Asset Health Center
Frequently Asked Questions (FAQ)

How can I implement the system? Where do I start?
ABB's overall end-to-end solution can be implemented in phases, focusing on the areas where the utility's needs are greatest, and then building out over time based on their requirements. The first step is to schedule an exploratory meeting with the customer to gain insights into their strategic objectives around asset management and to learn about existing equipment, systems and processes.

What are the benefits that would justify this system?
This system brings significant strategic and financial benefits to the utility. Some of these are: a) Earlier visibility of emerging risks to avoid unplanned outages, b) visibility and quantification of asset health so O&M spending can be applied where it can have the best impact of improved reliability, c) safety and life extension of the assets and d) prioritization of capital replacement spending.

Can this system be capitalized?
Generally the software licenses, sensors and monitors, and communications infrastructure can be capitalized along with implementation costs. Annual maintenance expenses may or may not, depending upon the utility's accounting practices.

This is quite a comprehensive vision. Can I purchase just select components from ABB, or must I purchase the whole end-to-end solution?
ABB recognizes that each customer has a unique mix of hardware and software systems already in place, as well as their own particular needs for improving the health of their assets. Even if their needs today are for only one part of the overall solution, their purchase from ABB will make a positive contribution to the overall asset health ecosystem. Our ability to provide an overall solution means that we understand the end-to-end business processes and what it takes to make the integrated system function.

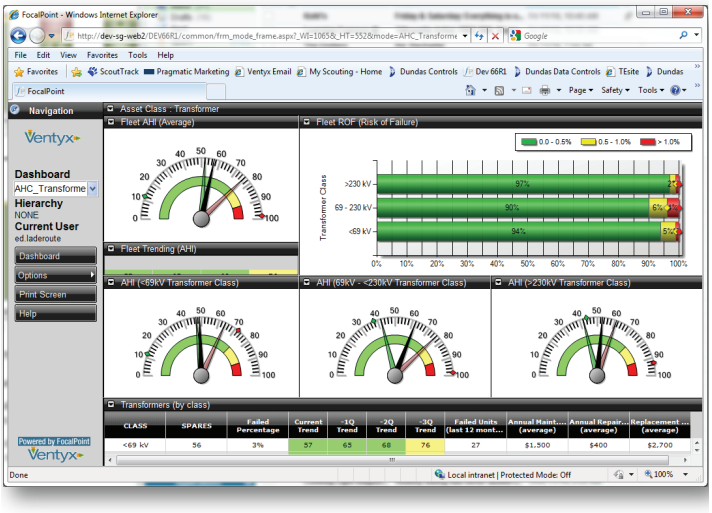
How does this ABB solution integrate with our existing systems?
The system is designed to integrate with existing sensors, monitors and data bases. For example, one of the best inputs for the transformer algorithms is dissolved gas analysis, regardless of the sensor or monitor. However, alerts from sensors such as temperature or pressure can also be used.

With the use of ETL technology our Ventyx software can extract, process and analyze data from disparate sources across the

organization, irrespective of the source location or the system. This ensures that utilities can leverage existing systems and assets.

Why is this ABB solution different from what other vendors are offering in the market?
ABB has taken asset health management to "the next level" by embedding equipment and system knowledge into a business intelligence platform that enables utilities to achieve the optimal balance between operational performance, financial performance and business risk. ABB has a deep history and decades of experience designing, producing, diagnosing and servicing transformers and breakers. This unique body of experience positions ABB to design and implement algorithms for monitoring risk factors, quantifying emerging asset health concerns, triggering condition-based maintenance actions and alerting personnel when those conditions have risen to a level requiring action.

How much does ABB really know about data management and data analytics?
ABB has used diagnostic tools and advanced analytics for decades to determine asset risks, their root cause and the recommended remediation. With the Ventyx acquisition, we have strengthened our capabilities around data management by providing data access across systems and platforms as well as integrated data quality and visualization. This combined ABB/ Ventyx approach allows utilities to manage data as a valued asset and obtain actionable insights to drive overall business strategies.



Asset Health Center executive summary dashboard

How much data is needed to make it work?

The more data the better, but the system can function with the data utilities have today. Even just bringing together data that the SCADA system is collecting today (such as load) with data from periodic inspections is enough to get started on converting from time based maintenance to condition based maintenance on certain critical assets.

Does ABB install sensors or the substation communications?

ABB offers services for an end-to-end solution, including the installation of sensors, as well as the design and implementation of substation communications. However, the customer may already have this existing hardware/software, or they may choose to have sensors and communications hardware installed via their own contractors. To the fullest extent possible, we will work with what is already installed in order to get started as soon as possible.

Can I use my own algorithms?

ABB has many years of experience and very broad and deep expertise in all makes of transformers and circuit breakers. This has enabled us to create very comprehensive algorithms that we think help best determine the risk of failure and health of equipment. Many of our algorithms work together to create a full picture of the health of the fleet, and they rely on each other to keep that picture accurate. We may be able to add customer algorithms as part of a client customization engagement.

Can I modify the ABB performance models?

The ABB algorithms are designed to have some flexibility through the use of parameters that can be accessed and modified by the customer. However, the core algorithms are proprietary knowledge and cannot be modified by the end-user.

Why should we buy your AHC since we already have business intelligence software? What is unique about Ventyx software?

The Asset Health Center is not just about business intelligence and collecting, querying, and showing data. In addition to the specialized algorithms to analyze the data, the software is designed to help utilities adopt better maintenance practices and to achieve performance objectives.

Standard business intelligence software from other vendors is a set of tools that you use to build your own data visualization routines. With Ventyx software, you get packaged solutions that deliver value from the first day, saving you the time consuming effort of defining, designing, and implementing a series of “one off” dashboards for yourselves.

Ventyx has been writing software that is focused on the needs of the utility industry for years. We know that technology and tools alone do not solve business problems. Ventyx software is unique because it embodies this expertise and knowledge of utility business processes and best practices.

I use Focal Point for distribution applications. Does the same software work for asset health?

The same basic tools and technology are at work “under the hood.” However, ABB has leveraged the acquisition of Ventyx and Focal Point by integrating asset expertise and software expertise into the Asset Health solution. Algorithms and specific knowledge of high and medium voltage equipment that were not previously available in Focal Point software have been added.

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