

The Importance of Centralizing Data for Wind Assets

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Simplify the Management of Renewable Energy Assets

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1. Introduction

Global organizations including workforces within the wind industry, have had to grapple with the life-changing and challenging impact of COVID-19 in the past few months. Many of us may be facing times ahead that are ambiguous, uncertain and unpredictable. Beyond these concerns, the call for social distancing measures have also pushed many companies towards adequately preparing themselves for remote work, possibly for an indefinite or extended time-frame in order to maintain business continuity. Weathering this pandemic and its future effects, and any future global events, will likely force organizations to invest in critical processes and infrastructure that democratizes data and access to it when the majority of the workforce is remote.

In such cases, the need for centralized data for wind energy assets becomes more important than ever before.



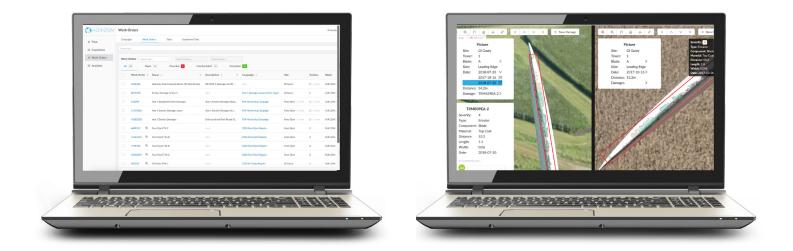
2. Cloud-based platforms make asset management efficient

One of the key challenges companies may be facing during this period of uncertainty is how to ensure the quality and access to their data in a way that remains unchanged, while maintaining healthy and effective collaboration among employees.

Cloud-based platforms can enable smarter and efficient decision-making by offering users within an organization a centralized tool for:

- Data storage
- Data cleansing
- Interpretation and analysis
- Reporting
- Better management of workflows
- Executing action plans and following up on results

In other words, centralization of data and the ability to access it anywhere at any time, provides full visibility across the organization to keep a pulse and manage operations on a company's critical assets. Wind assets such as wind turbines are located in remote sites. Many in the wind energy workforce conduct business from multiple places around the country and globally. Now may be a prudent time to act and implement new tools, infrastructure and practices to support data centralization, particularly on cloud-based platforms, such as Horizon.

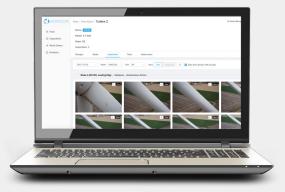


3. Uniting a remote workforce is just one benefit of centralizing data

Data centralization goes beyond just easy accessibility, however. There are many additional benefits that become even more important when uniting a remote workforce, driving organizational efficiencies, and saving time and money for every stage of the asset's life cycle:

Single-Source Of Truth

Data centralization provides a single source of truth for all, ensuring access and the latest understanding of blade asset's condition, no matter where the data is accessed. Everyone in the organization can trust the data they are accessing and be able to make confident decisions about blade inspections, repairs and continuous monitoring.



Enhanced Collaboration

O&M/site managers, operations/blade/reliability engineers, site personnel and external vendors have a tool to collaborate more effectively across a decentralized organization or workforce. This then enables breaking down data silos that may inhibit optimal operations.

Increased consistency

When everyone is working with the same blade data and insights, it improves consistency throughout the organization so that decisions are made based on key insights and analytics, and are more transparent to other departments.



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Optimized data as an asset

Centralized data generated from multiple and often disparate sources (e.g. drone inspections, internal blade inspections, 3rd party generated inspection and repair reports) can be used to make better decisions.

When data is decentralized and disorganized, it can hinder certain workflows and processes. However, when data is aggregated, processed and managed within a centralized platform, it can be cleansed and optimized for more effective use. This data repository becomes an asset that will enable organizations to make data-driven decisions on blade assets quickly.

Attention and focus on what's important

When all of the blade asset's data is centralized, processed, cleansed, analyzed and stored in one location, staff will spend less time on data organizing and more time focusing on achieving business and operational goals. This promotes more strategic thinking on how to improve processes and decisions on the right actions to be implemented.



Saves time & money

Centralizing all of the blade health asset's data in a cloud-based platform also comes with the added benefit of reducing reporting times. This means key personnel are able to visualize and make sense of the data in a more legible, visible and simplified format.

Data Centralization: Critical for Next-Generation Asset Management

With data that is spread out across multiple platforms or locations (including local workstation hard drives), a lot of time may be wasted in organizing it into one place, and numerous reports may be generated in the process. In this case, it makes it challenging to look at the bigger picture.

With teams spending less time generating and compiling reports, more time can be devoted to work on strategies and data-driven decisions. In this way, companies can save on resources as centralized data also reveals inefficiencies within current business process/practices and shows how there are solutions that are more evident and effective.

Moving forward, centralized management of blade asset health data may be critical for making intelligent decisions that ensure business relevance and risk management based on data and analytics. Data centralization can also lead to meaningful reporting of a consistent nature and reducing uncertainty about the current blade asset's conditions when shared across the organization.





5. What is Horizon?

Horizon is a cloud-based asset management platform that serves as a central hub for all digital health data for wind turbine blades, aggregated from various sources such as SkySpecs inspections and 3rd-party available data to enable smart decisions on blade asset O&M management using Al and analytics. Horizon centralizes data for many leading industry organizations, and is changing the way in which our customers control their spending and plan for the future.

Contact SkySpecs to learn more about Horizon and to find out how your business can benefit from our services in data digitization and centralization.

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