

# Socially interactive devices

A device-centric approach to service: Have you talked to your device lately?

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As well as being a source of information, the Internet allows people to interact on a social level. Social Internet-based environments have many powerful applications that can be utilized to service equipment (devices) in the industrial sector. In fact, as far as ABB is concerned, this environment is the next-generation approach to managing service intelligence.



Many Internet sites are presented as “communities” where people interact through various “spaces”. Interaction in such environments is possible using Web 2.0 technologies, the term used to cover all of the latest Internet applications including blogs, RSS feeds, Wiki’s, instant messaging, mashups and more. Many companies, however, are now beginning to see the value of Web 2.0 technologies and how they can be used to improve asset reliability. ABB believes that the applications used in social Internet-based environments can and will be used to manage Service Intelligence<sup>1</sup>.

Social Internet-based environments have many powerful applications that can be utilized to service equipment (devices) in the industrial sector.

**Giving devices a “voice” of their own**  
Remote intelligent device management (RIDM) refers to remotely installed equipment or systems – enabled through monitoring and diagnostic solutions – that use secure connectivity to make system health statuses available to a central monitoring service center to aid troubleshooting, and periodic and continuous maintenance. Expertise to on-site personnel is delivered via online connections, and device management solutions are provided by remotely delving into on-site devices. More specifically, ABB’s remote capabilities allow access to:

- Process optimization experts
- A technical platform expertise center
- Added training and consulting
- Regional service call centers
- Project engineering support

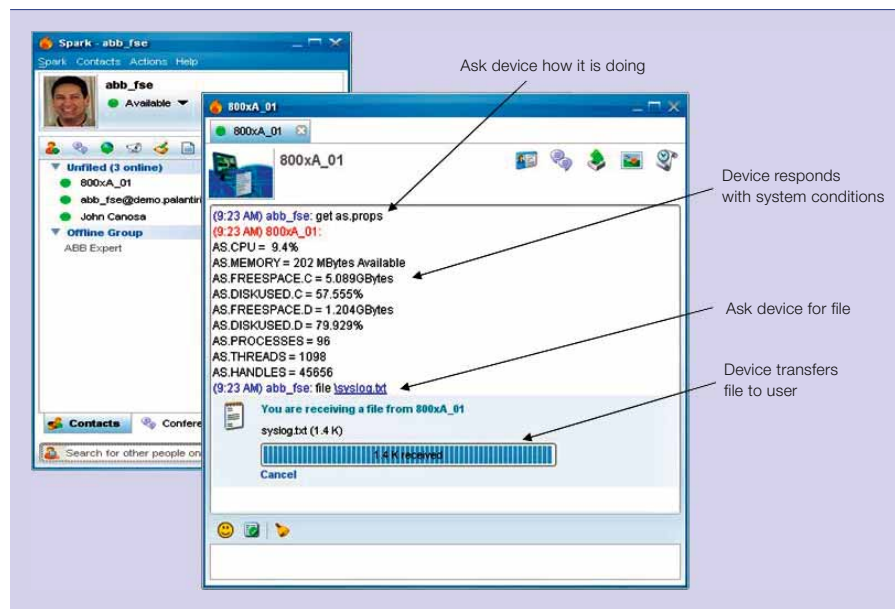
There is no doubt that RIDM increases overall equipment effectiveness (OEE). However, remote services are evolving rapidly and following paths first explored by online services such

as FaceBook and MySpace. Additionally, many people now entering the workplace are members of what is commonly known as the Net Generation. “Net geners” were born in the 1980s and 1990s in a time when most of the digital devices (computers, Internet, iPods) were already available, and they are characterized by their high digital literacy. An environment like this is needed to entice younger-generation engineers to become involved in this field.

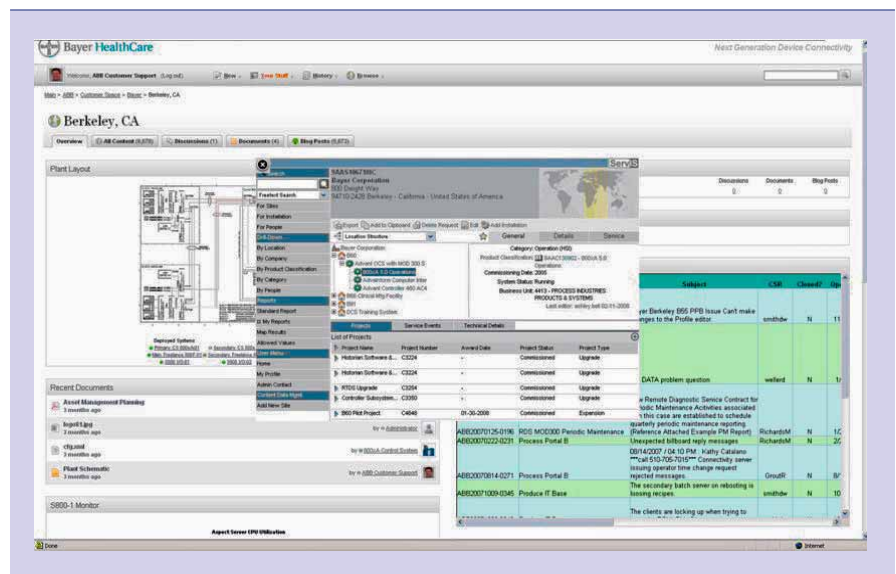
For its part, ABB wondered about the possibility of creating a type of

“DeviceSpace” that could use next-generation Internet and enterprise-based technologies as an information platform. In other words, a device is thought of as a user that can generate content of value to a community. This possibility is gradually becoming a reality! By utilizing the connectivity already established for RIDM, ABB is developing a collaborative device community that will be able to personalize a piece of equipment or system (device), thus enabling it to interact with end users and technical experts through collaborative chat sessions. For example, by using rich instant

1 An example of an instant messaging chat with ABB intelligent equipment



2 The customer space provides both customer- and site-specific information



**Footnote**

<sup>1</sup> Service Intelligence is a comprehensive term for all information, experts, diagnostic tools, business management and delivery mechanisms that support ABB products.



## Partnership and productivity

messaging, devices will provide real-time responses to requests for status, provide error log file uploads on demand and execute diagnostic routines, all within the same chat session **1**. All chat sessions will then post a blog to the device's space, where it becomes a searchable and reusable nugget of service intelligence.

The ABB service community has two major spaces, the customer space and the technology space. The customer space provides both customer and site-specific information, which is fed

from ABB-managed data sources **2**. This information can be arranged into a customized view by the end user. The technology space provides a non-customer or site-specific environment where all specific technology platform service intelligence is organized and presented **3** **4**. Every space and page has standard WEB 2.0 technologies that enable users and devices to post blogs, populate tag clouds, subscribe to RSS feeds, navigate through mash-ups and build a real-time view of dashboards and gadgets. The reasons why this approach to managing ser-

vice intelligence is superior to traditional methods are outlined in the **Factbox**.

Many companies are beginning to see the value of Web 2.0 technologies and their use in improving asset reliability.

ABB service solutions provide, among others, field resources, knowledge databases, service contracts, installed bases and software maintenance. With a device-centric community with spaces and pages, users can interact and collaborate with ABB in a manner that provides a "customer-defining moment,"<sup>2)</sup> reflecting ABB's commitment to supporting its technologies after commissioning.

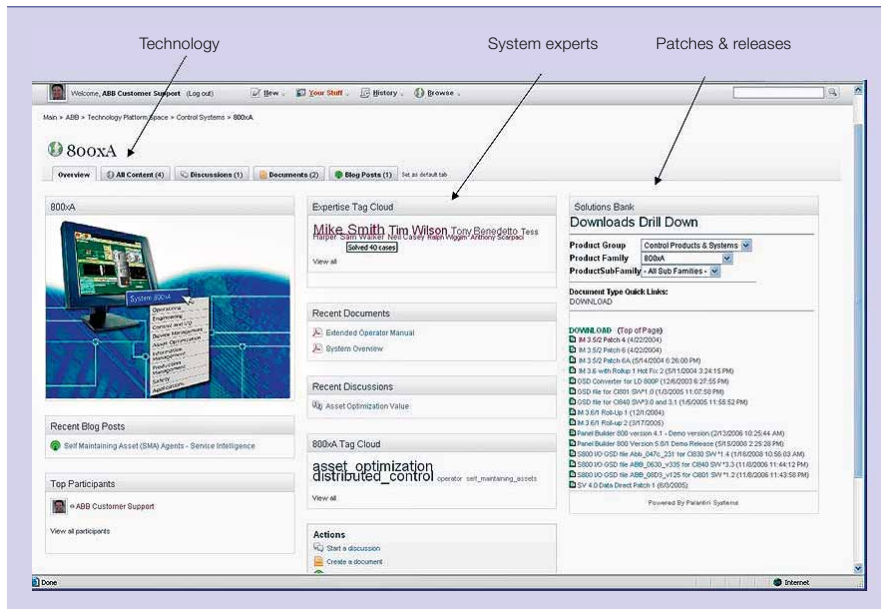
The time is now ripe for building excellent relationships between devices and their human counterparts.

The traditional approach to troubleshooting separates the interaction between technical support and the end user from the diagnostics performed by the service engineer. By enabling the device to engage in a collaborative chat session, problems are quickly and accurately resolved. More importantly, however, diagnostic approaches are captured and readily available for reuse.

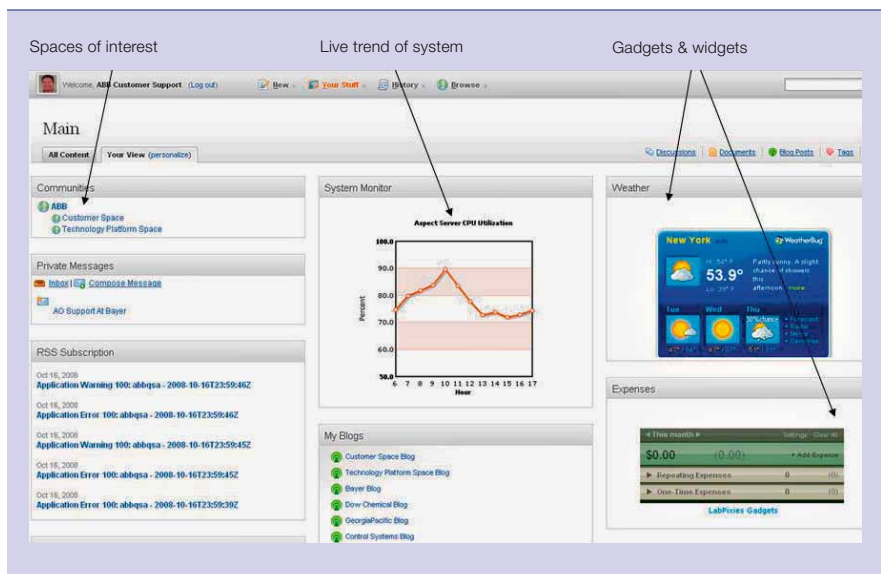
ABB's collaborative device community will enable a piece of equipment or system to interact with end users and technical experts through collaborative chat sessions.

The Internet platform supporting these interactive communities has

**3** The technology space provides a site-specific environment where all specific technology platform service intelligence is presented.

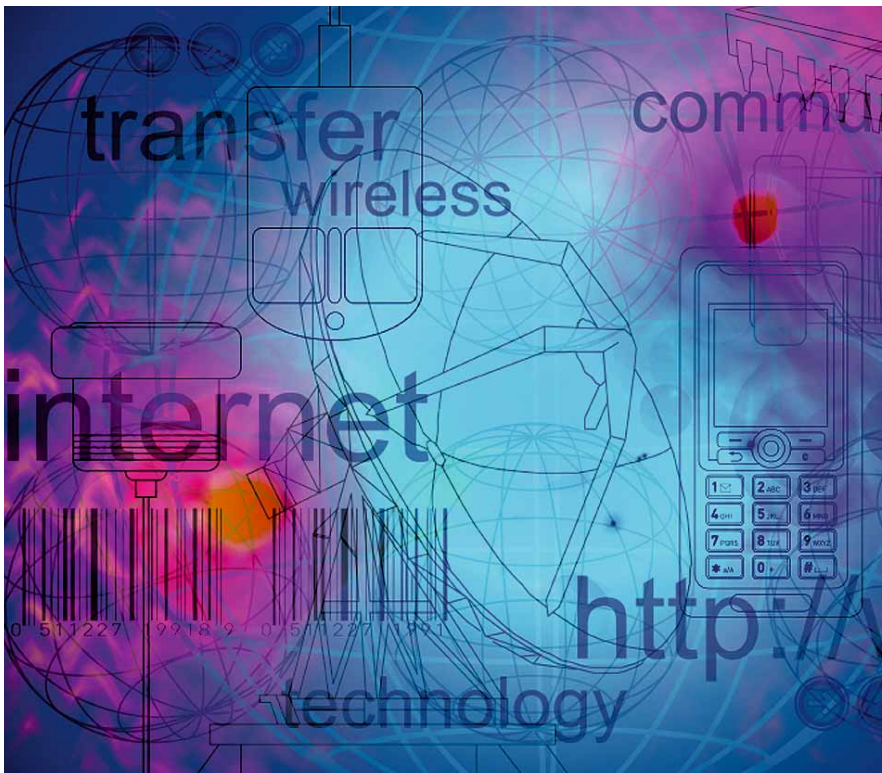


**4** A typical service and support personnel page



**Footnote**  
<sup>2)</sup> For ABB, a customer-defining moment is a measure of customer satisfaction.

## Partnership and productivity



proved itself to be readily accessible, scalable on a global basis, easy to use and the standard medium for presenting data. With mobile computing devices already Web enabled – and devices becoming increasingly connected and more intelligent – the time is ripe for building excellent relationships between devices and their human counterparts, ie, end users and manufacturers.

With its strategy of embedding services in its products, ABB can focus on asset performance management in a manner that optimizes availability, provides quality production, and extends the product life cycle. This in turn gives ABB's customers the benefit of lower total cost of ownership, thereby increasing their overall competitive advantage.

**Factbox** Why ABB's collaborative device community is superior to traditional methods for managing service intelligence

- The focus is on presenting information from existing sources instead of replacing existing databases or becoming yet another redundant receptacle of information. This allows for quicker deployment and less redundancy of data sources.
- Years of know-how and experience can be captured from experts nearing retirement and is stored in a way that can be readily searched and reused by the next generation of service engineers.
- Web 2.0 technologies provide an environment where the younger generation of technical support engineers can be more comfortable. This is a medium they are more likely to communicate in and one that allows them to interact with seasoned experts.
- Devices provide real-time feedback about their health and condition, as well as contributing to self diagnostics. This entices the device, customer and technical support to interact collaboratively, giving all participants the opportunity to learn from the experience and to better document the support session.
- Customers are directly involved in the problem-solving process.
- The environment provides a portal allowing customers to interact with databases such as ServIS\*, an installed base management system. These customer interfaces contribute greatly to the accuracy of installed base information.
- Members are motivated to be innovative and collaborative, thus providing new approaches and best practices in an environment that is conducive to the reuse of these ideas.
- Hundreds of important data sources, each with separate logins, can be pulled into a single environment requiring only a single sign on. Furthermore, the interface to all this information is organized into a consolidated view or dashboard.
- Users can easily customize their own home pages to align with their job functions and responsibilities.
- Web 2.0 technologies are proven to be scalable to very large systems that span across the globe, providing harmonization to the approach a customer uses to interact with members and devices.

\* ServIS forms part of a traceability system that is used to keep track of Unigear switchboards and panels.

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