CLOUDERA DATA UTILIZATION AND OPTIMIZATION ACROSS US

Introduction

The way organizations conduct business is changing day by day, with data becoming increasingly important to improving business. We've had to relearn best practices involving data due to the pandemic, and it's not unreasonable to consider that unprecedented events such as this could happen again.

Because of the uncertainties and changes in the evolving pandemic and post-pandemic landscape, organizations need to examine how an integrated, holistic enterprise data strategy can help deliver positive business outcomes.

Being able to adapt quickly is critical, with the research revealing three key elements:

- Most organizations across the US are reassessing where their data and performance analytics need to be housed in the near future.
- Due to the pandemic, organizations had to relearn best practices in handling and optimizing data to make business critical decisions.
- Organizations need to ensure they are well-prepared for the anticipated shift toward hybrid multi-cloud and the continued rise of hybrid working.

Read on to find out more details about the current state of data and analytics across the US, and both the benefits and challenges currently faced...

The US engage with innovative analytical tools and methods involving their data

Among the analytical methods and tools currently used across the US, Internet of Things (IoT) and Edge device management is the most common for over half (52%) of organizations, according to surveyed IT decision makers (ITDMs). Artificial Intelligence (AI) and machine learning (50%), as well as data science tools (50%) are not too far behind. This enthusiasm in the US to utilize new and innovative technologies in the interests of their data is further driven by the doubling of staff working remotely – from 20% before the pandemic to 58% during the peak as reported by ITDMs.

The pandemic has taught organizations the importance of adapting and evolving to cope with unexpected changes. Changes such as supporting remote employees and having greater flexibility in terms of location and devices is critical – IoT and Edge device management allows organizations to do so in a much more fluid capacity.

Surveyed ITDMs across the US also engage with a wide range of data sources, with customer and prospect data (53%) being the most used. This is closely followed by connected product data such as IoT (51%). The results show that organizations see value in understanding the customer and use this data to inform their marketing approaches. This is especially crucial with the constantly evolving behaviour and needs of the customer. Using connected product data also helps further optimize internal processes and streamline the way in which they're done.

Further supporting the notion that US organizations utilize data on an impressive scale – all surveyed senior decision makers (SDMs) (100%) and ITDMs (100%) report using data and analytics within their business divisions in at least a minor capacity. The results suggest that business divisions within organizations are on the same page in terms of the importance and necessity of using data and analytics in their processes.

Data sources currently used

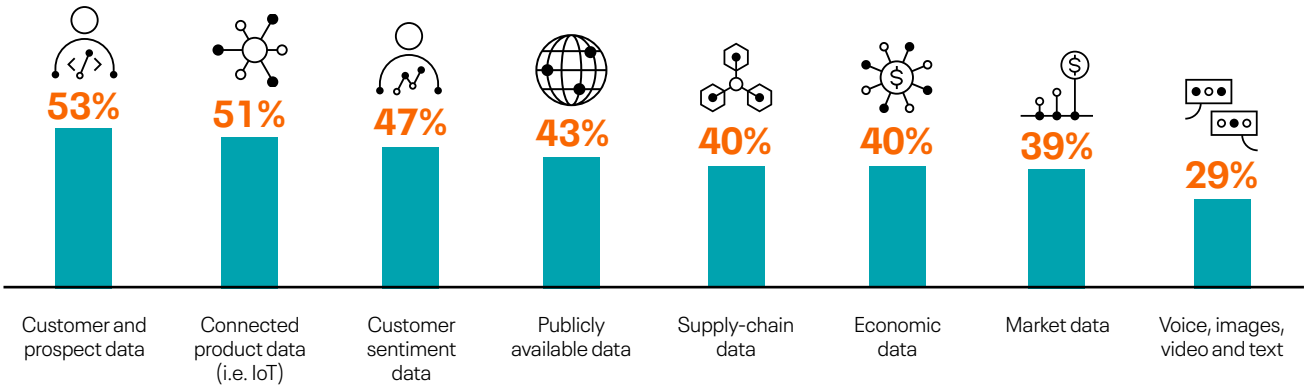

Figure one: What data sources are currently used by your organization? [400], asked to ITDMs only, showing US scores, omitting some answer options.

91%

of **senior decision makers** agree that data management has been impacted because of the pandemic.

Data collection also proves to be the most utilized part of organizations' data lifecycle processes for almost three fifths (59%) within the US, highlighting that the ingestion of data and monitoring at the edge is of key importance. Security and governance is another common element (54%), which makes sense given the events of the past year or so and how cybersecurity has become even more of an ever-growing threat.

Despite these positive strides in incorporating various elements of the data lifecycle within organizational frameworks, organizations would benefit more from their data if they were more engaged across the board. For instance, a greater focus on reporting and delivering business enterprise insight could further enhance organizational success.

92%

of **senior decision makers** agree that their organization would experience more revenue-paying opportunities if it were able to manage its data more effectively.

94%

of **senior decision makers** agree that it's important to optimize data management within organizations.

Enterprise data strategies form the basis of organizations' operations, and organizations with more mature strategies report higher profit growth recently

All (100%) surveyed organizations in the US with enterprise data strategies in place reported achieving at least some benefits, which shows the value of such strategies.

However, nearly all (99%) ITDMs report currently facing or anticipate facing challenges when implementing enterprise data strategies – with the biggest challenges centering growing data volumes (37%), the high cost of data management solutions (37%) and the complexity of data management systems and solutions (37%). On the contrary, slightly less (97%) SDMs say they experience or anticipate experiencing challenges with enterprise data strategies, with security threats posing a key challenge in the implementation.

US organizations report a total average profit growth of 6.17%, and those with enterprise data strategies in place for longer than a year report higher profit growth than those with newer strategies, and even those that do not have strategies in place at all. Organizations with longer established enterprise data strategies are also more likely to have weathered the pandemic better than others, with almost seven in ten (69%) surveyed SDMs reporting that they have coped very well since the start of the pandemic, versus just over a third (35%) of those with newer strategies.

It is evident that implementing enterprise data strategies gives organizations an advantage, especially for those with enterprise data strategies in place, the vast majority (91%) report that their strategies are key to their business resiliency and aid their organizations to adopt a hybrid workforce more effectively – something that has been evidenced by the surge in remote working following the pandemic.

Two fifths (40%) of ITDMs report their organization is coping extremely well with the volumes of data they're expected to manage, with little to no issues in this area. However, the remaining surveyed ITDMS across the US (59%) say their organization is either unable to cope to this extent or are unsure about their abilities to cope. Given the wide engagement previously seen in terms of the data sources, as well as the analytical tools/methods currently used, it's quite concerning that this proportion of organizations are having issues.

Similar trends are seen when considering the variety of data, the trustworthiness, frequency and value. It's critical that improvements are made across these areas as by not doing so, organizations run the risk of not being able to best optimize their data to inform business critical decisions.

$168,690

Senior decision makers across the US report annual losses of **$168,690** as a result of missed opportunities involving data, with the **IT, technology and telecoms** sector reporting annual losses of **$1.3 million** on average.

92%

of **senior decision makers** believe that making sense of all data across hybrid, multi-cloud and on-premises architectures is or would be valuable.

90%

of **IT decision makers** agree that organizations that implement a hybrid architecture as part of its data strategy will gain a competitive advantage.

90%

of **IT decision makers** report that managing data with at least some cloud capacity is a priority for their organization.

Hybrid multi-cloud: The future of data

Since the start of the pandemic, there has been a paradigm shift to remote working. Hence, being able to access and manage data from multiple sources and locations has never been more critical.

It makes sense then that around a third (32%) of organizations are planning to house their current data and performance analytics to the hybrid multi-cloud in the near future – more than double the amount of organizations that are currently doing so (14%). The need to adapt quickly is something that the hybrid multi-cloud will enable organizations to achieve.

Just under half (47%) of ITDMs reported an increase in spend in supporting digital transformation initiatives since the start of the pandemic. This includes investments in areas such as hybrid multi-cloud infrastructure, and data and analytics solutions. As well as this, nearly four in ten (38%) have reported an increase in spend across supporting changing work environments (e.g., hybrid working), to support their organizations' workforces.

Furthermore, on average more than two fifths (43%) of the IT department's time and resource in organizations is being dedicated to cloud migration and strategy, and a similar average amount dedicated to managing data (38%) – so clearly the necessary steps are already being taken to enhance hybrid multi-cloud capabilities.

99%

of **SDMs** agree that DEI initiatives contribute to an organization's success.

96%

of **ITDMs** agree that DEI initiatives contribute to an organization's success.

Data contributes to business initiatives and organizational success

A vast majority of ITDMs (96%) and SDMs (97%) across the US believe that data and analytics is important to ensuring successful and effective DEI (Diversity, Equity, and Inclusion). It is thus unsurprising to see that most ITDMs (90%) and SDMs (92%) report that their organization either currently have these in place or plan to in the future.

Attracting and supporting diverse customers, partners, and suppliers across all areas of the business and supply chain is just one of the practices that organizations are doing in the interests of workforce diversity.

The speed and timeliness at which organizations can access their data is also a key determinant to their success. Organizations require data fast in order to make business critical decisions, with almost three quarters (74%) of SDMs reporting the need to have data in real-time, and the majority (88%) of ITDMs seeing the value in delivering real-time business insights.

However, more than three fifths (61%) of ITDMs report that their organizations have not completely achieved the ability to leverage solutions optimized for speed and access across on-premise and public/private cloud infrastructure.

Thinking about further initiatives such as digital transformation (DX), it is promising that nearly all SDMs (99%) and ITDMs (99%) report DX forming at least part of their business strategy. Further indication of the importance of digital transformation is centered on the fact that seven in ten (70%) SDMs across the US report digital transformation being a business driver that is currently prioritized.

Methodology

This report specifically focuses on the analysis of the US which consisted of 400 ITDMs and 200 SDMs. Respondents were from organizations with 1,000 or more employees across both public and private sectors.

All interviews were conducted using a rigorous multi-level screening process to ensure that only suitable candidates were given the opportunity to participate.

Conclusion

A wide range of data sources, and analytical methods and tools are currently used across organizations in the US, suggesting their proactivity in terms of where attention should be focused. Most also have enterprise data strategies in place, proving awareness of a need to manage the masses of available data in more effective ways.

However, the sheer amount of data that organizations are expected to manage, the different variants, and the need to use data to make business critical outcomes presents challenges. There are also particular areas in which these organizations could improve to best optimize this. In particular, the effectiveness of enterprise data strategies is a pinch point for some and will surely be limiting potential. The relevant guidance and support could really improve the agility of organizations, and their ability to cope with unprecedented events in the future.

The anticipated shift towards a hybrid multi-cloud, and investments spent on supporting hybrid working and infrastructure is promising – clearly, organizations are already putting practices in place ahead of plans to move where infrastructure is currently housed. Such changes can also further support business initiatives which organizations currently have in place and see value in. Engaging in such initiatives will give organizations an opportunity to gain traction in the market and retain diverse employees that can help to fulfil business objectives and desired outcomes.

Data is now recognized as what it has always been, a strategic asset underpinning the success of organizations across the world. Organizations that recognize this and utilize available data in the best way will noticeably succeed in the competitive market.

About Cloudera

At Cloudera, we believe that data can make what is impossible today, possible tomorrow. We empower people to transform complex data into clear and actionable insights. Cloudera delivers an enterprise data cloud for any data, anywhere, from the Edge to AI. Powered by the relentless innovation of the open source community, Cloudera advances digital transformation for the world's largest enterprises.

Learn more at cloudera.com

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