TOWARDS A MORE DATA-DRIVEN FINANCIAL SERVICES INDUSTRY IN THE US

Introduction

Everywhere across the financial services industry, improvements in technology have driven innovation and a rise in digital banking. This paradigm shift also presents opportunities with data at the center of this change. Organizations that have data strategies in place will likely see more success than those who do not, as they leverage the data they have to create solutions, improve customer experience and respond quickly to changing market conditions and customer expectations.

This executive summary takes a deeper analysis of the financial services industry based on insights from our 2021 "Cloudera Enterprise Data Maturity Report: Identifying the Business Impact of an Enterprise Data Strategy".

The key takeaways from the research are as such:

- **Customer-centricity** remains top of the agenda.

- **Risk management and regulatory compliance** a priority when it comes to data management.

- **Complexity of management systems and solutions, high cost of data management solutions**, and **security threats** are some of the challenges faced with enterprise data strategies for financial services organizations.

- Organizations that leverage **Enterprise Data Cloud capabilities** create opportunities for new business frontiers in a hybrid world.

Keeping ahead of today's connected consumer with data and analytics

Customer centricity is key, and top of the agenda for the financial services industry in the US with connected product data (54%), customer sentiment data (48%) and customer and prospect data (46%) identified as the top three data sources used. In terms of utilization of all three customer data sources, only 13% of organizations are currently using these simultaneously.

Data sources currently used

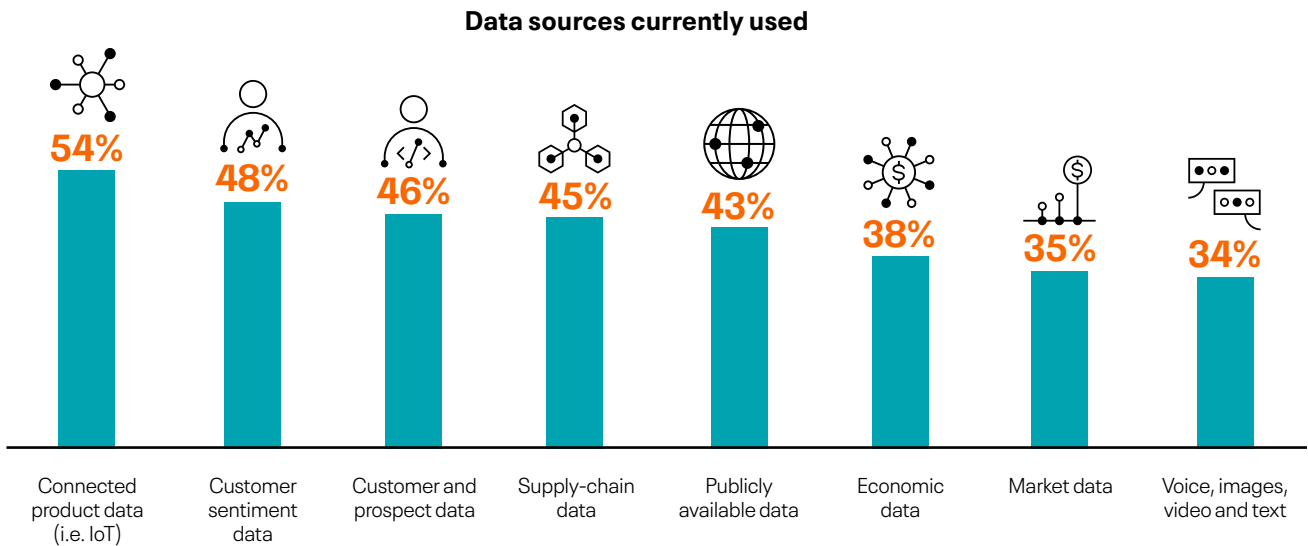| 54%	48%	46%	45%	43%	38%	35%	34%
Connected product data (i.e. IoT)	Customer sentiment data	Customer and prospect data	Supply-chain data	Publicly available data	Economic data	Market data	Voice, images, video and text

Figure one: What data sources are currently used by your organization? [100], asked to IT decision makers only, showing financial services scores across the US, omitting some answer options.

While changing customer behavior provides increasingly complex data, new opportunities to meet customer needs emerge. Around half of both IT decision makers (ITDMs) (51%) and senior decision makers (SDMs) (49%) report their organizations currently using data and analytics to improve the customer experience and satisfaction – further evidence of customer centricity and a wide recognition of its value.

Innovative analytical methods and tools like Artificial Intelligence (AI) and machine learning algorithms (50%), Internet of Things (IoT) (50%), and data science collaboration tools (47%), have also paved the way to drive positive change within the industry. Tools such as these allow financial services organizations to better understand customer needs, launch new products and deepen customer engagement which again, link back to the customer centric focus that organizations demonstrate.

Focusing further on the drivers of adoption, organizations are looking to these analytical methods and tools mainly for the following reasons:

- **To effectively collect, manage and analyze vast volumes of data across multiple sources and locations to make better and faster informed business decisions.** All (100%) surveyed SDM respondents across the financial services industry in the US report that their organization requires data in either real-time or at least near real-time in order to make business critical decisions.

- **To enhance delivery of real-time business insights.** The majority (89%) of surveyed ITDMs report delivering real-time business insights through technologies such as Artificial Intelligence is valuable. Even more SDMs (93%) report this same fact.

- **To support self-serve reporting analytics.** More than a quarter (26%) of ITDMs report they have completely achieved providing all relevant business groups with access to centralized analytics tools and support suited for their own analysis and reporting needs. From their own perspective, around four in ten (39%) SDMs report completely achieving this self-serve capability.

Risk management and regulatory compliance are a priority for financial services organizations when it comes to managing data

Almost all (95%) SDMs across the financial services industry in the US agree that data management has been impacted as a result of the pandemic. It goes without saying that one of the ways in which data management has been impacted relates to organizations' ability to cope with the data they're expected to manage day to day.

Tellingly, more than half (59%) report that their organizations are not coping extremely well with the volume of data, proving a notable need to improve in this area. As organizations explore data sources to best inform their business decisions, they're faced with what can be an overwhelming amount of data. This in turn makes legacy data systems less capable of handling this; and with the vast majority (98%) of organizations in the financial services industry also facing challenges with current enterprise data strategies, it goes to show where pinch points are currently experienced, as well as the extent to which they should be addressed.

Difficulties with managing the sheer volume of data then also has a knock-on effect on areas such as the variety of data, its trustworthiness and the frequency of incoming data that needs to be processed. Without improvements across these areas, the value behind the data will never be optimized to its full potential either. This is something that the research has further demonstrated, with more than half (51%) of ITDMs reporting that their organization has issues when it comes to the value they're able to derive to inform business critical decisions.

Extracting the value of data is critical in the context of the financial services industry; an industry faced with more regulatory requirements than most, which make the ability to use data to accurately scale up risk management essential. Not only this, but further weighting on the trustworthiness of data comes from the need to deliver required insights which allows these organizations to adhere to such regulations. Four in ten (40%) ITDMs also rank risk management and regulatory compliance within the top three most prioritized areas over the next three years – further indication that organizations are making progressive steps with this in mind.

SDMs have also recognized that data governance impacts risk management, where having the right processes in place and ensuring that data is secure, accurate, consistent and readily available can help mitigate risks:

90%
of **senior decision makers** also agree that it's important to optimize data management within organizations.

93%
of **senior decision makers** also see the value behind secure, centralized governance over the entire data lifecycle.

In order to begin improving the effectiveness of enterprise data strategies, it's important to recognize the current challenges faced:

36%

of ITDMs report that **management systems and solutions are too complex.**

30%

of ITDMs note the **high cost of data management solutions** as another challenge.

56%

of SDMs report **security threats** as one of the most common challenges.

The financial services industry is taking progressive steps to manage data, but effectiveness could be improved

The majority of both surveyed SDMs (90%) and ITDMs (84%) across the financial services industry report that their organizations currently have enterprise data strategies in place. It's clear that financial services businesses want to do more with their data and having enterprise data strategies in place pushes them one step further towards having good quality data at their fingertips.

Both SDMs (68%) and ITDMs (51%) also recognize their current enterprise data strategies as very effective, with the remaining amount of surveyed respondents reporting improvements to be made. While the majority report having enterprise data strategies in place, SDMs and ITDMs appear to be slightly misaligned in their recognition of such strategies and their effectiveness. In order to make progressive steps, all business divisions must be on the same page, not only in having visibility of their strategies, but also in terms of where and how they can improve.

Thinking about the notable room for improvement in this context, this is quite a concern, particularly when thinking about what's at stake in terms of data management in this industry. The exchange of personally identifiable information poses greater emphasis on the need to remain highly secure – just one area worth considering in terms of maximizing effectiveness of enterprise data strategies within the industry. Furthermore, as time goes on and technological innovation grows, so do the various types of data available and the reliability of using data to drive innovation. The financial services industry and human behavior become more interconnected as time passes, and without optimizing strategies, these organizations can expect to uncover areas where they need to improve.

The advancement of cyberattacks, particularly following the pandemic, has clearly had a notable impact on the financial services industry. More effective data governance measures are essential in order to mitigate the risks faced by financial services organizations, and to ensure suspicious activity is detected as soon as possible. As previously discussed, protecting personal information is critical. Not only this, but breaches can result in considerable damage to businesses' reputation, and can severely disrupt business operations by interfering with the infrastructure housing data and analytics. Such cyber risks can have devastating impacts in relation to lost time and productivity, costs incurred to combat cyberattacks, and economic slowdown – something which the financial services industry cannot afford.

88%

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

90%

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

Organizations that leverage Enterprise Data Cloud management capabilities create opportunity for new business frontiers in a hybrid world

The way that data, infrastructure and work is to be managed in the future will be hybrid. Organizations are planning to move towards hybrid multi-cloud to better manage data and support its workforce in the near future. This gives organizations the agility that they desire, particularly when thinking about finance and the need to process data quickly and efficiently across a number of different environments.

Storing data and analytics in the cloud allows for quicker access to data and insights across the organization. This is essential in the financial services industry, especially when it comes to gaining quick customer insights, seeking opportunities ahead of competitors, and responding swiftly to changes in the market.

Almost half (46%) of ITDMs surveyed across this industry have reported an increase in spend across supporting changing work environments (e.g., hybrid working). There has also been an increased spend since the start of the pandemic in supporting digital transformation initiatives (42%) such as hybrid multi-cloud architecture, and data and analytics solutions.

The hybrid future outlines the need for a hybrid, multi-cloud data architecture (known as Enterprise Data Cloud). Supported by a set of integrated capabilities, an Enterprise Data Cloud is able to help organizations navigate in the heterogeneous landscape. However, there are a number of areas in which finance organizations could be doing more to get the most of this.

Organizations' current capabilities in relation to the Enterprise Data Cloud:

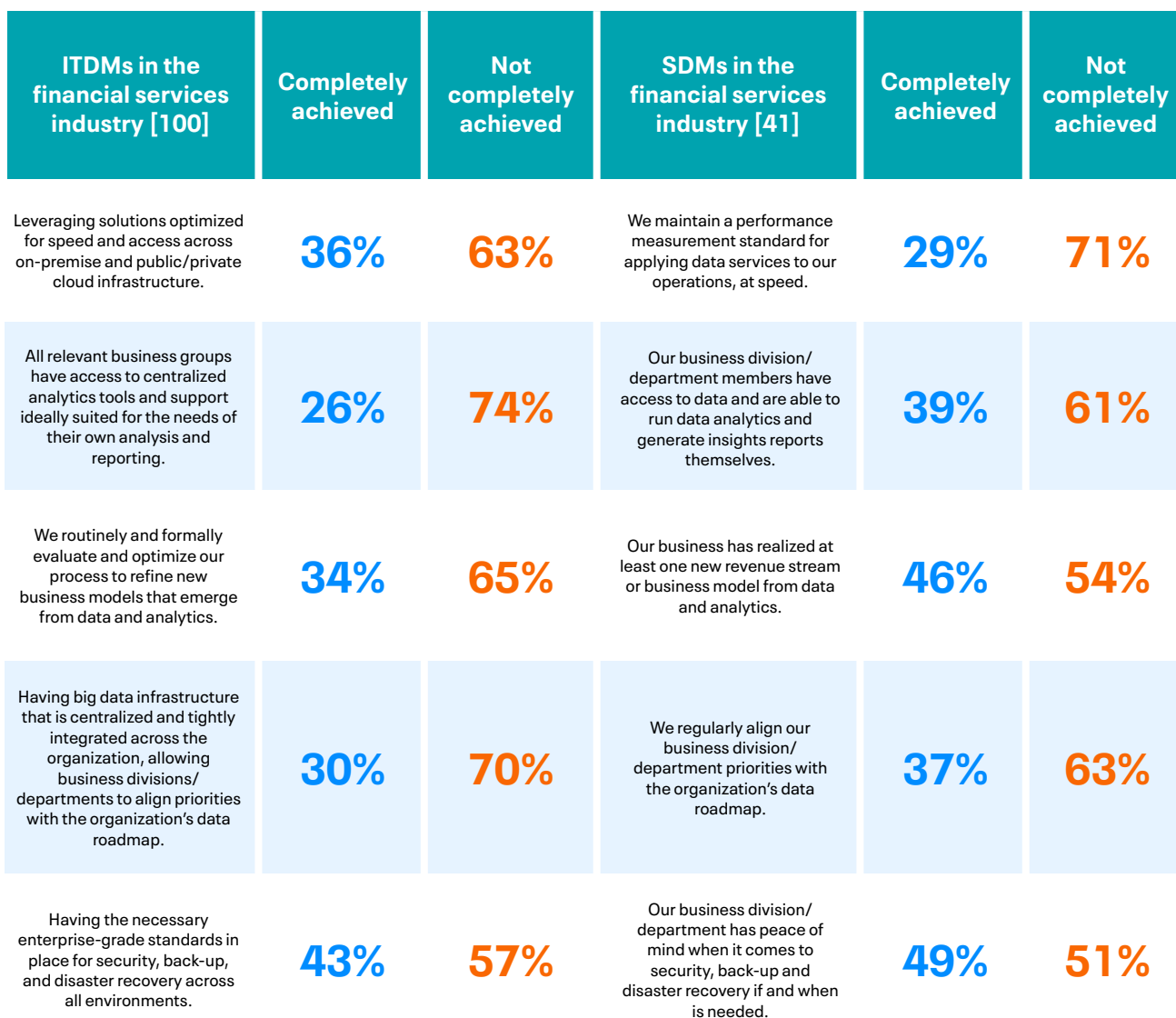| ITDMs in the financial services industry [100]	Completely achieved	Not completely achieved	SDMs in the financial services industry [41]	Completely achieved	Not completely achieved
Leveraging solutions optimized for speed and access across on-premise and public/private cloud infrastructure.	36%	63%	We maintain a performance measurement standard for applying data services to our operations, at speed.	29%	71%
All relevant business groups have access to centralized analytics tools and support ideally suited for the needs of their own analysis and reporting.	26%	74%	Our business division/ department members have access to data and are able to run data analytics and generate insights reports themselves.	39%	61%
We routinely and formally evaluate and optimize our process to refine new business models that emerge from data and analytics.	34%	65%	Our business has realized at least one new revenue stream or business model from data and analytics.	46%	54%
Having big data infrastructure that is centralized and tightly integrated across the organization, allowing business divisions/ departments to align priorities with the organization's data roadmap.	30%	70%	We regularly align our business division/ department priorities with the organization's data roadmap.	37%	63%
Having the necessary enterprise-grade standards in place for security, back-up, and disaster recovery across all environments.	43%	57%	Our business division/ department has peace of mind when it comes to security, back-up and disaster recovery if and when is needed.	49%	51%

Figure two: To what extent has your organization achieved the following capabilities? [Base size in table], "Not completely achieved" is based on the sum of "Mostly achieved" and "Somewhat achieved", showing financial services scores in the US, omitting some answer options.

Possible steps to take towards realizing an enterprise data cloud include ensuring solutions are optimized for speed and access across all cloud infrastructures, and that there are standardized performance measurement metrics when applying data services to operations.

With security, back-up and disaster recovery being critical for maintaining business as usual without disruption and risks to organizational data, it is concerning that less than half of the respondents have expressed confidence when it comes to these areas. Security risks can also be catastrophic when considering financial services businesses' clear desires to transform their processes and effectively respond to demands of the market by engaging in customer data sources.

Other capabilities where organizations can look to further develop are data democracy and self-service analytics, with both SDMs and ITDMs identifying that these capabilities can be further developed.

The use of data particularly in the financial services industry gives organizations an opportunity to revolutionize how critical financial operations across the globe cope.

Methodology

This report specifically focuses on the analysis of the financial services industry which consisted of 100 ITDMs and 41 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

The financial services industry has faced a realm of data challenges following the pandemic, driven by the change in consumer behaviour. What's positive is that as an industry, they leverage a number of innovative data analytical tools and methods with a clear and great emphasis on improving the customer experience.

At the same time, there are also areas in which these organizations could improve to best optimize their data, and as a result, their business outcomes. In particular, the effectiveness of enterprise data strategies is a pinch point for some and will surely be limiting potential. Facing old rivals and new contenders in the financial services market, organizations who embrace transformation fueled by data will develop the business agility and heightened competitiveness to excel in the years ahead.

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.

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