BUILDING A DATA LIFECYCLE MANAGEMENT STRATEGY IN THE ERA OF DIGITAL TRANSFORMATION

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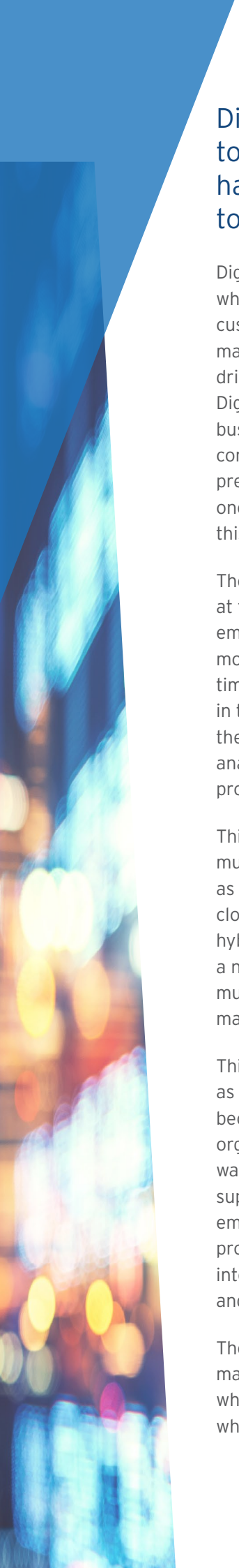

Digital transformation is one of the driving forces in business today. IDC predicts by 2020, 30% of G2000 companies will have allocated capital budget equal to at least 10% of revenue to fuel their digital strategies. [1]

Digital transformation defines how and where to do business; how to service customers; how to serve mobile users; how to manage and attract employees; and how to drive innovation and competitive advantage. Digitised data is the currency by which businesses rise and fall today, and those companies that do the best job of protecting, preserving and managing their data are the ones that will not only survive but thrive in this new era.

The reality of digital transformation puts IT at the centre of the business. IT leaders must embrace technologies and solutions that are more cost-efficient and agile. At the same time, they must address tremendous growth in the amount of data that is created and then stored, secured, backed up, replicated, analysed, accessed, archived and, eventually, properly destroyed.

This is creating a new model for IT that is much more service-centric than ever before—as evidenced by the staggering growth of cloud usage, whether public, private or hybrid. Digital transformation is also creating a new paradigm in how organisations must go about protecting, preserving and managing their data.

This new paradigm is often referred to as data lifecycle management, and it is becoming a critical initiative for every organisation that is being touched in any way by digital transformation—whether supporting mobile apps, using social media, embracing digital collaboration, selling products online, servicing customers interactively, or just dealing with customers and employees through email or the Internet.

The key to building an effective data lifecycle management strategy is to understand just what data lifecycle management is and what it can do for the organisation. It is also important to define the extent to which your company is embracing digital transformation because that will affect decisions about where and how to store data, as well as issues around backup, replication, recovery, protection and archiving.

THE BENEFITS OF DATA LIFECYCLE MANAGEMENT

Just about every organisation in every industry is affected by digital transformation. Research firm McKinsey & Co.[2] says as digital technologies dramatically reshape industry after industry, many companies are pursuing large-scale change efforts to capture the benefits of these trends or simply to keep up with competitors. In a new McKinsey Global Survey on digital transformations, more than eight in ten respondents say their organisations have undertaken such efforts in the past five years.[2]

In a digital business, new data is constantly being created while older data is relied upon to spot trends and opportunities. This means all data must be properly tagged and indexed, and it must move from tier to tier as its value evolves. Organisations must be able to find and access data wherever it is located—not just to drive business processes, but also to meet data governance, regulatory and e-discovery requirements.

Data lifecycle management is about creating and executing a plan to protect, preserve and manage data at each stage of its lifecycle, from creation through destruction. As data ages, its value to the business changes. An effective data lifecycle management plan will recognise, plan for and adapt to those changes.

The benefits of adopting this model are critical to supporting digital transformation, enabling organisations to:

- **Manage and control costs:** With digital transformation, companies are creating huge amounts of data that must be stored, backed up, replicated, archived and, eventually, properly destroyed. A data lifecycle management plan will incorporate a wide range of technologies—including on-premise storage, storage tiering, cloud storage and off-site tape backup—to keep costs manageable despite this tremendous expansion of capacity.

- **Protect and secure data at all times:** As organisations embrace cloud models for storage—particularly for backup, replication and archiving— data is often moving from on-premise to off-premise clouds. The IT team is responsible for protecting that data no matter where it is located, so a viable data lifecycle management plan will incorporate security for all data at all times.

- **Meet compliance and e-discovery requirements:** Organisations are obligated to save data for specific time periods to meet compliance requirements and respond to e-discovery requests. A data lifecycle management plan uses tiering to move data to cost-effective storage, based on how often it needs to be accessed. It also incorporates processes and procedures to tag and index data so that it can be found and expediently delivered when necessary.

- **Improve availability to meet SLAs for the business:** In a digital business, everything relies on IT. Any amount of downtime is unacceptable. In today's environment, the average cost of unplanned downtime is at an average of $21.8 million each per year, up 36 percent year on year, according to Veeam.[3] A data lifecycle management plan will incorporate the need for greater uptime and deploy a variety of solutions to help organisations lower recovery time objectives (RTOs) and recovery point objectives (RPOs).

- **Drive innovation:** As noted by McKinsey & Co.[2], digital transformation involves reinventing business processes. Using best practices in data management enables organisations to drive innovation through initiatives such as big data analytics, mobility, the Internet of Things and expanded social media collaboration. Having these technologies on hand is only one part of the story. As the research suggests, having the right, digital-savvy leaders in place might also improve the chances of a digital transformation success.

FORMULATING A DATA LIFECYCLE MANAGEMENT PLAN

Each organisation will embrace digital transformation at its own pace. Therefore, not every data lifecycle management plan will be the same. One of the important first steps in embarking on a plan is to choose an experienced and knowledgeable partner. It is very difficult for most IT organisations to have expertise across all of the areas involved in building a data lifecycle management strategy.

In today's environment, IT teams are deploying a number of technologies, from flash and cloud storage to object storage and specific solutions for backup, recovery and archiving. There are also significant security challenges, particularly as data moves between on-premises data centers and hybrid or public clouds.

In addition, regulatory requirements and potential e-discovery requests change from country to country and industry to industry, so keeping pace requires constant vigilance.

An experienced third-party partner will have the knowledge and expertise to guide you through these challenges and build a plan using best practices for governance, data protection, archiving, retention and other areas. If you work with a partner that takes a technology-agnostic approach, you can build a plan that allows you to use the right solutions for your specific requirements.

Once you've chosen a partner, the next step is for you to work with your partner on a full assessment of your business and data management challenges. At this point, you will address fundamental questions as they relate to your digital transformation challenges, including:

- To what extent is the business embracing digital transformation?
- What are the current gaps in data storage and management?
- Is there critical information isolated in silos?
- Is data being properly tagged and created at the point of creation?
- What is the budget for data storage, including backup, archiving and replication, and will that budget shrink, grow or remain flat?

This is by no means a full list of the questions that should be asked, but it gives a sense of the processes involved in building the right strategy.

EXECUTING A DATA LIFECYCLE MANAGEMENT STRATEGY

Once you've set your goals and built the framework of a data lifecycle management strategy, the next step is to execute that strategy by first adopting best practices policies and technologies. This is another area where it is important to have an experienced partner.

As just one example: Most organisations are moving to flash storage for many of their primary production applications, but flash is not a cost-efficient option for backup, archiving and recovery. Once data is no longer required for production applications, it must be moved to less expensive tiers. These can be on-premises disk or tape, off-site disk or tape, or the cloud.

There is no one-size-fits-all solution, and in fact, most organisations will benefit from a combination of these technologies. But how do you know which technology makes the most sense for which data? How do you know which data to store on-premises and which data should move to the cloud? How do you ensure that data is protected at all times, even in transit? These are just a few of the additional questions you and your partner must address to successfully execute your data lifecycle management strategy.

TAKING THE NEXT STEP

In choosing the right partner to enable digital transformation through data lifecycle management, you should consider a provider that offers a full range of solutions, meaning it is not dependent upon one particular technology or deployment model—for example, cloud only or on-premises only. Technology independence is one of the value-added benefits that sets Iron Mountain apart from other companies in the field.

1 "Worldwide spending on Digital Transformation will be nearly $2 trillion in 2022 as organisations commit to DX, according to a new IDC Spending Guide," IDC, November 13, 2018
2 "Unlocking success in digital transformation," McKinsey & Co., October, 2018
3 "2017 Cloud Data Management Report," Veeam, April, 2017.