ABB Ability™ Collaborative Operations

Data-driven business insights and domain expertise
for improved performance

ABB Ability™ Collaborative Operations gives you continuous remote access to ABB digital technologies, data analytics and domain expertise to empower and protect your enterprise for the future.

Unlock
value from your data

Enrich
your operations with new insights from existing data

Drive
higher productivity, efficiency and security

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Rapid change in today's global market means mounting challenges

Taking full advantage of every tool at your disposal is more important than ever when you are faced with so many daunting business challenges. Are you facing any of the below?
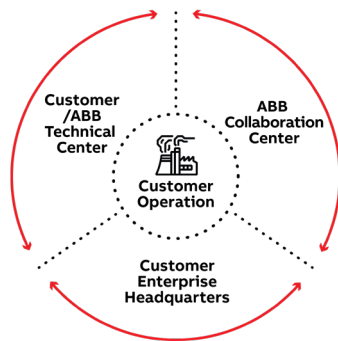
	Challenge	Why does it matter?	A new approach is needed
	Changing customer demands	It's a dynamic market; customers have options. You must be able to respond quickly to changing needs.	Continuous access to operations support lets you quickly assess the impact of changes so you can make faster business decisions.
	Underperforming investments	Large technology investments often deliver less value than expected and account for more than budgeted.	Remote-enabled asset monitoring identifies and addresses potential issues to keep assets operating at high levels.
	Improving efficiency of operational expenditures	Typically, 80% of costs are operational expenditure and only 20% are capital expenditure. Focus on OPEX is needed to improve efficiencies.	Remote-enabled process and risk monitoring identifies and addresses potential issues to keep production performance high and maintenance costs low.
	Changing workforce	Lack of skilled workers due to retirements and a tightening labor market causes knowledge gaps.	Remote access to subject-matter experts around the world provides insights that improve productivity.
	Pace of global competition	New competitors are emerging all over at an astounding rate.	Access to experts no matter where they are allows you to think global and act local.
	Uncertain regulatory environment	As the number of regulations are increasing, compliance is becoming expensive and cumbersome.	Remote-enabled environmental monitoring ensures compliance, limits service costs and mitigates against regulatory action.
	Business, geopolitical and cyber security risks	The Internet of Things poses both opportunities and risk.	Access to continuously updated asset, process and risk knowledge and solutions helps to mitigate these risks.

ABB Ability™ Collaborative Operations helps you address these challenges

What if you could leverage the digitally connected world to improve productivity with a new way of utilizing data? ABB Ability™ Collaborative Operations provides powerful digital solutions that take advantage of today's operation and information technologies to help you increase productivity, optimize operations and ensure security.
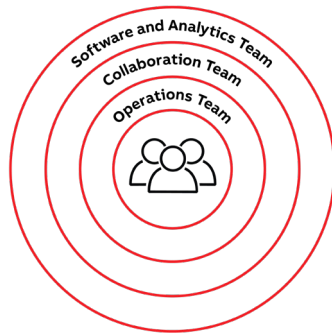
ABB Collaborative Operations combines the platform, people and places necessary to bring ABB expertise directly to you, wherever you are.

Platform

An integrated industrial internet platform
Collaborative Operations utilizes the ABB Ability™ platform and cloud infrastructure to allow businesses to harness the power of industrial data. The platform enables customers to securely integrate and aggregate their data, combine it with wider industry information, apply predictive analytics, and generate insights that can help them drive performance and productivity improvements.

People

Our experts complement your experts
ABB experts combine domain expertise and technical knowledge with digital information to provide advanced insights. We have scientists with deep understanding of both the digital and physical world, as well as application designers, control engineers and service technicians with rich industry experience. ABB's Collaborative Operations platform connects these experts directly with your operational and business management to generate maximum value from your operations.

Places

"Follow-the-sun" remote monitoring and data analytics
ABB has several Collaborative Operations Centers in strategic locations around the world serving key customer industries. Each center is equipped with the latest remote monitoring and data analytics technology and is networked with our strategic intellectual expertise to provide customers with value 24/7/365.
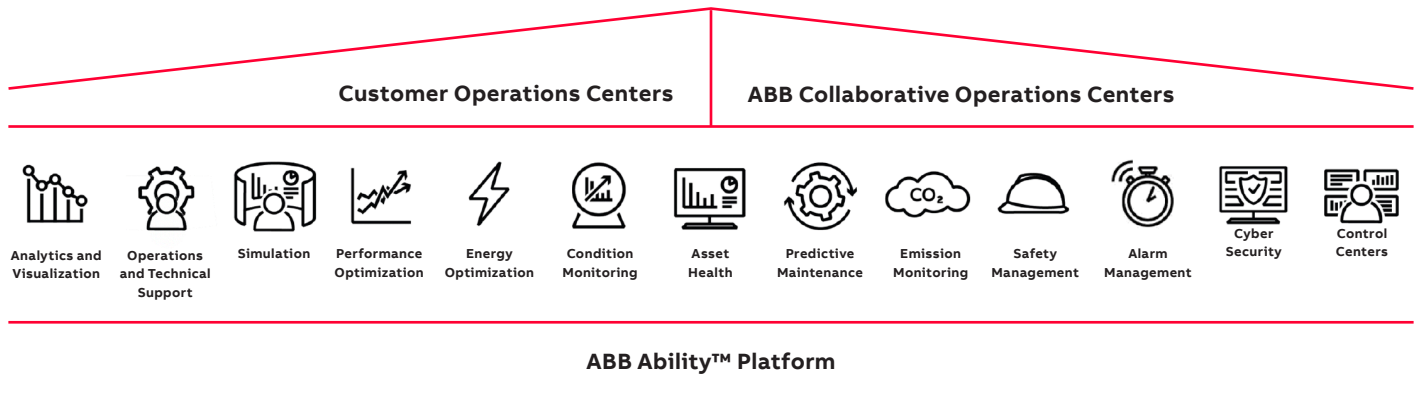
How ABB Ability™ Collaborative Operations works

Connect with ABB experts in real time to quickly identify and resolve issues

Collaborative Operations is built on the ABB Ability™ platform; a unified, cross-industry, digital capability that extends from device to edge to cloud, either yours or ABB's cloud environment. This platform securely collects data from devices at sites, applies advanced analytics and generates actionable insights for customer operations. Furthermore, the platform aggregates data from multiple sites so that asset and performance issues can be identified, categorized and

prioritized for proactive improvement actions across the enterprise.

Customers have access to data from the device level all the way up to the enterprise level. ABB experts monitor this data remotely at ABB Collaborative Operations Centers and connect with customers in real time to quickly identify issues and provide recommendations to resolve them.

Customer Operations Centers   **ABB Collaborative Operations Centers**

Analytics and Visualization	Operations and Technical Support	Simulation	Performance Optimization	Energy Optimization	Condition Monitoring	Asset Health	Predictive Maintenance	Emission Monitoring	Safety Management	Alarm Management	Cyber Security	Control Centers

ABB Ability™ Platform

Examples of services delivered via Collaborative Operations:*

ABB Ability™ Performance Optimization for control loops identifies, categorizes and prioritizes control loop improvement opportunities by collecting and analyzing data to generate actionable information that helps increase availability, improve quality and reduce process variability.

ABB Ability™ Energy Management allows for bundled planning, trading, operating, monitoring, and reporting of power generation, energy storage and controllable loads of power generation assets. The operating points of each connected unit and the delivery of grid services are economically optimized in real time.

ABB Ability™ Cyber Security Analytics automatically collects system data and compares them with industry standards that help you uncover weaknesses within your security procedures, system policies and computer settings, so that your assets, processes and people are protected.

ABB Ability™ Asset Management provides health and performance insights to prevent critical asset failures while optimizing asset lifecycle costs. The solution helps drive intelligent, risk-based approaches to asset management in alignment with industry standards.

*Services offered will depend on your industry.

Customers around the world have realized results

Chemical plant - USA
Needed to mitigate cyber risks and comply with government's cyber security requirements.

How Collaborative Operations met their need:
Collected and analyzed data from plant's control systems to produce actionable insights that helped reduce cyber security vulnerabilities.

190-meter long vessel - Finland
Needed to track vessel data from onshore locations to inform routine maintenance.

How Collaborative Operations met their need:
Connected vessel data to onshore locations and ABB Collaborative Operations Centers to improve maintenance.

Paper producer - Indonesia
Needed to process increasing data since the mill, one of the largest single-site producers of stationery, continues to ramp up production.

How Collaborative Operations met their need:
Faster data gathering and processing through ABB Collaborative Operations Center reduced cycle times on product grade changes and increased availability.

Multi-utility company - Sweden
Needed to optimize operational performance and reduce energy consumption.

How Collaborative Operations met their need:
Integrated ABB technologies and services with customer operational expertise, in a centralized enterprise control environment, to provide "infraservices" to the end user.

Oil and gas company - Norway
Needed to increase the recovery factor and operating life.

How Collaborative Operations met their need:
Integrated process automation, remote monitoring and collaboration with ABB experts resulted in improved safety, increased asset life and export capacity.

Remote desert mining customer – Chile
Needed remote support to ensure continuous operation of gearless mill drives.

How Collaborative Operations met their need:
Reduced failures and improved reliability through remote 24/7 support for critical assets in a Collaborative Operations environment.

How to begin your collaborative journey with ABB

ABB Ability™ Collaborative Operations engagement process

Communication	Conceptualization	Configuration	Certification	Collaboration
Present business concept and potential values Execute initial Service Value Calculations Ensure business fit and organizational agreement. Schedule value workshop	Conduct value workshop to identify business objectives Identify assets, processes and risks to monitor Collect, analyze and assess relevant baseline data. Present improvement opportunities and proposal	Set up Configuration team and kick off Configuration Decide digital technologies, data analytics and domain expertise required Deploy data collection and ABB Ability™ infrastructure Create apps, analytics, HMI and KPIs Design service delivery framework and agreement	Align Collaborative Operations Center Set up site & ABB Collaborative Operations team Train users and initiate stakeholder communication Plan and schedule agreed service delivery	Monitor assets, processes and risks in real-time Create and update predictive modeling and provide recommendations Prepare and deliver agreed progress reports Conduct regular contract management meetings Quantify value continuously and expand scope as needed
Sign Confidentiality Agreement	**Sign Letter of Intent**	**Sign ABB Care Agreement**	**Certify Collaborative Operations connection**	**Update agreement KPIs & terms as needed**

Next step

Conceptualization preparation questions:

1. Does Collaborative Operations align with your operational and digitalization strategy?

2. If yes, which services and capabilities would provide the most value to your operations? (See page 5)

3. At which sites in your enterprise would you consider deploying Collaborative Operations?

4. Who else in your organization should be involved in Conceptualization?

5. When and where would you like to conduct a Conceptualization workshop?

ABB

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Empower your business with data driven business insights.
To get started or learn more, please contact your
local ABB sales representative or visit:

solutions.abb/collaborative-operations

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ABB Inc.
579 Executive Campus Dr
Westerville, OH 43082 USA
automation.service@us.abb.com

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