




CONNECTED ASSET LIFECYCLE MANAGEMENT

ABB Ability™ Ellipse®

Performance orchestration for the transportation industry.

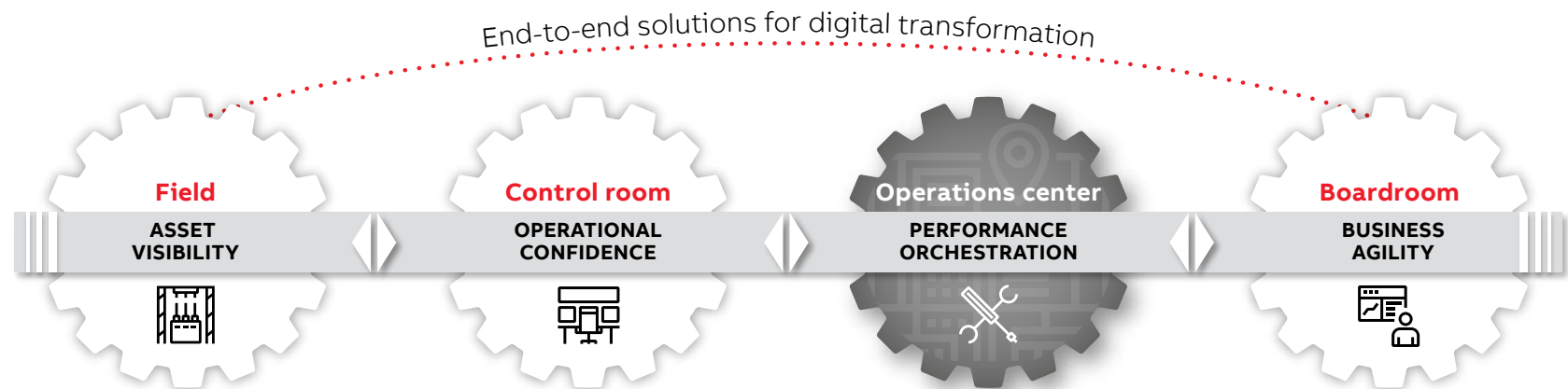




The most basic mission of any organisation is to keep operations efficient, work optimised and assets performing at their peak. This mission, however basic, is also an endless challenge as assets age, the workforce transitions and demand for additional output increases.

Fortunately, there is more technology and data available today than ever before, providing the ability to proactively improve communications, automation and performance. From the field to the boardroom, digital transformation is inevitable, and it will change the way business operates. Dubbed the 'fourth industrial revolution', no area of business will see the performance enhancements more profoundly than operations. Whilst the transition may seem futuristic, for those that begin today, the rewards are great – operations are improved, costs are reduced and safety is enhanced.

There is no better time to start the digital transformation journey than now, and no better software solution than ABB Ability™ Ellipse® to help you get there.

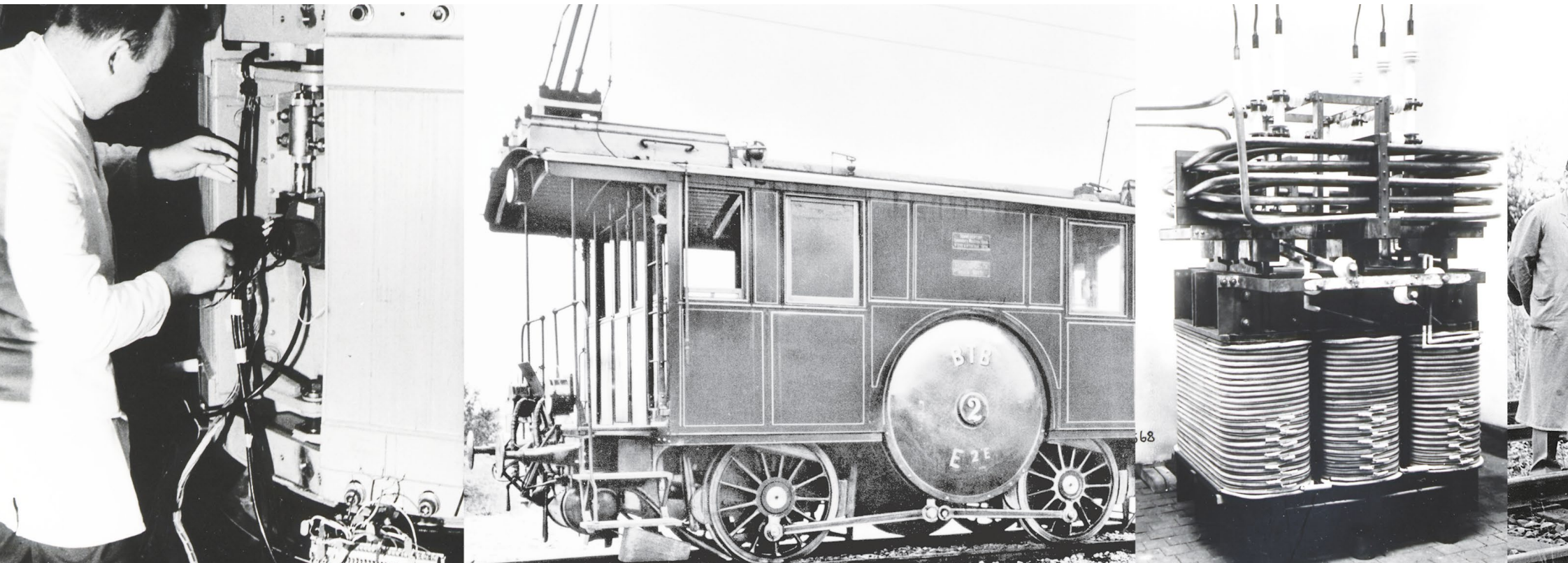


From the field to the boardroom

you can rely on ABB solutions, service and guidance to get you on the right track to digital transformation.

A pioneer in asset management

With a legacy of more than **125 years** at the cutting edge of electrical engineering technology, ABB is the leading authority in industry-specific asset management. Combined with almost **40 years** supporting the asset management and business operations of hundreds of the world's largest industrial organisations, ABB is at the forefront of continuous innovation and premier technologies that set the standard in operational performance optimisation.





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Now ABB is bringing you the next generation of asset performance orchestration.

ABB Ability Ellipse, the connected asset lifecycle management solution.

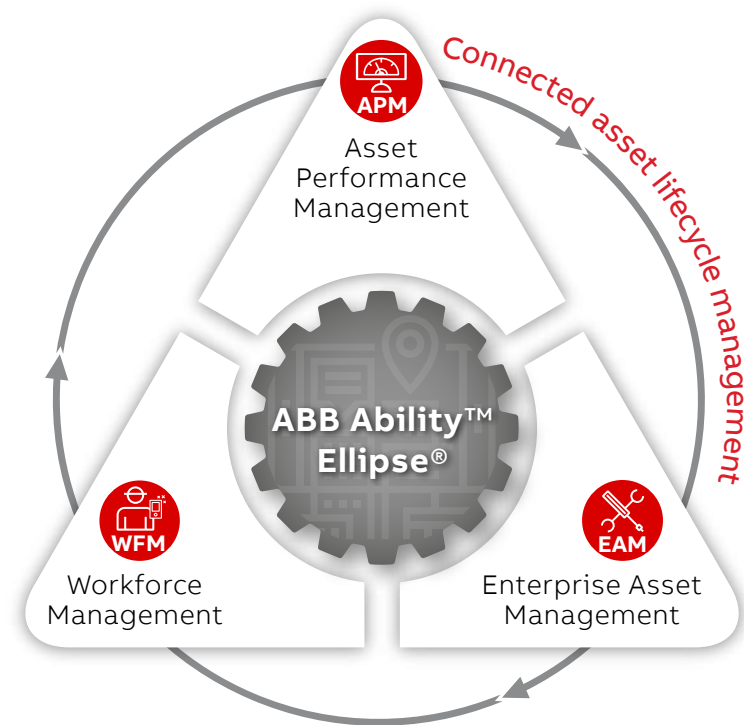
Orchestrating the new paradigm

ABB Ability Ellipse is ABB's connected asset lifecycle management solution that unifies world-class functionality for enterprise asset management (EAM), workforce management (WFM) and asset performance management (APM).

Ellipse facilitates the orchestration of priority, process and people across an organisation, enabling the management of physical assets across the entire asset lifecycle. From strategy through execution, Ellipse is a robust and comprehensive business and technology solution.

Features and benefits:

- Reduced downtime and improved reliability
- Increased workforce productivity
- Cross-functional visibility
- Process standardisation and maturity
- Out-of-the box integration and reporting
- Low total cost of ownership

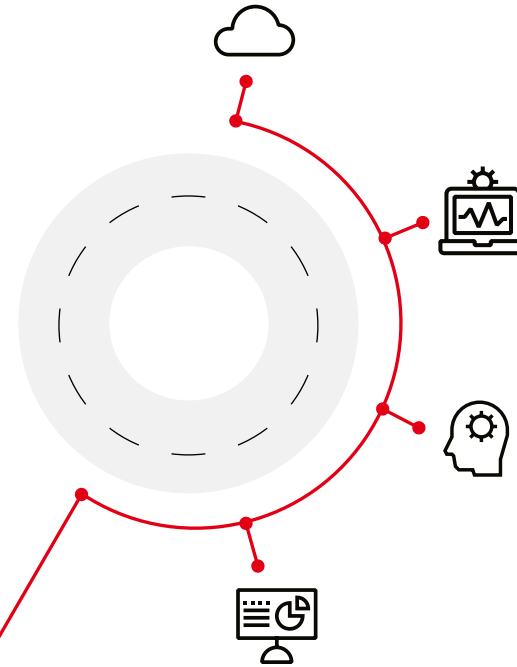


Working together to work better.

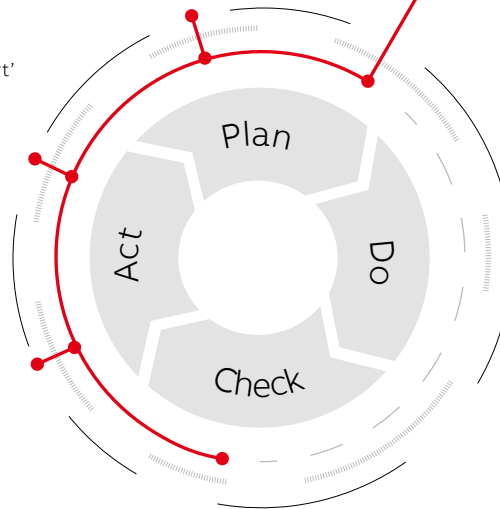
Communication and connection between the three cornerstone functions of Ellipse drive continuous, successful operations.

Built for the future

Ellipse leverages the connectivity and speed of advanced Microsoft® Azure® technology including machine learning, cognitive services and cloud computing to enable faster, better-informed decisions in daily operations. By interfacing all operational functions, Ellipse delivers a unified source of truth for the business, whilst analytical reporting allows for more comprehensive, insightful, long-term planning and modelling to improve safety, reliability and sustainability.



Ellipse has built-in business processes that support the 'Deming' or 'Shewhart' cycle, a simple yet powerful process for continual improvement that is the guiding principle of ISO 55000.



Best practices yield the best results

ABB Ability Ellipse provides an immediate boost in asset strategy maturity with ISO 55000-aligned business processes that drive operational excellence. With more than 150 predefined, best-practice business process models, including detailed equipment, project and work order models for both short- and long-term planning, Ellipse helps to reduce operational costs and risk. These built-in practices create a competitive advantage through improved service and greater operational proficiency.

ABB Ability Ellipse APM

Performance optimised.

ABB Ability Ellipse Asset Performance Management (APM), formerly known as Asset Health Center, monitors asset health by comparing conditional readings with asset-specific data modelling to provide a comprehensive view of fleet performance. Ellipse APM uses advanced machine learning technology to predict, prescribe and prioritise asset maintenance, management and investment decisions based on performance indicators.

The solution ensures that 'maintain, repair or replace' decisions are soundly based on actual asset conditions and their criticality to operations.

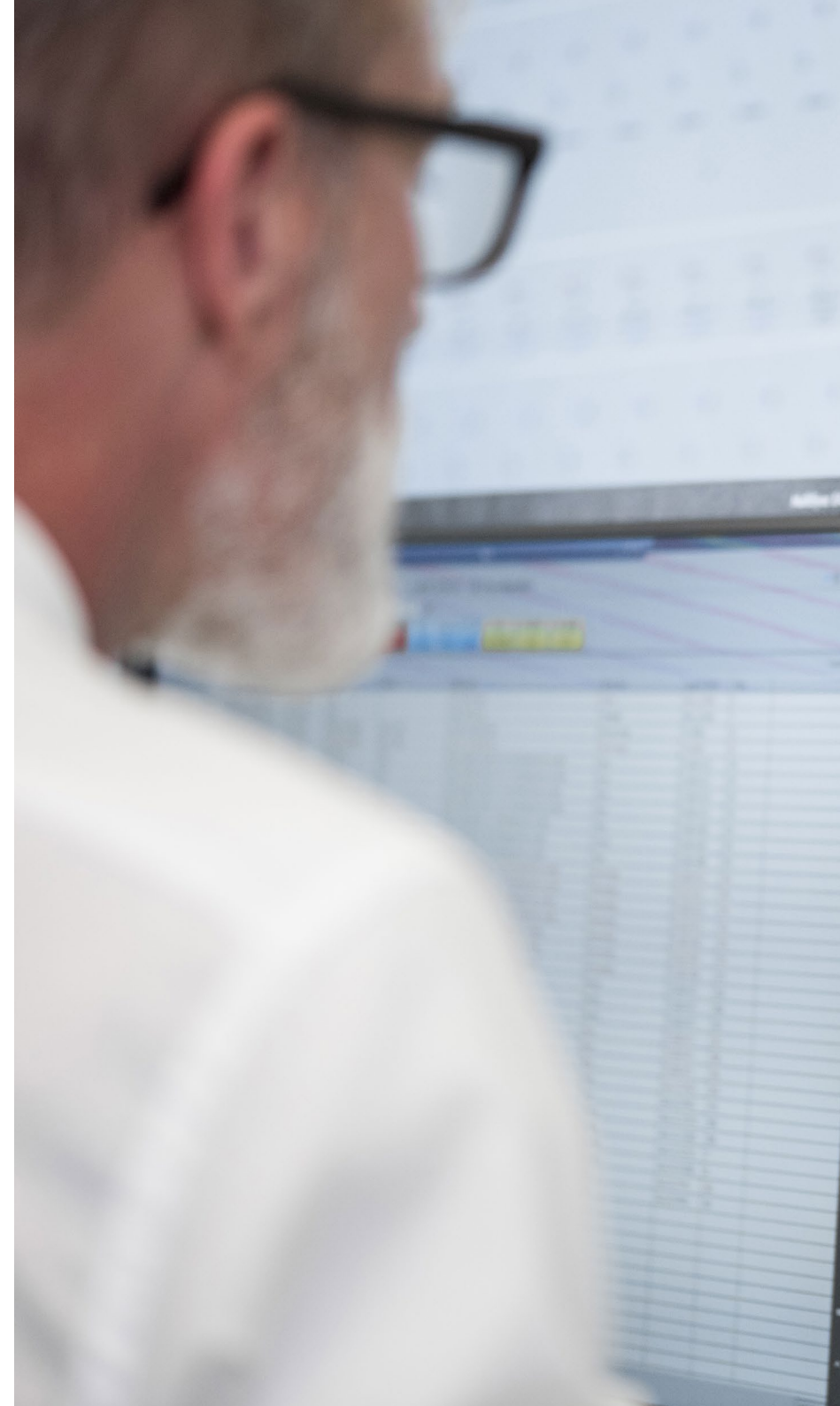




ABB Ability Ellipse APM benefits:

- Industry-leading performance models incorporate the expertise of over 60 years of servicing critical industrial equipment of all manufacturers
- Machine learning capabilities enable users to test hypotheses and validate assumptions using their own data
- Out-of-the-box integration of short-term work (maintenance) with Ellipse EAM and Ellipse WFM or third-party vendors using standard adapters
- Open model interface enables extensibility to incorporate third-party models, a customer's own algorithms or to extend ABB's performance models
- Allows users to build their own dashboards using Microsoft Power BI™ for customisable insights
- Available on premise and in the Cloud

ABB Ability Ellipse EAM

Process optimised.



ABB Ability Ellipse Enterprise Asset Management (EAM) is a purpose-built EAM and enterprise resource planning solution that delivers business outcomes at a sustainable and superior cost of operations and capital investment. Ellipse EAM is designed to support the largest and most complex operational environments with highly robust functionality. Combining built-in best practices in asset management and industry-specific expertise, Ellipse EAM enables peak operational performance and continuous process improvement in line with ISO 55000 recommendations. Ellipse EAM is available as a SaaS solution or as an on-premise deployment.

ABB Ability Ellipse EAM benefits:

- End-to-end best practices for the day-to-day and lifecycle management of assets and work, as well as supply chain management, human resources management and financial management
- Over 150 preconfigured business processes add knowledge and business maturity to incorporate and sustain best practices
- Solution flexibility to accommodate even the most complex workflow processes
- Consolidated graphical views and easy-to-use organising and scheduling capabilities deliver better visibility to coordinate work activities for both short- and long-term planning
- Preconfigured functionality allows predictable scope at a consistent price, with solution delivery in as little as 90 days
- Empowers people to respond faster and make better decisions about assets that directly impact the bottom line



ABB Ability Ellipse WFM

Work optimised.

ABB Ability Ellipse Workforce Management (WFM) is a highly scalable and intuitive inspection, maintenance and repair application. Designed for work in asset-intensive environments like rail systems, stations and depots, Ellipse WFM equips mobile users to execute work orders in the field with optimal efficiency.

Thousands of mobile technicians and dispatchers rely on ABB's mobile workforce management solutions every day to solve their toughest field challenges. The net effect of their feedback is a comprehensive solution proven to increase productivity, reduce costs and contribute to better asset reliability. Ellipse WFM is designed specifically to extend the efficiency of the EAM process directly to the assets it supports, and drive asset management fieldwork productivity and worker safety.





ABB Ability Ellipse WFM benefits:

- Two-way delivery of critical maintenance information including visual confirmations
- Mobile access, hands-free headset and voice-activated forms
- Self-service design studio allows customers to set up and manage the system on their own
- Self-dispatch functionality allows users to select work from their work queue, enabling workers in the field to sequence work as required for the situation at hand
- Work anywhere with support for connected and disconnected modes – orders sync automatically when the user re-enters a coverage zone
- Standardised integrations allow for configurable data sharing between applications
- Can be deployed together with Ellipse EAM and Ellipse APM or with other third-party asset management systems
- Low IT footprint



Now is the time.

Successfully navigate digital transformation.

ABB has technology solutions to support the digital transformation of your business from the field to the boardroom and everywhere in between. Our transportation industry expertise can help you every step of the way with guidance and leading technology solutions to simplify your transformation. With ABB Ability Ellipse, you can reap the rewards of digitalisation sooner than you ever thought possible.





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