

asset *hive*

The Digitalised World

A GUIDE TO DATA HUBS

Volume 1



DATA HUBS

A modern data hub must become a piece of middleware that links the power of data to the change of action, because true value is only found in making a direct impact on worker efficiency and productivity.



What is it?

A data hub is simply an interface or middleware between a company or organisation's data sources and its consumption.

It is a central point where multiple data sources including sensors, meta data, master data, and transactional data amongst others can collect for easy access and distribution.

As an example, think of the architecture of a wheel consisting of a hub and spokes - the spokes (data sources) flow to a central point (the data hub) which is then 'harmonised' (translated into a format or multiple formats) ready for storage and information sharing.

This 'clean' harmonised data can then be used to inform 3D models, predictive analytics, AR/VR or other applications.

Often, there is confusion between data hubs and data lakes but there is a big difference.

While a data hub is similar to a data lake in that both involve transferring data from disparate silos into a single new system, that's where the similarities end.

Traditional data lakes tend to unite data in one place, but the data is typically a mish-mash of information, largely incompatible with each other.

And without compatibility, querying data is difficult and real-time processing cannot occur.

A data hub on the other hand, is able to harmonise different sets of data and serve in multiple formats.

It makes the data meaningful enabling future optimisation of company operations.

Why should I care?

Data is the lifeblood of modern digitally-focused businesses, influencing just about every process, decision and action that can be imagined.

If your business doesn't have a data hub but still uses digital assets, information has to be transferred or connected between various systems in a point-to-point IT system.

Not only is this inefficient and outdated, it also puts a hard limit on the growth and power that your IT system can support if it were freed up with a data hub that can handle multiple connections at the same time.

Businesses that embrace data hubs enjoy a clear competitive advantage over those that don't because they are able to generate insights from their data and act upon them, with the data hub acting as a source of truth and a tool for deploying solutions.

A data hub is also highly scalable while also remaining cost-effective.

Instead of adding layers of physical cables or other digital integrations, a single data hub can have its capacity expanded without significantly growing its footprint, both in terms of physical space and running costs.

The efficiency, scalability and agility that a modern data hub brings to business operations is like a turbocharger for an engine - small but mighty - and gives a significant boost to those who embrace their use.

What can I do about it?

A data hub can deliver huge company benefits but as the saying goes, if it's worth doing, it's worth doing right. Set your company for success by following these key steps:

01

Appoint an evangelist

Ensure your business has an advocate who will align the organisation's data vision across the enterprise. This will help build momentum and support throughout the organisation and ensure all levels within the business are on board. This will also help to ensure that the data hub is implemented in a way that will align with how the business intends to consume data.

02

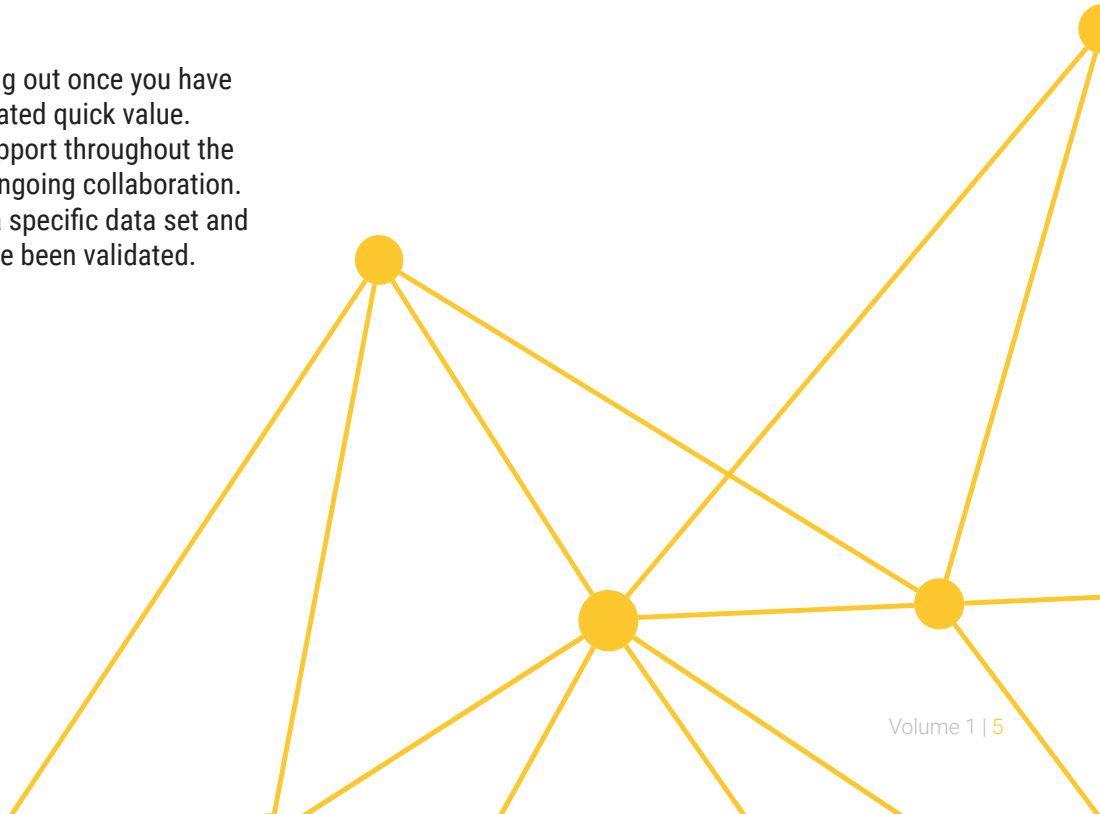
Integrate and consolidate

Effective data hubs should seamlessly integrate with your existing and legacy systems to eliminate data duplication and data silos. Modern data hubs promote connectivity and unify ecosystems by connecting many data sources into a contextual view. Don't go down the siloed path of implementing a data hub without understanding how it will complement your existing systems.

03

Score a quick win

Consider starting small and scaling out once you have reaped the benefits and demonstrated quick value. This will help to gain executive support throughout the organisation and will encourage ongoing collaboration. Start small with a pilot, focus on a specific data set and scale out only once outcomes have been validated.



Innovator's checklist

Identify data silos

Identify whether data silos exist in your business. Are there too many data stores that offer no means of integrating data into a unified view that enables data to be consumed in a meaningful way?

If the answer is yes, consider how a data hub can help to contextualise your multiple sources of data so that the people on the ground can use the data to make informed decisions.



Encourage connectivity

A data hub doesn't need to replace your existing systems. On the contrary, it should integrate your data stores and act as middleware that enables data flow - data is fed into the hub and data is received from the hub by other applications.

Integrate your workflows

Consider how the data is used to execute certain workflows and business processes. A modern data hub should be able to value-add your data by linking it to a workflow that will put the data into action – without this link, data becomes useless.

Identify your workflow owners and engage closely to ensure a common understanding on how this will help maintain clean data.



Take ownership

A data hub protects your company against risks. If your business uses contractors who have their own systems, processes and tools, you could be relinquishing control of your company data and workflows to a third party.

Take control and reduce your risk and reliance on contractors with a bespoke company data hub which seamlessly integrates your data, workflows and business knowledge in the one place.

WHO IS SILVERHORSE?

Silverhorse Technologies is on a mission to add value for our customers and bring the transformative benefits of digitalisation to large-scale assets.

Our AssetHive platform is a next-generation connector/middleware data hub technology with an embedded workflow architecture which enables efficient, repeatable, accountable and auditable workflows.

AssetHive is an intelligent data hub, customised around your asset to enhance operational efficiency in a low risk and scalable way.

The data hub enables your digital strategy by implementing full cycle, optimised operational workflows. It delivers data insights where they are needed, with transformative, value-adding results.



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