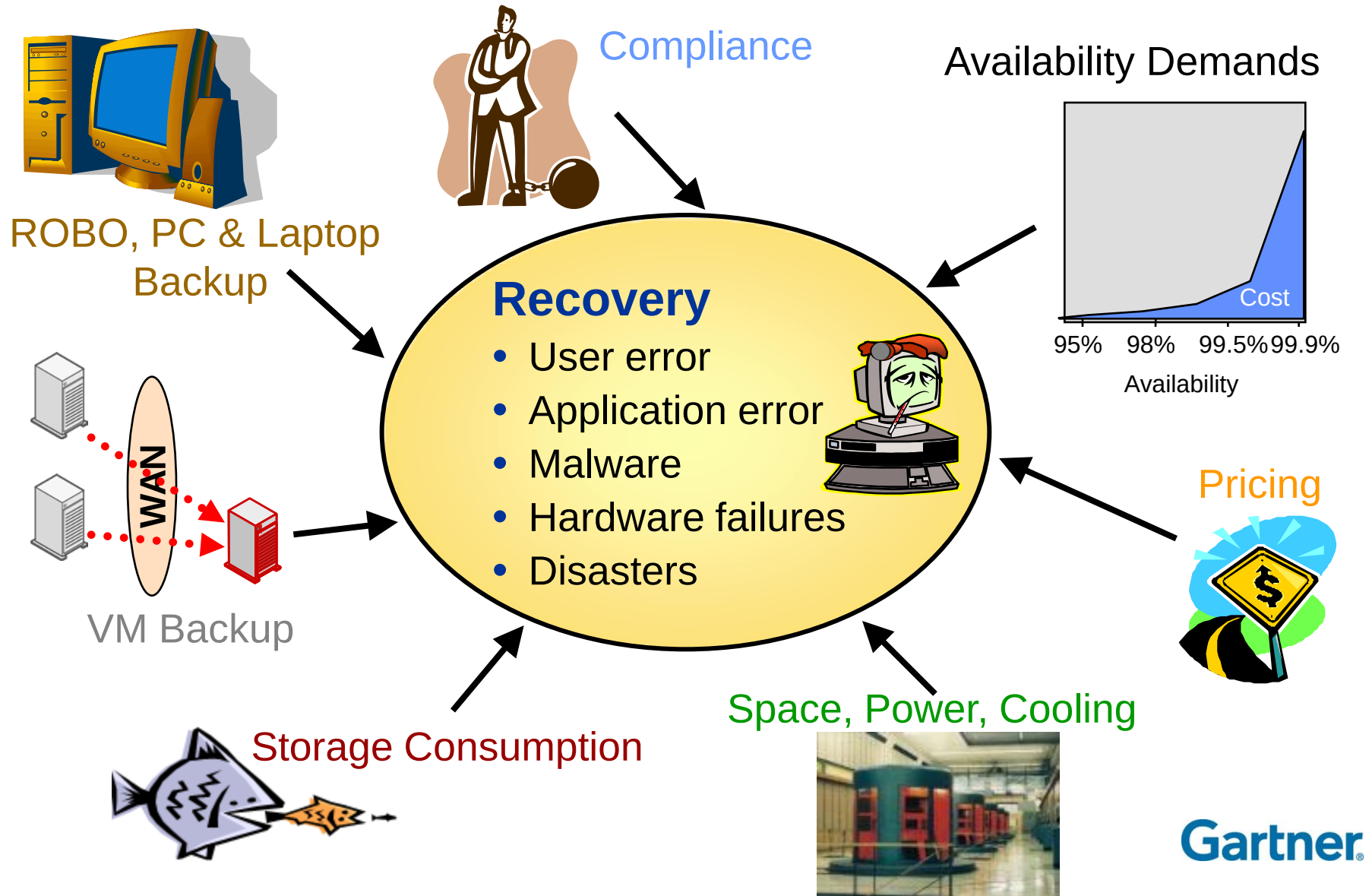
Backup/Recovery Isn't What It Used to Be

Requirements and technology have evolved. Organizations should expect to fundamentally change their backup/recovery investment strategies.



**There is no "off" switch
for data anymore**

Increasing Pressure on Backup/Recovery



Key Take-Aways



Top Selling Thoughts

- **Stickiness** is a thing of the past as backup products are now swapped out, in part due to lower retention periods for data
- **Backup Re-architecture** is taking place today and will continue for at least another 12 months and probably longer
- **Simplicity** is a meaningful differentiator as powerful solutions are only interesting if they can be deployed and managed effectively
- **Server Virtualization** is a change event that causes organizations to consider deploying new / different backup solutions
- **Bigger Isn't Always Better** as McDonalds sells a lot of hamburgers but is rarely accused of having the best food 😊

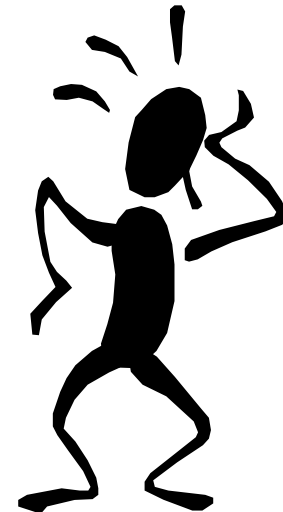
The Implications

The backup and recovery approaches of the past no longer suffice in meeting the current, much less the future, organizational recovery requirements.

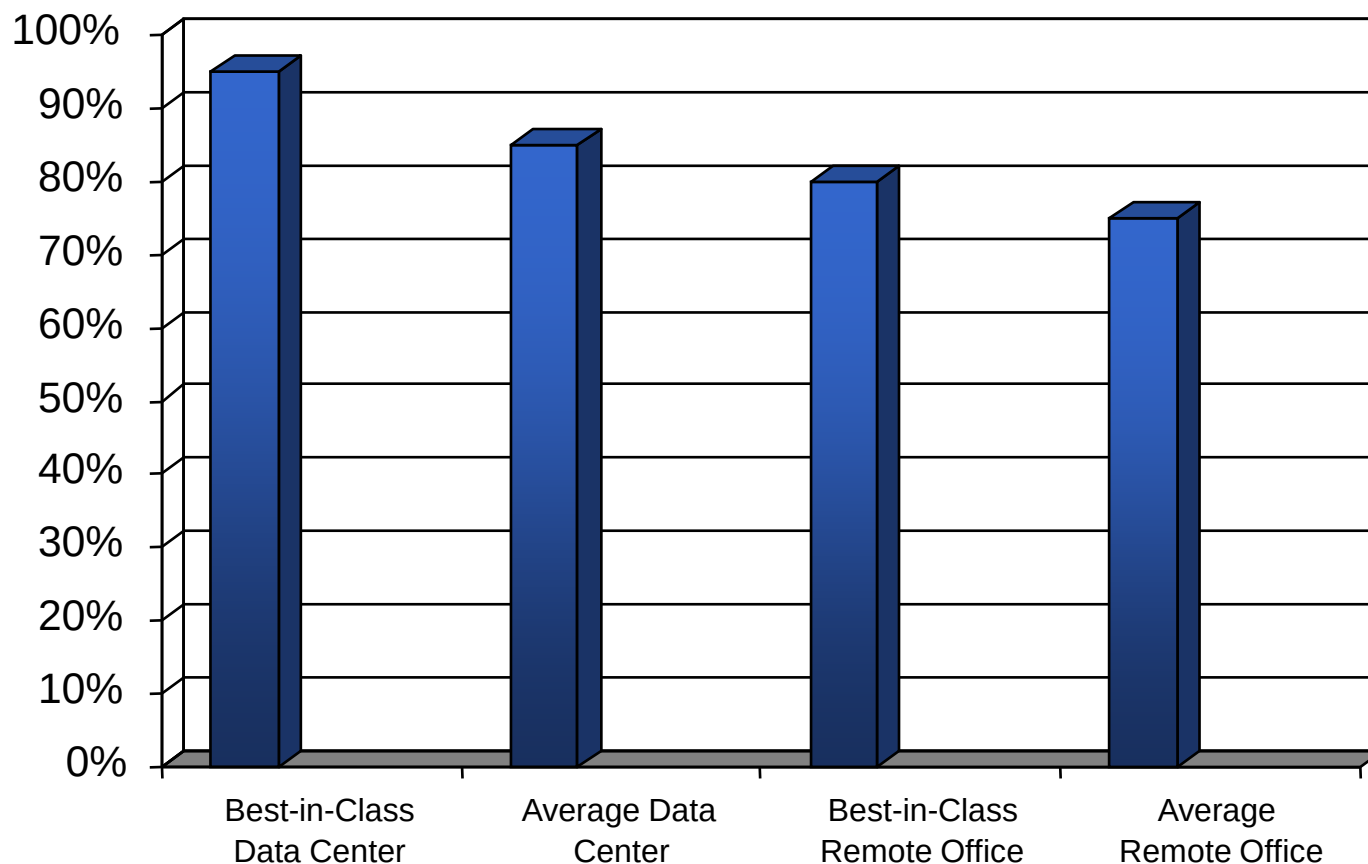
Today, Backup/Recovery Is Broken

Common Issues

- Too much faith in backups
- Lack of consistent testing and verification
- Backup failures
- Poor, incomplete backups
- Too many incremental backups
- Too many 'events' trigger a backup
- Operator/user error
- Hardware and software failures
- Age and deterioration of media
- Technology obsolescence



Backup Success Rates Are Not Acceptable



*Recovery rates
are even worse!*

Strategic Planning Assumption: Through 2010, improvements in backup success rates will be the No. 1 driver for disk based recovery implementations.

Managing the Total Cost of Backup

Capital Expenditure



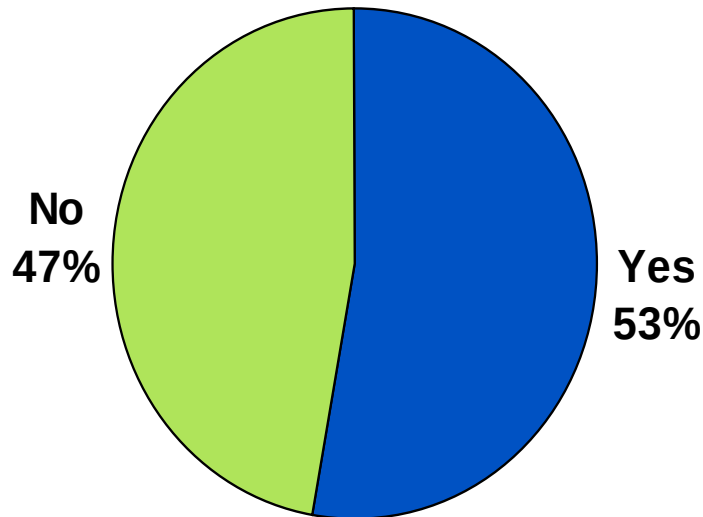
Operating Expenditure

Chip away at the top and more keeps appearing...

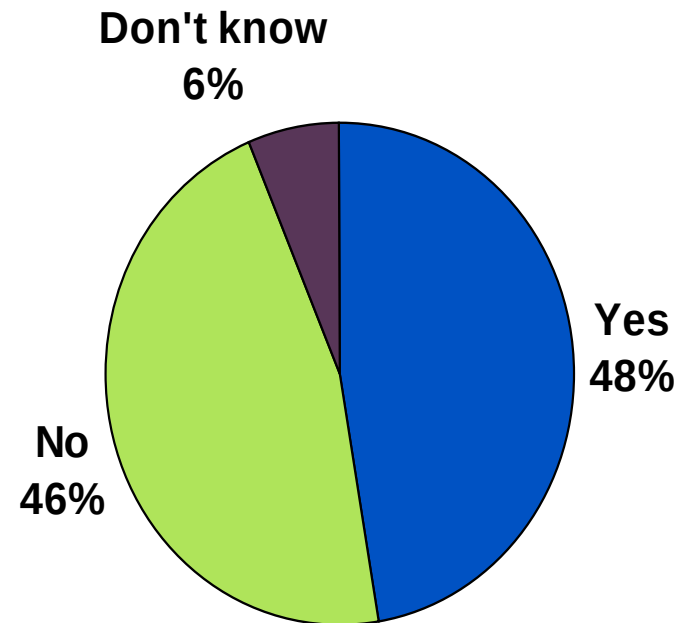


Has or Will Your Organization Done / Will Do A Major Backup/Recovery Redesign?

Last 12 Months



Next Twelve Months



All Giants, No Dwarves?

- The largest vendors have dominated the storage landscape.
- In recent years, some critical innovations have come from smaller vendors at the periphery, not larger vendors at the core.
- Will the legacy "giants" consume the emerging "dwarves?"
- Can a dwarf prevail?



Many Ways To Spend the Data Protection Dollar



What Should Backup/Recovery Products Do?

1. Unified & Holistic
2. Completely Integrated
3. Non-Invasive
4. Efficient
5. Scale Up & Down

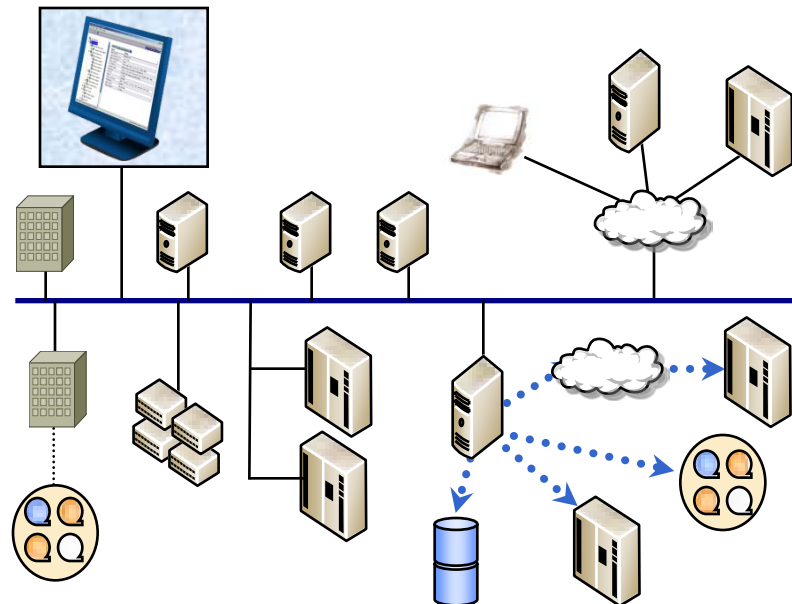


- ✓ Successfully backup!
- ✓ Successfully restore!
- ✓ Restore “instantly” for fast access to data
- ✓ Be more intuitive, easier to use
- ✓ Be easier to manage and upgrade
- ✓ Be holistic
 - No point products to shore up functional gaps



Data Protection in 2014

- **Unified Recovery Management**
 - One pane of glass for control
 - In-house
 - Cloud
- **Tiered Recovery**
 - Tape
 - D2D & VTLs
 - Space efficient snapshots
 - Remote replication
- **Disaster Recovery**
 - Tape -> Replication for offsite vaulting
 - Cloud / SaaS
- **Backup Beyond the Data Center**
 - Laptop & Desktop Backup
 - ROBO Backup
- **Encryption comes of age**
 - Key management better integrated



New Recovery Approaches Are Emerging

Backup

- Tape or disk
- Cataloged
- Time-based
- Block or file
- Local or remote
- Logical and physical

Replication

- No sense of time
- Sync or async
- Local or remote
- Physical only

CDP



Snapshot

- Time-based
- Block or file
- Local or remote
- Logical and physical

Which answer best describes your *production* usage of Continuous Data Protection (CDP):

① Currently using near-CDP today



② Currently using true-CDP today



③ Plan to implement near-CDP in the next 12 months



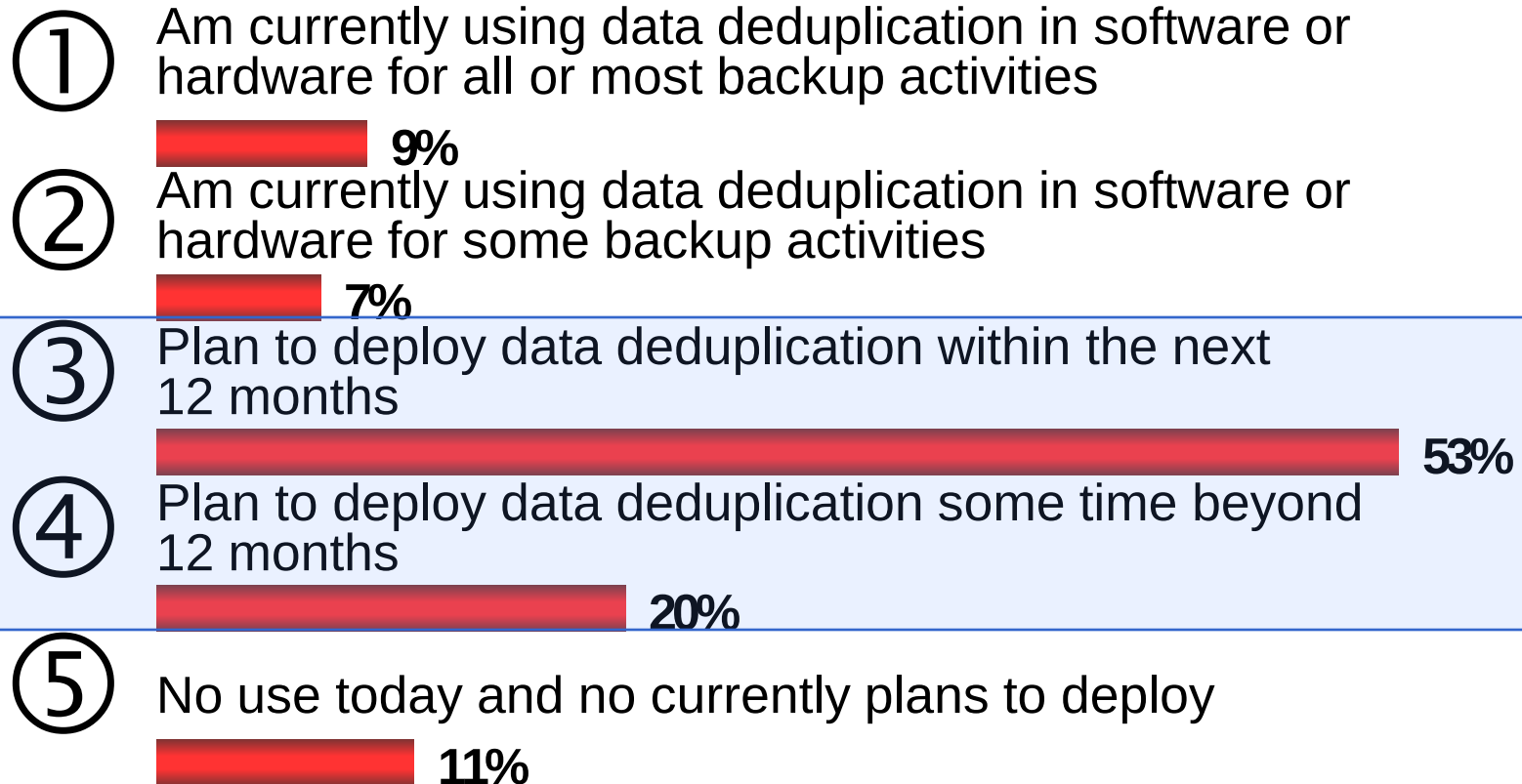
④ Plan to implement true-CDP in the next 12 months



⑤ No plans to implement CDP in the next 12 months



What are your plans for use of data deduplication technology for backup?



Differentiated SLAs -> Tiered Recovery Services

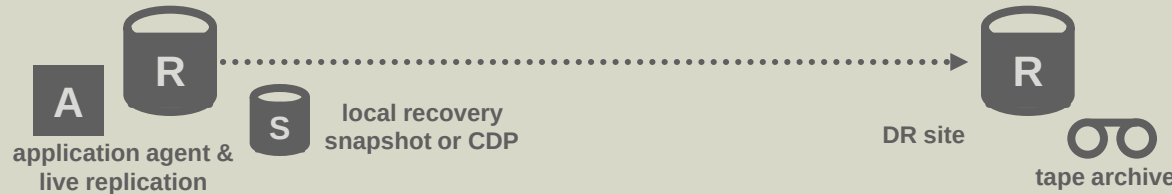
RTO/RPO

Data Protection Techniques

Cost

Platinum

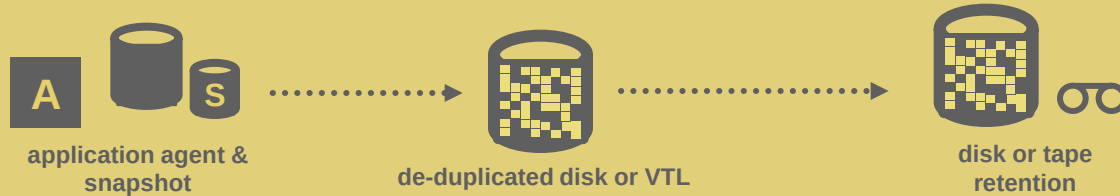
seconds
<1 second



\$\$\$\$

Gold

minutes
2-4 hours



\$\$\$

Silver

hours
1 day



\$\$

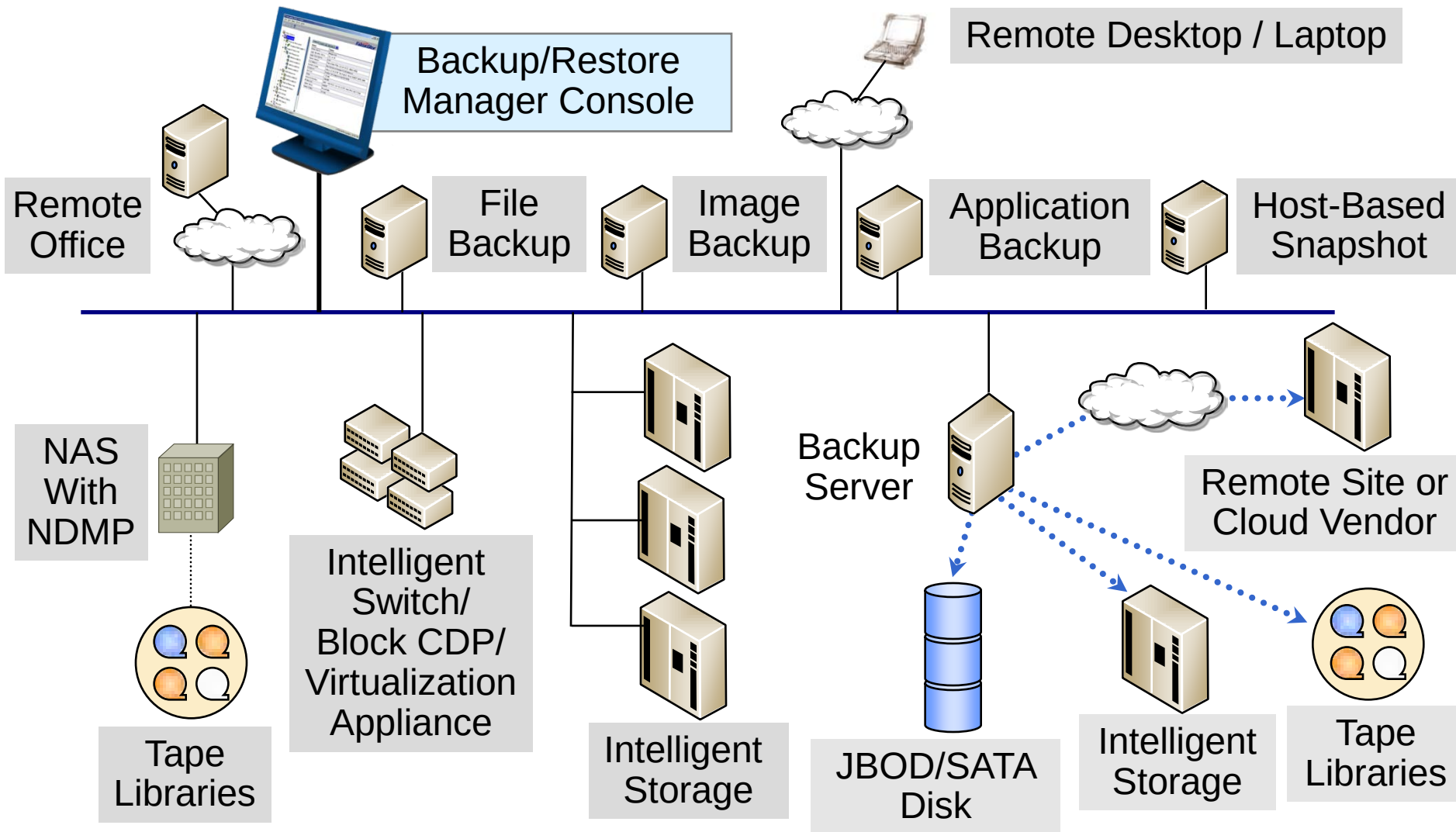
Bronze

hours
1-3 days



\$

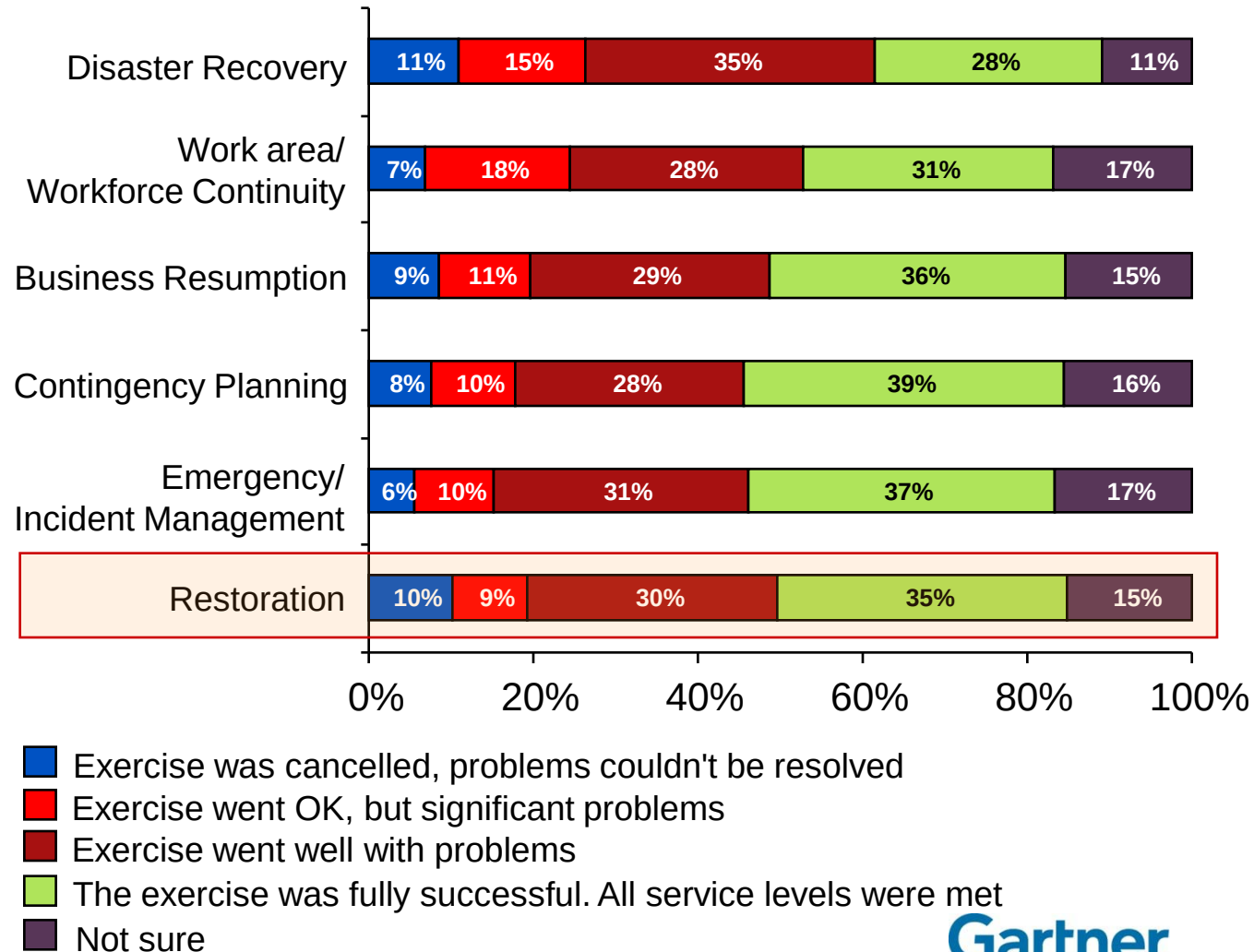
The Future of Backup/Recovery: Unified Recovery Management



Is There a False Sense of Security of What You Can Recover?

Exercising DR plans is the second-most-critical aspect of the DR process (conducting a BIA is the first) and the aspect most feared

Outcome of the Last Exercise



Recommendations

- ✓ Investigate new technologies for applicability in your backup/recovery infrastructure
 - These might not come from traditional backup vendors
- ✓ Strategically select vendors with a long-term vision for recovery
 - D2D2C, CDP, Deduplication
 - Recovery Manager (manager of managers)
- ✓ Implement tiered recovery
 - Build multilayered SLAs for backup & recovery
- ✓ Do regular testing to ensure that your data is recoverable



■ ■ ■ ■ Questions?