

A PRACTICAL GUIDE TO
DIGITAL TRANSFORMATION
FOR YOUR INFRASTRUCTURE



DEFINE DIGITAL TRANSFORMATION

Digital technologies range from virtualization of services, such as Office365 to full-blown cloud strategies. Some of the buzzwords you may hear are UCaaS, cloud, SD-WAN, hyperscale, etc. Breaking through the buzz is essential though to find the path you must take for success.

The goal of this eBook is to assist you in breaking down the sometimes-confusing world of digital transformation and deliver a practical guide to help you achieve success.



“ Digital Transformation is the process of using digital technologies to create new – or modify existing – business processes, culture, and customer experiences to meet changing business and market requirements. This reimagining of business in the digital age is a digital transformation. ”

DEFINE
DIGITAL
TRANSFORMATION



PRIORITIZE
YOUR NEEDS
AND WANTS



PLAN FOR
VIRTUAL REALITY



IMPLEMENT
WITH A PLAN



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70%
of change efforts

FAIL

This stat, taken from Forbes 2019 article titled “Why Do Change Efforts Fail?”, assumes that most of your clients are not planning to fail, but yet that is the unfortunate outcome. The path of least resistance is typically the easiest, but not always – or often – the most successful.

It is essential to understand your current state and desired outcomes in order to create a plan for digital transformation. With any IT infrastructure initiative, there are several layers required in a plan from vetting vendors to understanding internal stakeholders’ data needs and knowing the boundaries of the company budget.

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REMEMBER: Not Everything Has To Be Virtualized

Sometimes there is a mandate to move everything to the cloud, but our conversations with Fortune 1000 organizations have told us overwhelmingly they have hybrid infrastructures. Rather than putting everything in a singular cloud environment, they must diversify their infrastructure to accommodate compliance regulations, storage and data transfer costs, global or national diversity, etc. Hybrid is popular for a reason!

Understanding what should be virtualized and in what order is made easier with an understanding of your infrastructure and how it's used. Taking inventory is a tedious but crucial task, especially if you are in a position where records weren't kept well before your tenure. Here are some ways you can make documentation a bit easier:

1. Start small, tally the tangible requirements, and highlight pain points (easy ones to identify are performance issues, such as bandwidth speed issues, storage capacity issues, problems with voice on phones, etc.)
2. If you've had a consultant working with you, ask them the pertinent questions you need to define how your infrastructure is architected and usage.
3. If you're working with a set of vendors, don't hesitate to ask them for assistance. We have often found that customers are worried about sharing too much. In that case, make them sign an NDA. Vendors will be able to put a better solution together with a clear picture of your infrastructure.
4. There are TONS of tools out there to help establish what your "utilization" on hardware and virtual equipment. For example, on VMware there is a RVTools report you can pull to review. This is our favorite because it gets down to the core of right-size right-fit for cloud solutions.

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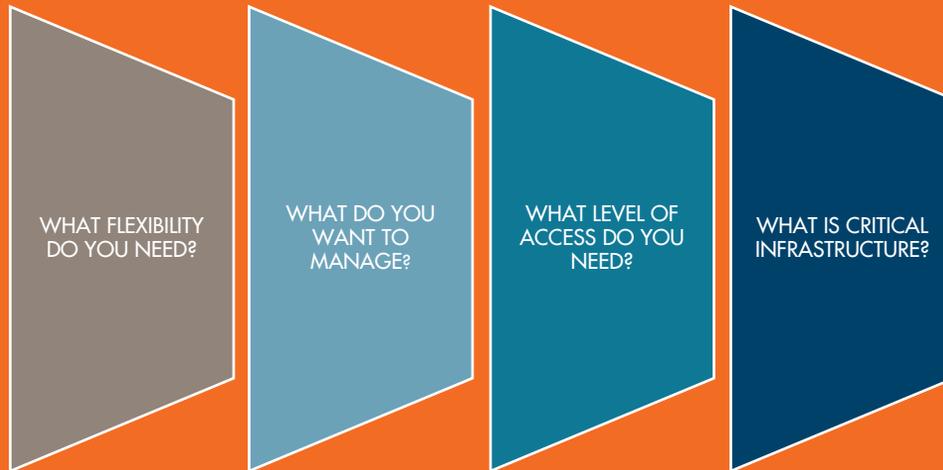
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PRIORITIZE YOUR NEEDS AND WANTS



 [Download Our Inventory Consolidation Assessment](#)

When creating a digital transformation plan, we have developed a list of common questions you may want to ask yourself:

- What is critical to your infrastructure?
- What level of access do you need?
- What do you want to manage?
 - What would you prefer a vendor manage? In most scenarios, we see customers who are looking to get out of their hardware/virtual infrastructure management and are looking to manage their applications only.
- What is mission critical to your business?
- Email? Connectivity? Development? Proprietary applications?

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Plan To Scale

At Data Canopy, we preach “flexibility” to our clients who are implementing a digital transformation plan.

We believe that you should have an estimate of what growth you may experience over time and project that into your plan.

Additional factors in your plan to scale should include:

- Number of Users
- Test/Development
- New Applications
- Databases/CRM

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[Download Our Hybrid Inventory Assessment](#)

When it comes to selecting the right vendors for your digital transformation you don't want to leave anything to chance. Ensure that you are assessing your vendors with the following questions:

- Does the vendor meet compliance regulatory requirements?
- Will the vendor provide expert guidance and strategic planning?

Ensure that you also evaluate your vendors with their ability to keep their plans within your budgetary constraints.

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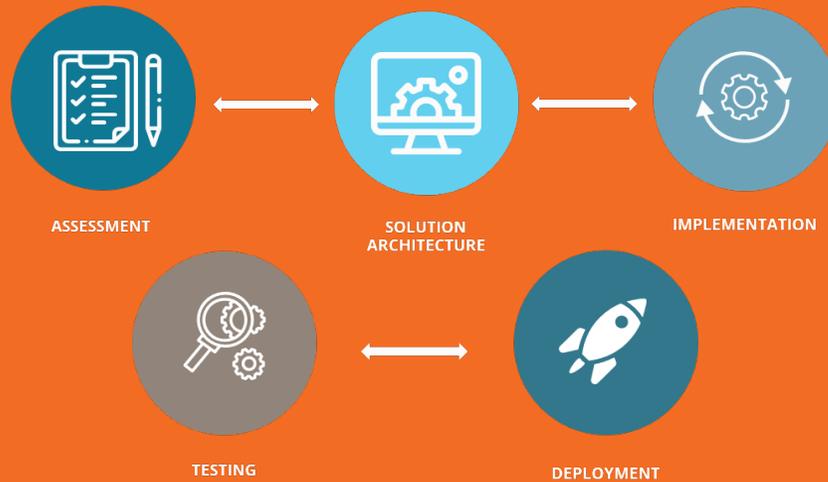
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[Download Our Disaster Recovery Plan Checklist](#)

When the time comes to implement your plan, we have a simple diagram of attack to ensure you are properly ready for your digital transformation.

A few key points to keep in mind:

- Don't be afraid to ask for a POC (proof of concept).
- Ensure you have a disaster recovery strategy in place for continual testing.
- Test, test, test. Testing all aspects of your solutions before deployment will reduce unwanted surprises

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CASE STUDY - VIRTUALIZATION

TRANSFORMING AGING INFRASTRUCTURE TO ADVANCE VIRTUALIZATION TIMELINES



FINANCIAL SERVICES FIRM

CHALLENGE

Data Canopy was introduced through a partner to a large, Washington, DC-based financial services provider who requested a quote for two cabinets of collocated data center hosting. Their on-premise data center had leaking air conditioning units and the IT team was under tremendous pressure to find a suitable environment for critical infrastructure. As part of Data Canopy's initial discussions and discovery process, the following was uncovered in addition to the pressing data center hosting challenges:

- Aging hardware
- Ad-hoc network architecture
- Out-of-date applications and operating systems
- Growing security concerns

The internal IT team recognized the need to modernize and evolve the management and maintenance of core infrastructure and had an eye toward a longer-term virtualization strategy projected to span the next five years. The Data Canopy team of experts suggested that the timeline could be moved up significantly and consulted with the financial services company to see how to make that a reality while staying within their solution requirements and budget constraints.

SOLUTION

Data Canopy brought in experts in network architecture, data center infrastructure, cloud computing, storage, and cyber security to consult on the company's current environment. The financial service provider was sensitive to excessive capital expenditures, so Data Canopy explored solutions where the financial service provider would leverage Data Canopy's virtual environment on a monthly basis. The company had strict uptime and security requirements to ensure member data is secured and regulatory requirements are maintained.

In order to guarantee the security and uptime needs were met, Data Canopy developed a strategy to migrate infrastructure to a virtualized environment hosted in a Tier III facility with a geographically redundant disaster recovery solution, with a guaranteed sub-one-hour RTO. The daily incremental backups ensure all development and member data updates are replicated and secure in a virtual disaster recovery environment located more than 1200 miles away. Data Canopy helped the financial services provider transform its organization by:

- Migrating 500 users from Exchange server to Office 365
- Connecting Physical to virtual via Layer Two within a Tier III data center
- Meeting PCI-DSS regulatory requirements
- Implementing a DRaaS solution

Virtualization roadmap reduced from 5 years to 18 months.

- Migrated from Exchange server to Office 365
- Physical to virtual connected via Layer Two within a Tier III data center
- Meet PCI-DSS regulatory requirements
- DRaaS solution

APPENDIX

ARTICLES

- ["Why Do Change Efforts Fail?"](#)
FORBES 2019
- [Blog Post - One Size Doesn't Fit All!](#)

CHECKLIST AND ASSESSMENT TOOLS

- [Inventory Consolidation Assessment](#)
- [Inventory Hybrid Assessment](#)
- [Disaster Recovery Plan Checklist](#)

CASE STUDY

- [Virtualization Case Study](#)

WEBINAR

- [Watch Our Digital Transformation Webinar - March 2020](#)

