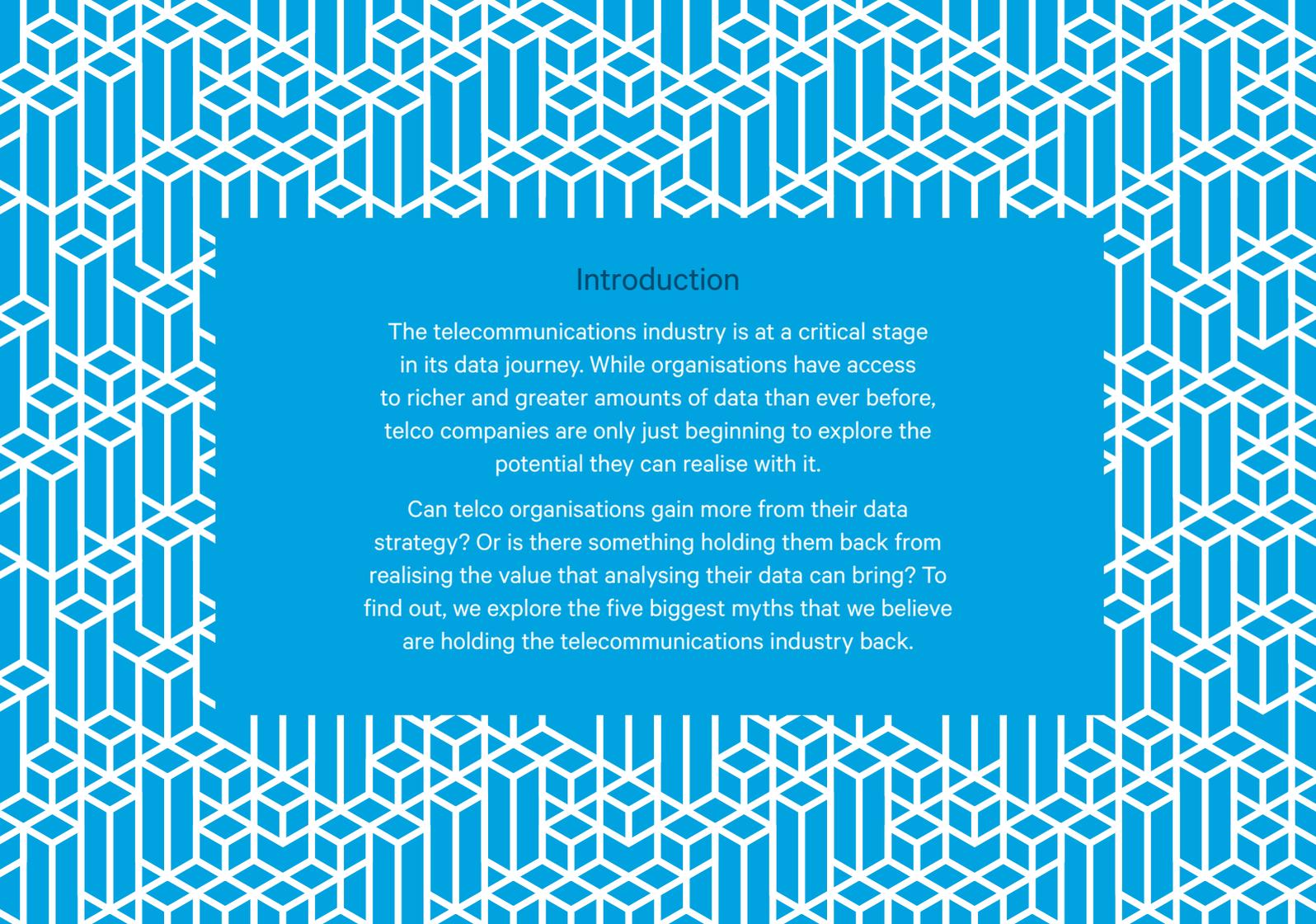




The 5 Biggest Data Myths in Telco: Exposed





Introduction

The telecommunications industry is at a critical stage in its data journey. While organisations have access to richer and greater amounts of data than ever before, telco companies are only just beginning to explore the potential they can realise with it.

Can telco organisations gain more from their data strategy? Or is there something holding them back from realising the value that analysing their data can bring? To find out, we explore the five biggest myths that we believe are holding the telecommunications industry back.

A Huge Opportunity

Telecommunications (telco) is an industry that touches all of us, whether through our broadband networks, our mobile devices or access to TV and entertainment. Telco companies allow us to speak to each other, to share our thoughts and to do business with anyone in the world.

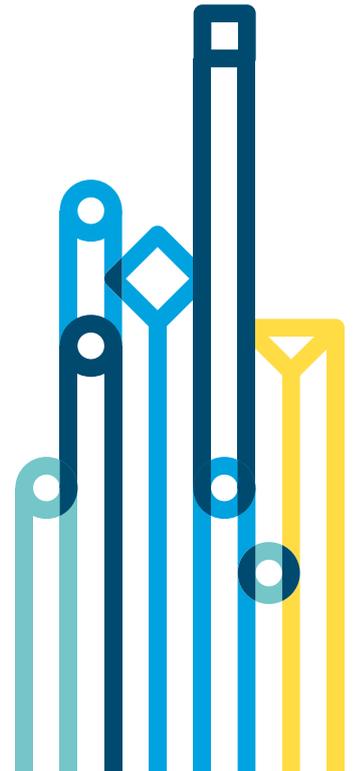
Telecommunications has always been an information-rich industry, but shifts in technology have led to an explosion of unstructured consumer data. Where before telco was about voice alone, data now comes in multiple forms, including text, images and audio – data sets that are unwieldy and difficult to analyse, let alone derive value from.

In many ways, telco companies are in an enviable position. Few organisations are able to access the sheer amount and diversity of customer data that telco companies have at their fingertips. In fact, many organisations would pay huge sums to access the data that telco companies have at their disposal.

But as organisations, telco companies are very complex indeed, with multiple business units that have different strategic priorities. The amount of data available to telco, while helpful, is disorganised and therefore difficult to derive value from. Telcos, while willing to devote resource to their data solutions, are seeing little of the return that they need to justify that investment.

This begs the question: when the opportunities are so huge, why aren't telco companies taking advantage? When access to consumer information has never been as comprehensive or as rich, why aren't more telco organisations able to translate that data into improved ROI, better customer understanding, reduced customer churn or new revenue streams?

Maybe it's not access to huge amounts of data that's the problem. Maybe there's something else that's holding telco organisations back from unleashing the potential of their data...



So what's stopping you?

The challenges that decision-makers in telco face are significant. Whether it's acquiring new customers, optimising and planning network traffic, or using customer insights to develop new products and services, your business needs to respond to the fast pace of innovation very quickly indeed.

But what's holding telco companies back from realising the potential of their data? As market leaders in Hadoop we know that organisations could perform better if they were able to easily access, analyse and action it.

Fact Check: What is Hadoop?

Studies indicate that 90 percent of data is unstructured¹ (such as images, audio, tweets, text messages, and so on). With Hadoop you're able to analyse and manage this abstract, unstructured data. Hadoop is an ecosystem of open source components that fundamentally changes the way enterprises store, process, and analyse data. Unlike traditional systems, Hadoop enables multiple types of analytic workloads to run on the same data, at the same time, at massive scale on industry-standard hardware. CDH, Cloudera's open-source platform, is the most popular distribution of Hadoop and related projects in the world.

¹ wired.com/insights/2014/07/rewiring-tackle-unstructured-data/

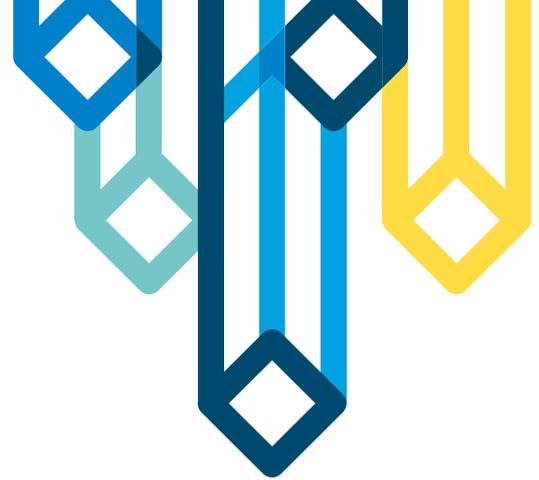
Myths & Legends

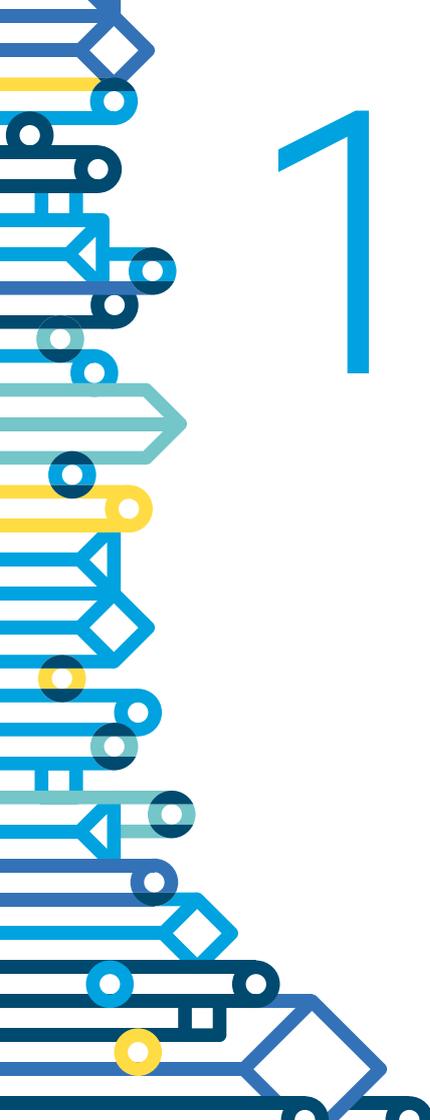
But we also know that Big Data, analytics and, yes, even Hadoop, have become meaningless buzzwords and jargon. Where there's jargon, there is misinformation and where there is misinformation there are myths.

We know that:

- You want to be nimble and find new value in your data, but you think there's too much data out there for you to properly analyse.
- You want a secure solution but you think that open source means open season on security.
- Data solutions in your business need to be cost-effective and easy to manage, but you think Hadoop is expensive and takes a long time to implement.
- You want a solution that is simple to understand, but you think Hadoop is too complex and difficult for your existing data teams to learn.
- You need to make your data management systems more efficient, but you think additional analytics platforms will be difficult to integrate with your current systems.

These are all valid concerns, but we're confident that they shouldn't stop you from realising the potential of your data. We want to address these myths head on and show you how you can better use your data to improve the performance of your business.





1

My data is too diverse to analyse

MYTH

My data resides across hundreds of systems and platforms. With so much complex unstructured data existing in silos across my organisation, there's no way I can consolidate and centralise it all.

REALITY

“Big Data” is actually very diverse data coming from various sources, and it's not always structured and ready to use. For telco, variety of data is particularly relevant; telcos work across many different business areas and have access to not only huge but also diverse sets of data that exist across your organisation. A lot of the data that modern telcos possess is unstructured and disorganised but Hadoop can store large volumes of it, no matter its source, format or size.

By implementing a Hadoop solution that worked with existing legacy systems, BT was able to accelerate the speed at which it processes its data by 15x to take advantage of the Internet of Things. Learn more about BT's Hadoop journey [here](#).



2

Open source means open security

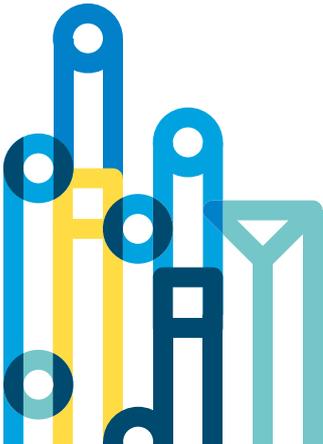
MYTH

Any mention of “the cloud” or “open source” brings security (or lack of it) to mind and there’s vigorous debate on whether data is secure in the cloud. Because Hadoop is open source, security protocols governing data will naturally fall by the wayside.

REALITY

Hadoop has come a long way since 2006. Cloudera’s enterprise data hub provides comprehensive security and governance for your business so your IT department no longer has to vet and certify security for its data management systems. In fact, our reputation rides on having the best security solution in the market; that’s why the biggest telco companies, banks and government agencies work with Cloudera. Cloudera delivers applications and frameworks for deploying, managing, and integrating the necessary data security controls demanded by today’s regulatory environments and compliance policies.

Security should be a priority for any telco wanting to better understand its data. Learn more about how we’re implementing and strengthening security in the cloud [here](#).



3

Hadoop doesn't provide adequate returns on investment

MYTH

According to a Gartner survey completed in 2015, only 26% of respondents claimed to be either deploying, piloting or experimenting with Hadoop². Hadoop is too costly and is “overkill” for the problems businesses face. The opportunity costs of implementing Hadoop are too high relative to the expected benefit.

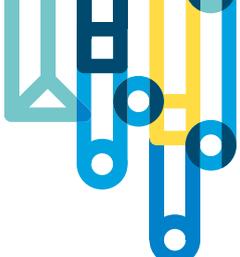
REALITY

This is the biggest myth of all. Just one example of using Hadoop to derive value is data leakage and fraud. Based on industry estimates, telcos lose approximately 2.8% of their revenues to leakage & fraud annually – costing the industry approximately US \$40 Billion every year³. This means telcos could be adding that amount to their bottom-line without selling any additional products or services. Using Hadoop can help you to examine and plug any potential data leakage points throughout your networks and customer-facing systems. If anything, telcos could lose out on billions if they don't put an adequate data solution in place.

Understand how your organisation can utilise Hadoop to derive greater return on investment and drive your digital transformation by reading our "Big Data Use Cases for Telco" white paper [here](#).

2. gartner.com/newsroom/id/3051717

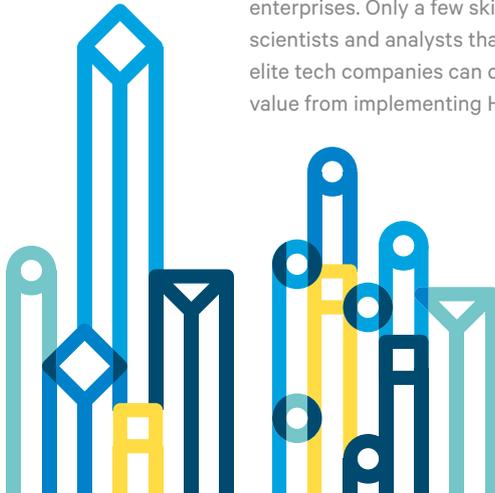
3. cloudera.com/content/dam/cloudera/Resources/PDF/solution-briefs/Industry-Brief-Big-Data-Use-Cases-for-Telcos.pdf



4

Hadoop is too difficult for my team to learn

MYTH



Hadoop is very difficult with a need for complex skill sets. While tools are improving, they primarily support highly skilled users rather than elevate the skills already available in most enterprises. Only a few skilled data scientists and analysts that work for elite tech companies can derive real value from implementing Hadoop.

REALITY

There's no doubt that Hadoop is complex but we've gone to great lengths to remove that complexity for our customers. We believe that every organisation should be able to realise the value of their data and learn the applicable skills to make the most of it. With Cloudera, telco companies have been able to save time and money on headhunting data scientists by training up their existing teams. We offer a variety of training options, including inexpensive self-paced Hadoop Basics tutorials, so your team can get quickly up to speed with our platforms and solutions.

Your team can learn the necessary skills to get the most from a Hadoop solution. Visit our Cloudera OnDemand training site [here](#).

5 Legacy systems are too ingrained and complex to work with yet another data solution

MYTH

Telco has always been data-intensive, meaning that legacy systems still determine much of how organisations manage, analyse and gain value from their data. Organisations are understandably reluctant to invest in Hadoop as they don't want to add more complexity to an unwieldy stack that has to work across multiple business units and respond to multiple platforms.

REALITY

Apache Hadoop works seamlessly with your legacy systems to organise your data across analytics and management platforms. This isn't about throwing out your legacy systems, but rather consolidating them and pulling structured and unstructured data from unexpected sources. Hadoop-based solutions can help telcos to process and analyse both structured and unstructured data going back several years, complementing, rather than jarring with legacy systems. There may be value in your legacy systems that you're not mining but you don't have the data platform in place to fully understand what it can do for you.

SFR, France's second largest telecommunications company, used Cloudera Enterprise to help it glean new customer insights from its existing data. Learn how SFR did it [here](#).





Let's gets started

It's time to take action. Can you have it all with your data?
We know you can. We believe that nothing should stop you from realising the true potential of your data. Whether addressing security concerns, demonstrating ROI or integrating with your existing data management solutions, we can help your organisation unlock the power of your data to stay ahead of the curve.

If you'd like to find out more about how Cloudera can help you make the most out of your data, email mythbusters@cloudera.com

About Cloudera

Cloudera delivers the modern data management and analytics platform built on Apache Hadoop, Apache Spark and the latest open-source technologies. The world's leading organisations trust Cloudera to help solve their most challenging business problems with Cloudera Enterprise, the fastest, easiest and most secure data platform available for the modern world. Our customers efficiently capture, store, process and analyse vast amounts of data, empowering them to use advanced analytics and machine learning to drive business decisions quickly, flexibly and at lower cost than has been possible before. To ensure our customers are successful, we offer comprehensive support, training and professional services.

[Learn more at cloudera.com](https://www.cloudera.com)