The Institute of Information Management and The Glassmeyer/McNamee Center for Digital Strategies

The Electronic Collaboration Study

Case Study ABB Turbo Systems AG

Portal Solution ATURB@WEB in Support of Service and Sales Processes of ABB Turbo Systems AG

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About "The Electronic Collaboration Study"

The "Electronic Collaboration Study" is a joint project of the Institute of Information Management at the Universität St. Gallen (Schweiz) and the Glassmeyer/McNamee Center for Digital Strategies at the Tuck School of Business at Dartmouth College in Hanover, New Hampshire (USA).

Both institutions collect case studies for transinstitutional electronic collaboration. The goal is to put together examples that demonstrate how companies can gain competitive advantages from the use of information technology. The results are recommendations for successful electronic collaboration.

Prof. M. Eric Johnson, PhD, Director of the Glassmeyer/McNamee Center for Digital Strategies, and Prof. Dr. Hubert Österle, Director of the Institute of Information Management and Chief Technology Officer of the "Information Management Group" (IMG) are the principal investigators for the project. They are supported by Prof. Dr. Walter Brenner and Prof. Dr. Elgar Fleisch of the University of St. Gallen, as well as Prof. Hans Brechbühl and Prof. Stephen Powell, PhD of the Tuck School of Business, in attaining the goals of this project.

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Links

Case Study Database:	http://cases.iwi.unisg.ch
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Summary

ABB Turbo Systems AG is the world market leader in charging diesel and gasoline engines in the performance range above 500 KW via exhaust-driven turbochargers. Over 180,000 ABB turbochargers are actively employed globally in ships, power stations, train engines, and heavy construction and mining vehicles to improve the performance of diesel engines. Its decentralized organization with over 70 international agencies and service stations guarantees fast, customer-friendly, and high-quality round-the-clock service.

Until 1989 ABB Turbo Systems — with headquarters in Baden — collected all information on turbochargers in a file with 182 million theoretical configurations, which was distributed as micro fiche to the service stations. Obsolete data, missing access to stock in warehouses, etc. led to delays and additional overhead charges for repairs.

Over the next 12 years and via several projects, ABB Turbo Systems arrived at an internet-based solution, ATURB@WEB. This allowed service providers realtime access to information on 180,000 turbochargers, 115,000 technical installations, currently 87,000 service reports, 32,000 spare parts (incl. stock), 60,000 customers, as well as operating manuals and assembly instructions.

The solution ATURB@WEB was an important foundation for ABB Turbo Systems's service operations. Additionally it allowed the company to reduce its spare parts stock by about 12%. The reduction of fixed capital has lowered interest charges by about 1 million Swiss Francs (CHF) per year.

Zusammenfassung

ABB Turbo Systems AG ist der Weltmarktführer für die Aufladung von Diesel — und Gasmotoren im Leistungsbereich oberhalb 500 kW mittels Abgasturboladern. Über 180'000 ABB Turbolader (zur Leistungssteigerung von Dieselmotoren) sind global auf Schiffen, in Kraftwerken, auf Lokomotiven, schweren Baustellen- und Minenfahrzeugen im aktiven Einsatz. Die dezentrale Organisation mit über 70 internationalen Vertretungen und Servicestationen garantiert für einen schnellen, kundennahen und hochqualitativen Service - rund um die Uhr.

Bis 1989 sammelte ABB Turbo Systems — das Stammhaus in Baden — sämtliche Informationen zu den Turboladern (mit theoretischen 182 Mio. Konfigurationen) in einer Kartei, die als Rollfilm an die Servicestationen verteilt wurde. Veraltete Daten, fehlender Zugriff auf Lagerbestände usw. führten zu Verzögerungen und zusätzlichen Prozesskosten bei den Reparaturarbeiten.

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Über mehrere Projekte kam ABB Turbo Systems im Verlaufe von 12 Jahren zu einer inzwischen internet-basierten Lösung, ATURB@WEB. Diese gibt den Servicemitarbeitern Echtzeit-Zugriff auf Informationen über 180'000 Turbolader, 115'000 technische Anlagen, derzeit 87'000 Servicereports, 32’000 Ersatzteile (inkl. Bestände), 60'000 Kunden sowie Betriebshandbücher und Montageanleitungen.

Die Lösung ATURB@WEB ist für das ABB Turboladergeschäft eine wichtige Basis für ihre Serviceleistungen. Darüber hinaus konnte das Unternehmen damit den Ersatzteillagerbestand um 12% senken. Die Verringerung des gebundenen Kapitals reduziert die Zinskosten um ca. 1 Mio. Schweizer Franken pro Jahr.

1 The Company

Overview. ABB Turbo Systems AG, based in Baden, Switzerland, is the world's leading producer of turbochargers in the over 500 KW performance range with a market share of 43%. It is a wholly-owned subsidiary of the ABB Group and maintains a global service network of more than 70 service stations in 44 countries.

ABB Turbo Systems AG	
Founding	1890 Asea (Sweden), 1891 Brown Boveri (Switzerland), 1989 fusion into ABB Production of turbochargers at Brown Boveri (BBC) since 1924
Headquarters	Baden (Switzerland)
Specialty	Mechanical Engineering
Business Arear	Turbochargers for Diesel engines above 500 KW
CompanyStructure	Independent business unit within the ABB Group Production in Baden and Deitingen (Switzerland), additional 4 licensees (China, South Korea, India, Poland) and a Joint Venture in Japan 70 Service stations in 44 countries, assigned to individual ABB country-groupings
Homepage	http://www.abb.ch/turbochargers
Sales Volume	2002: 394 million Swiss Francs (CHF)
Market Share	2002: 41%, incl. 14% via licensed producers
Workforce	1,600, with ca. 800 in service stations
Customers	60,000
Cooperative Process(es)	Maintenance & Repair
Software Solution	SAP R/3 (Modul FI, CO, SD, MM, PP), SAP ITS and in-house development

Table 1-1: Snapshot of ABB Turbo Systems AG

Competitive Challenges. Turbochargers are components used for performance improvement of diesel engines. The engine exhaust gases drive a compressor via a turbine, compressing the air necessary for burning the fuel. This allows for a fourfold increase in the engine's performance. At the same time fuel consumption is reduced by 10%. About 180,000 turbochargers are in use in 115,000 technical installations worldwide. They are primarily employed in shipping (62%); in this sector the cost of turbochargers amounts to about 1% of the price of the ship. Further utilization areas are power plants (35%) and railways (3%). Since the service process for the three areas is similar, the following shipping example is representative.

ABB Turbo Systems does not produce diesel engines, but delivers turbocharger solutions tailored to specific engine types and customer needs. The modular product design provides a high degree of flexibility in meeting these requirements.

Each turbocharger consists of about 160 parts, which can be productively combined with each other in ca. 3.5 million variations. Multiplied by the current 52 different types, gen-

erations, and sizes, the possible product configurations reach around 182 million. On average, only five turbochargers worldwide are built identically.

The parts of a turbocharger are exposed to extreme physical stress that, depending on the part, requires replacement after 12,000, or 50,000, or 100,000 hours of use. The majority of ABB Turbo Systems' revenue is therefore generated by the ABB turbocharger service. Proactive maintenance and repair work are customary, so that breakdowns and failures can be avoided for the most part and maintenance cycles can be coordinated with the docking periods of the ships, for instance. In breakdown cases the customer expects repair of affected turbochargers in the shortest possible time span. For these tasks the service stations require extensive information about the turbochargers to be serviced.

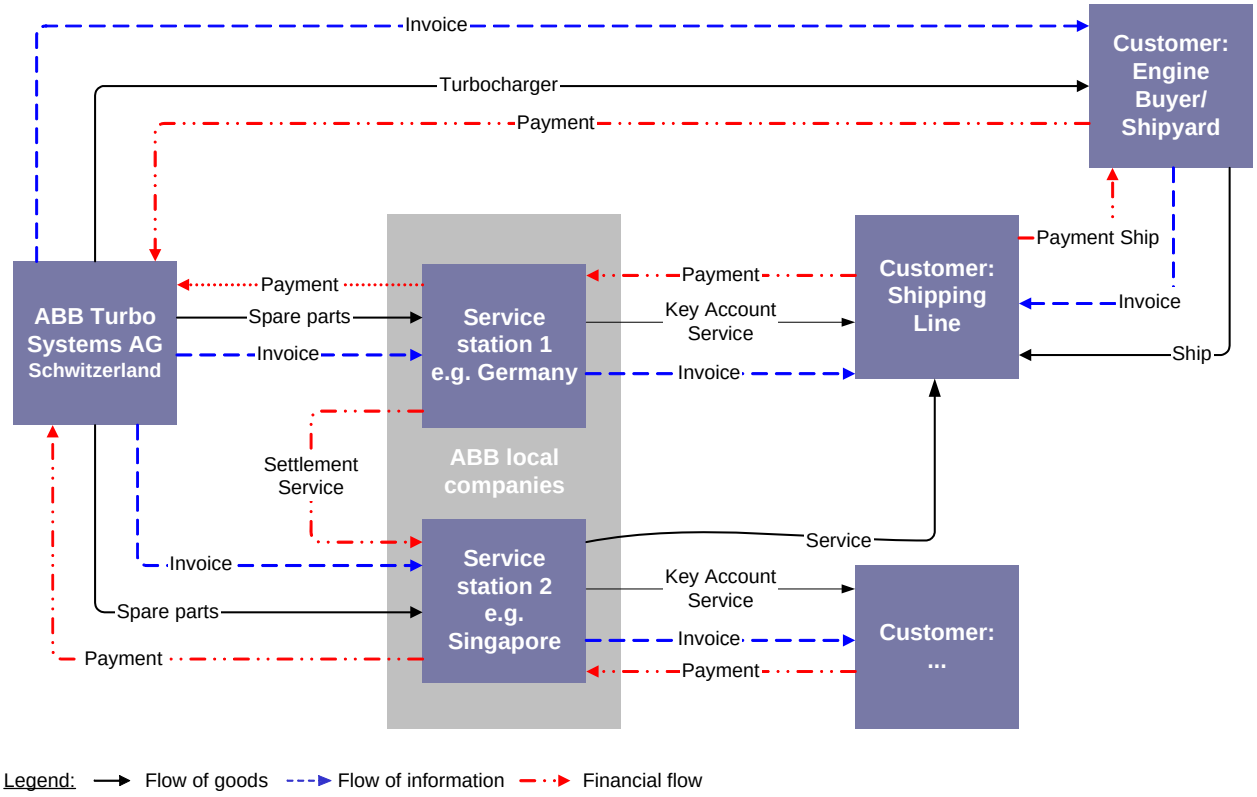


Figure 1-1: Service Network of ABB Turbo Systems AG

Figure 1-1 depicts the interlocking nature of ABB Turbo Systems AG's service network. Customer service is provided by a worldwide network of service stations of varying size and specialization. These are assigned to the individual ABB country groupings and are responsible for servicing customers residing within their service area (key account concept). The service stations are treated like internal customers by ABB Turbo Systems AG and receive discounts for spare part orders, for instance.

The service costs are the same for companies all over the world. This avoids undesirable travel to service stations with lower service charges. If a service station performs services for a customer from another service area, e.g., for a turbocharger breakdown on a ship of a German shipping line near Singapore, the customer pays his own service station for the service provided. This will be followed by an internal settlement at fixed rates. The individual service stations stock a fixed number of spare parts and receive additional parts from the central warehouse in Baden or, in emergencies, from other service stations.

2 Initial Situation

Strategy. ABB Turbo Systems supplied its service stations with extensive information about the turbochargers. Before 1989, an index card was kept for each ship, listing the installed turbocharger and all specifications. These index cards were transferred once a year to microfilm and distributed to the service stations worldwide. In addition a type label (information plate) with product numbers and exact specifications was affixed to all turbochargers.

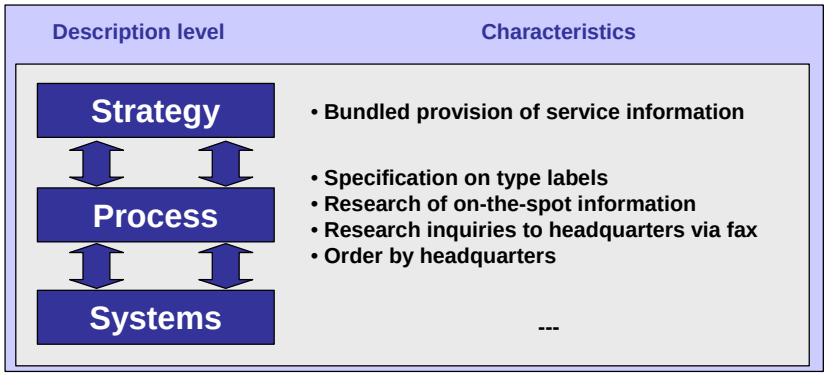


Figure 2-1: Brief Characterization

The documentation (such as blueprints and installation instructions, for instance) was paper-based and sent by the headquarters to the service stations. Further information was provided to the service stations by the headquarters on demand.

Process. If a turbocharger somewhere in the world required maintenance or repair, the service station would find out its specifications and product number. It would then send an inquiry to the headquarters in Baden, usually by telephone, telex, or fax. The headquarters employees would find the relevant drawings and determine manually what part was needed and whether it was available in the central warehouse. If it was not, headquarters would inquire about availability in the warehouses of the larger service stations. If the needed part could be found, shipment to the original service station was requested (see Figure 2-2).

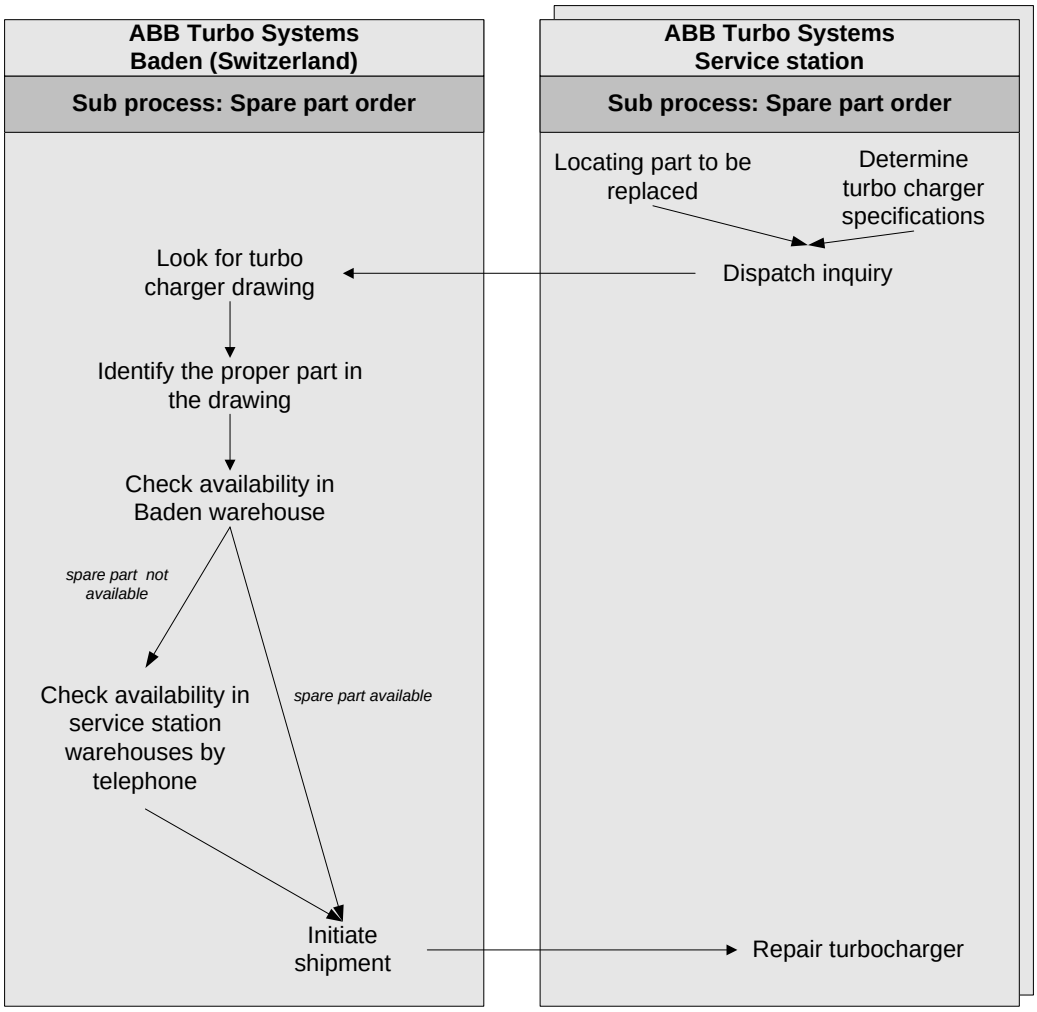


Figure 2-2: Previous Process

Systems. Information systems in support of the process were not yet utilized. All information was filed on paper and microfilm.

Pain Points. The spare parts business, without IT-support, had a negative effect on the quality of service.

- The annual updating cycle of the turbocharger files proved to be a slow process. Information available on location was often outdated. Additional costs and delays were caused by the shipping of microfilms and the customs fees.
- The name change of a ship, customary in a change of ownership, would result in several designation changes over the course of a year. Finding the turbocharger information for recently sold ships was therefore very time-consuming.

- The specifications affixed to the turbochargers included information that could be used to determine the loaders' construction. As a result product piracy was a big problem for ABB Turbo Systems.
- Although required by regulation, the type labels for turbochargers undergoing alterations in specifications were not always updated. This could have led to delays in repairs and maintenance, since the technicians could only identify the exact specifications after the engines had been opened up.

3 Mainframe Solution ATURB

Strategy. ABB Turbo Systems recognized the potential of information and communication technology for the work of the service stations early on. In order to supply as much information as possible locally, ABB Turbo Systems decided to design a supporting database application.

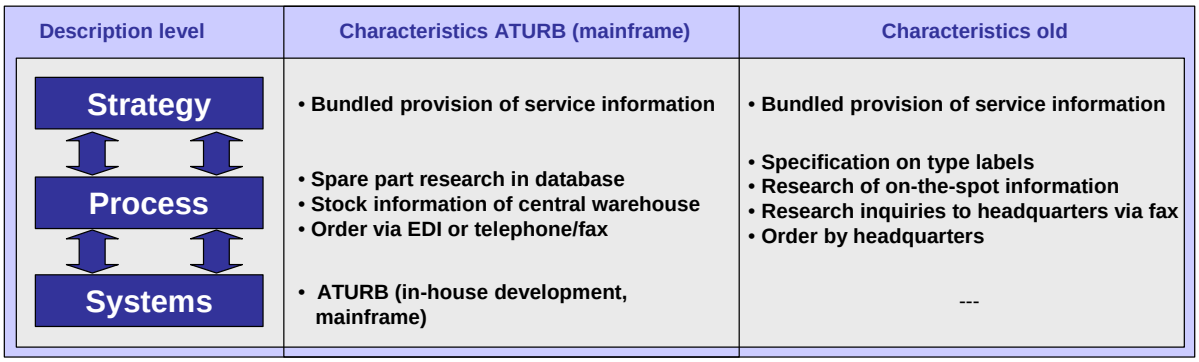


Figure 3-1: Comparative Brief Characterization

Process. For the first time the service stations were now able to locate the needed spare parts directly via the system and to inquire about availability in the central warehouse in Baden. If the part was not available there, they would contact other service stations by telephone. Orders were sent by telex or fax to Baden, where they were checked and processed (see Figure 3-2). During the nineties the large service stations were already able to transmit their orders via EDI (Electronic Data Interchange) to the headquarters; for smaller and medium service stations, inclusion in EDI was not economically feasible because of the high initial costs and the necessary employee know-how.

Further sources of information in this context were the production database for turbochargers (FABDAB), the Customer Support System (CSS) and the database Service Network Profile (SNP).

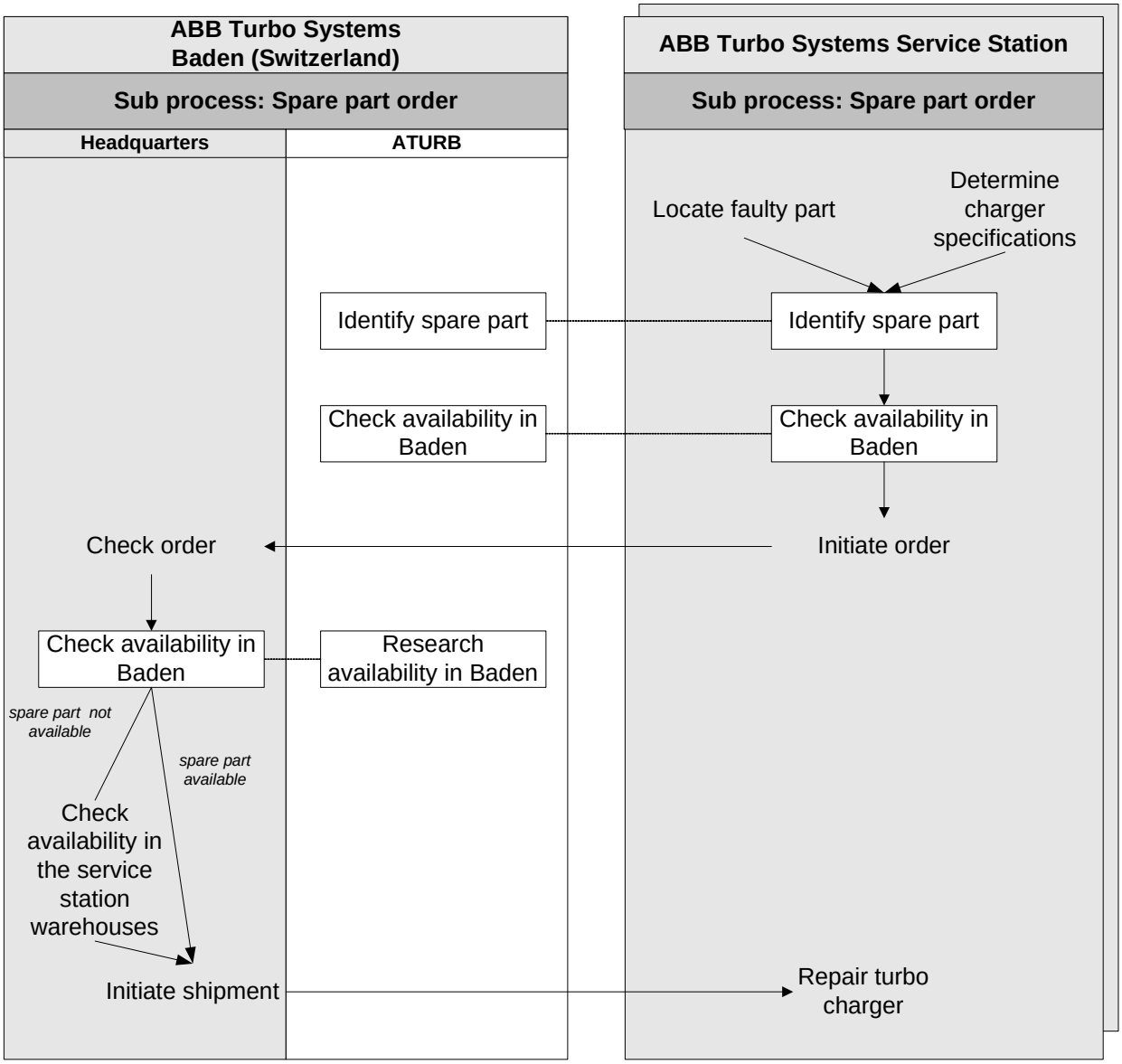


Figure 3-2: Replacement Parts Process with ATURB

Systems. The ATURB application ran on an IBM mainframe computer, was programmed in PL/1 at that time, and was based on a DB2 database. The expansion of ATURB, which paralleled the technical development, provided the service stations over time with increasingly extensive research capabilities.

Pain Points. ATURB simplified the maintenance and repair process for the ABB turbocharger. However, especially in the beginning, there were still considerable technical obstacles, such as extremely low transmission rates (2,400 bps) or the difficulties of a network infrastructure still under construction with the varied telecommunication standards in individual countries. Although the information and communication technology of the

late eighties was applied admirably to support the service business, not all inefficiencies inherent in the process could be overcome:

- The sales personnel for spare parts at the service stations needed to continue to have extensive turbocharger know-how to be able to order the necessary parts. That included knowing which parts from older production could be replaced with more recently developed parts, for instance.
- It was still necessary to list the specifications on the turbochargers' type labels. Product piracy and outdated type labels thus remained a problem.
- It was not possible, using the system, to determine parts availability in the service station warehouses.

4 Project

Goals. In 1998, the path of incremental improvements to ATURB was abandoned when it became clear that the IBM host solution was not able to cope with Y2K. ABB Turbo Systems introduced SAP R/3 as its Enterprise Resource Planning (ERP) system in 1997. After the migration of the ERP system from SAP R/2 to SAP R/3, use of the mainframe solution became extremely expensive for the service business, as the other mainframe applications were terminated. ATURB, as a large computer application, was way behind more recent software applications in user-friendliness and user interface design. In addition, data redundancy in SAP and ATURB would have had to continue.

Execution. ABB Turbo Systems therefore decided to migrate to a new platform. A demand analysis showed that at that point SAP software could only cover about 30% of ATURB's demand volume. This led to the realization of the web-based in-house development of ATURB@WEB, combined with the Internet Transaction Server (ITS) of SAP. Thus the SAP data could be used. A joint module development with SAP was ruled out, since ABB Turbo Systems considered its speedy service to be a decisive competitive advantage and wished to extend its lead through ATURB@WEB.

The solution was developed jointly with IMG AG as a partner for consultation and implementation. The first version of ATURB@WEB, developed over a 9-month period and incorporating five different modules, was put into use in September 1999. A special challenge during this first phase of the project was imposed by the time pressure of the imminent change to the year 2000.

During the second project phase, which lasted five months until May 2001, the capability of ordering spare parts directly via the web became a reality. Also during this time, ABB Turbo Systems implemented additional modules, such as a maintenance scheduler, in operation since March 2003, and the electronic ordering of new turbochargers, operational since October 2003.

Critical Success Factors. Roland Bossy, head of ABB Turbo Systems' IS organization, has been the driving force behind the development of the service databases. For him evolutionary systems development is a substantive success factor. The ongoing improvement in systems support for the service stations is in itself a contribution to change management. The employees see further systems development as an ongoing effort by the headquarters to support their work at their local facilities ever more successfully.

A further reason for evolutionary systems development is the short lifespan of IT technologies. Projects should therefore not last longer than 6-9 months. A release which can deliver 80% of desired functionality in six months is thus preferred to 100% implementation over a 12-month project period.

Systematic project management and a uniformly applied middleware and application concept are compelling prerequisites for taking this kind of action. Only thus can the goal-oriented development of the company's information systems and their compatibility be guaranteed. ABB Turbo Systems is very receptive to the employment of new technologies, but has learned from experience that it is financially worthwhile to observe other initial installations first and to profit from the accumulating knowledge of professional consultants. It is also important to develop the necessary IT know-how within the company itself.

5 New Solution

Strategy. The strategy of providing the service stations with comprehensive information can be employed even more effectively with ATURB@WEB than it could in the past.

Description level	Characteristics ATURB@WEB	Characteristics ATURB	Characteristics old
Strategy	• Bundled provision of service information	• Bundled provision of service information	• Bundled provision of service information
Process	• Database research • Stock information, all warehouses • Order via web	• Database research • Stock information, central warehouse • Order via EDI or phone/fax	• Type labels • On-the-spot information • Inquiries to headquarters via fax • Order by headquarters
Systems	• Web solutions ATURB@WEB, DOC@WEB	• ATURB (in-house development, mainframe)	---

Figure 5-1: Brief Comparative Characterization

Process. The employees now have realtime access to hitherto difficult-to-obtain information. This information contains, among other things:

- Up-to-date specifications, the operating manual, the next scheduled service dates and the maintenance record including earlier specification changes and the numbers of needed spare parts;
- All information about spare parts (e.g., drawings, installation instructions, availability in ABB Turbo Systems' warehouses, type of recommended parts (new or reconditioned), substitution of parts through other components or component groups);
- Number, type, and maintenance intervals for structures employing turbochargers for each customer;
- For each service station, a listing of turbochargers installed for customers in their service area, and for how many and which turbochargers service is overdue and might have been provided by a competitor;
- Service reports for all completed repairs and aggregate information about defective parts as an early warning system for development and production;
- Competencies of each service station, including capabilities and language abilities of its employees.

Through use of internet technology, all service stations are able to place spare part orders, the approval process of which is also supported through information systems technology. Figure 5-2 illustrates the new process of spare parts research and ordering.

In addition, ATURB@WEB offers all sales associates support in customer relations, identification of potential cross and upsale opportunities, as well as retrofit business (conversion of competing products to ABB turbochargers). The sales department, for instance, could find out that 20% of Hapag-Lloyd ships have not yet been fitted with turbochargers, and take appropriate steps for acquisition. The service reports as well are not only of use to the service force, but also allow conclusions for production and development.

Service planning had most recently been supported by a maintenance scheduler. The service station now learns which customer/engine service did not take place, is overdue, or was performed according to schedule. This information was already in the system, but had not been utilized or distributed by ABB Turbo Systems before. The service technicians can now plan relevant dates and activities directly through the system and are supported by alarm functions.

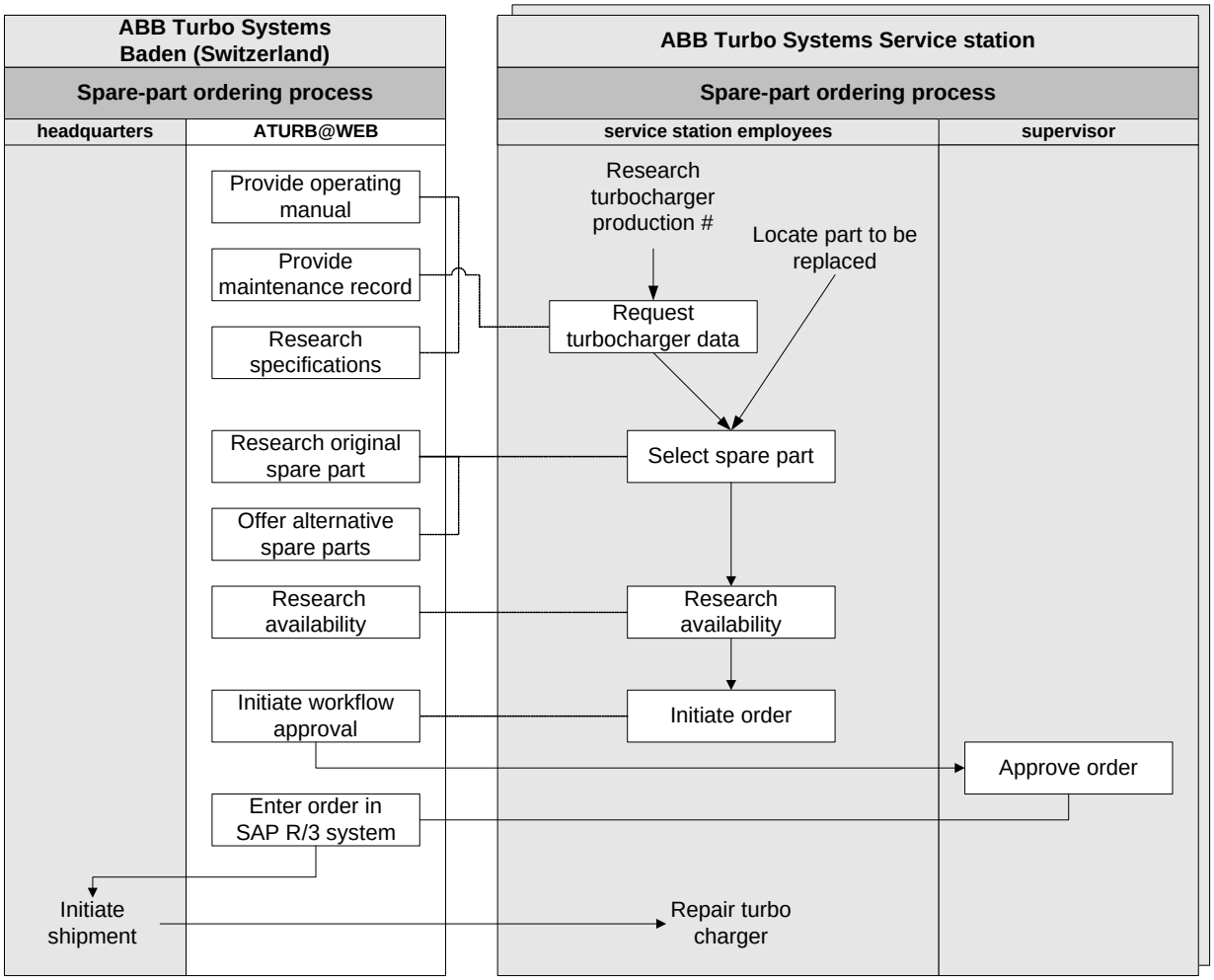


Figure 5-2: New Process

Originally it was planned to offer the maintenance scheduler to the customers in order to make their service budgeting process easier and to allow them to order service online. A customer poll showed, however, that they prefer the individual customer service provided by a key account manager in their local service station.

Systems. ATURB@WEB is an in-house development of ABB Turbo Systems AG that accesses the ERP-system data via the SAP Internet Transaction Server (ITS). At the same time the solution integrates additional databases, such as the online-documentation DOC@WEB, which provides user manuals, drawings, and product information via a file server or the Lloyds' shipping database, among others. The Lloyds' database is updated in 3-month cycles and allows the unequivocal identification of ships on the basis of their insurance ID numbers, thus solving the problem of ships' changing names.

The central back-end system is SAP R/3, which stores all data. A single sign-on (SSO) was developed in-house as a portal. Figure 5-3 provides an overview of the system architecture.

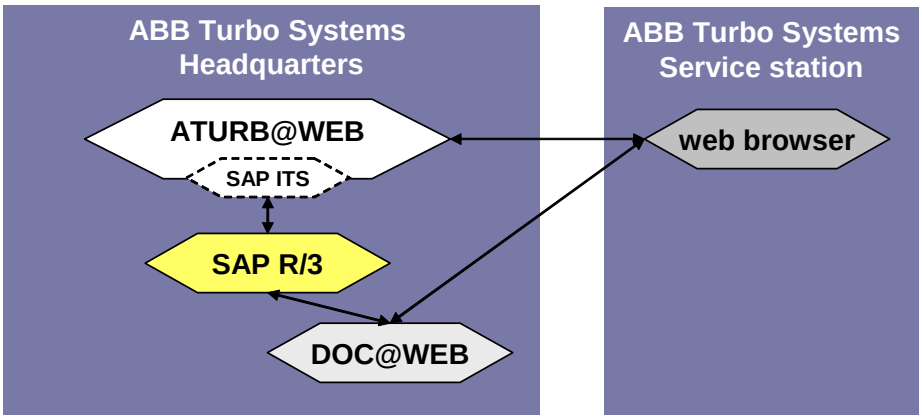


Figure 5-3: ATURB@WEB System architecture

Currently ATURB@WEB consists of the eight linked modules: Service Network (SN), Turbocharger (TC), Spare Parts (SP), Customer Support (CS), the Maintenance Scheduler (MS) (in use since March 2003), Service Report (SR), Service Network (SN), and Purchase Order (PO). The module New Turbocharger (NT), which makes it possible to order new turbochargers electronically, was rolled out to the first service station in October 2003. All modules are web-compatible via SAP IST and can be accessed by the service stations via web browser (see Figure 5-4).

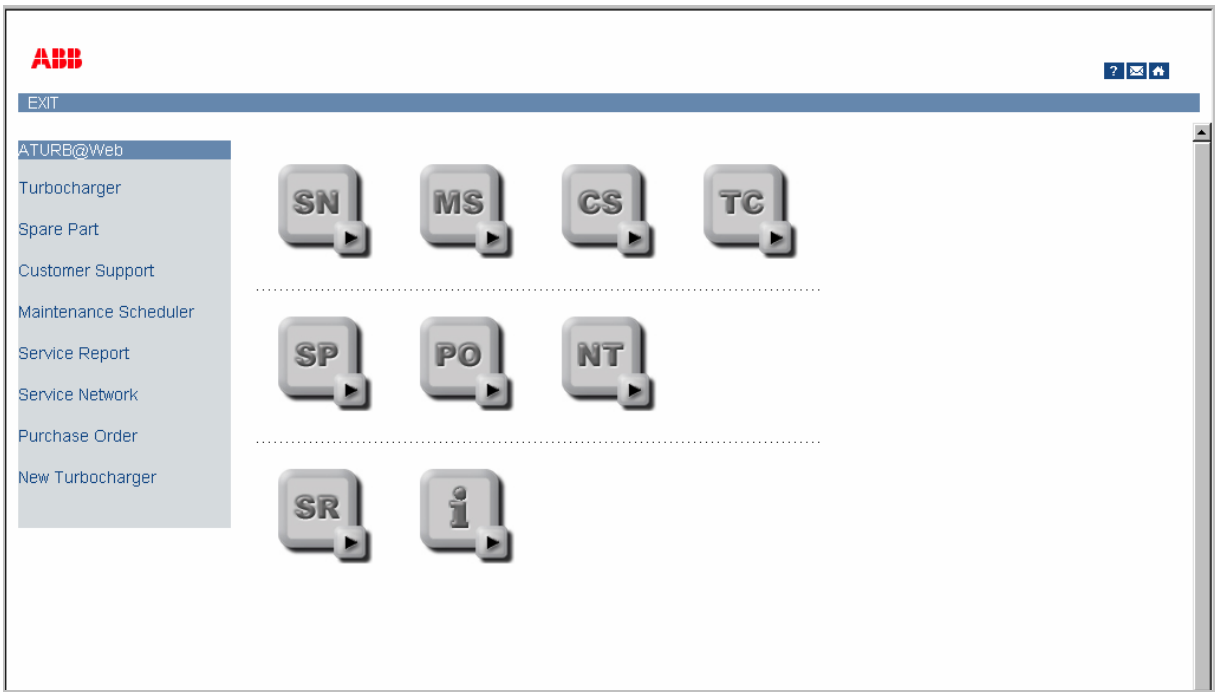


Figure 5-4: ATURB@WEB Entry Page

New functionalities include: electronic order processing, linkage of documents, listing of currently about 75% of worldwide warehouse stock, and representation of approval workflow. ABB Turbo Systems has developed a security concept for access to service information critical to its business, which governs employee access authorization. All employees receive password generators in check card format, which generate one-time passwords with limited validity for login. With this, employees are authenticated to the portal via a Single Sign-On (SSO) developed in-house.

Access authorizations are issued based on roles. In order to minimize the maintenance effort as much as possible, ABB Turbo Systems limited these to nine roles, from the decision maker to the service employee and the mechanic. Although each service station has access to customer data only from its own service area, each station does have access to all product and configuration data, to be able provide service to ships assigned to other service areas.

Costs and benefits. ATURB@WEB collects all data for service station employees and allows integrated search possibilities for 180,000 turbochargers, 115,000 technical installations, currently 87,000 service reports, 32,000 spare parts, and 60,000 customers. ATURB@WEB enabled Turbo Systems AG to save considerable costs and improve its service (see Table 5-1).

Use of internet technology allows the service station workforce realtime access to maintenance records and spare parts information, gives customer service representatives accurate information about the employment of turbochargers at their customers' location and the products' maintenance situation at any time, and provides worldwide transparency about actual part stock for production facilities and service stations.

ABB Turbo Systems AG was able to reduce its spare part stock by 12%. The reduction in tied-up capital equals yearly savings of about one million Swiss Francs (CHF) in interest. Further savings were achieved through the discontinuation of license fees for the mainframe solution and automated spare part orders. In addition the business solution improves customer service, quality and speed of service, and supports the fight against product piracy (as specifications on type labels are no longer needed). The implementation of ATURB@WEB cost about 2.1 million CHF and took 18 months. The spare parts discounts from the headquarters for using ATURB@WEB are an additional incentive for the service stations to utilize the functions of ATURB@WEB. Currently about 93% of all orders are processed via the system. In a recently conducted survey to determine the most valuable information provided by the headquarters, the service station managers ranked ATURB@WEB first.

Overview ATURB@WEB			
Project			
Project			
Duration	1.5 years		
Project Team	5 people - 3 employees of ABB Turbo Systems - 2 external consultants		
Project Effort (man- days)	850 MD (ca. 4 man- years)		
Project Costs	2.1 million CHF		
Operation			
Ongoing Administration	2 employees		
Training effort per employee	< 1 day/year		
Benefits realized through ATURB@WEB:			
	ABB Turbo Headquarters	**ABB Turbo Service Station**	**Customer**
STRATEGY			
Customer / Partner			
Service lock-in	…through service leadership, especially maintenance speed		---
Infrastructure lock-in	… of not legally assigned service stations	---	---
Workforce			
Know-how-demands on service personnel	Reduced through comprehensive and bundled provision of information		---
Process of Cooperation			
Process Costs	- Cash out 1.2 million CHF - 12% reduction of stock (ca. 16.8 million CHF) - 86% lower infrastructure operating costs (240,000 CHF instead of 1.6 million CHF) - 93% electronic spare parts orders	- 50% more service orders with same number of employees - Discounts for use of ATURB@WEB	---
Speed	Order cycle time reduced by 91.5% (2 hrs. instead of 24)	search times reduced by 40%	*15% increase in service level* for 48 hr. service (from 70% to over 95%)
Quality	- Early warning function of service reports - Evaluation of collision cases - Exchange/recall actions - Impeded product piracy through improved access protection		
Flexibility	Support of new business for turbochargers		
SYSTEMS			
Integration	Synergies with existing systems	**---**	**---**

Table 5-1: ATURB@WEB - Effort and realized benefits

ATURB@WEB is not only utilized by the (currently) over 350 service station users, but also by 400 employees in the headquarters. For them, ATURB@WEB represents a considerable time savings in gathering information through its integration of disparate data sources and user-fair restructuring. The staff is thus able to process about 50% more orders. At the same time it reduced the demands on the employees, who up to now had to learn and carry in their heads a multitude of complex connections that are now available in constantly updated form via the service data base.

Planned further development. Upon initial implementation in September 1999, the users who approached ATURB@WEB most critically, were those who had worked extensively with the old ATURB system and, because of their knowledge of all transaction codes, could utilize that system faster than was initially possible with the web-based solution. The project owners trace the high user acceptance of ATURB@WEB to the intention to guide the system's evolution on the basis of user feedback, and to add new functions. ABB Turbo Systems has planned further developments, including the following:

- Extend the purchase order module to the point where whole turbochargers can be ordered. The service stations can not only supply their customers with turbochargers of the same construction as those already in use, they also have the capability of asking the specifications database for model suggestions by loading specific parameters, such as size and operational temperature. A pilot program will begin in German, Finland, and the U.S. as of November 1, 2003; in 2004 the solution is to be rolled out to 15 of the 74 service stations.
- Update the Internet Transaction Server (ITS). The SAP ITS employed hitherto to connect with the ERP system is already obsolete again. The project owners still consider, it in retrospect, to have been the right software in 1999. At this time all modules are present on the web via ITS. With the migration to SAP Enterprise, ABB Turbo Systems will acquire the ITS successor product Web Application Server. This offers a larger function potential and is scheduled to be utilized for the midterm within the framework of further improvements to the service process and its information system technical support.
- Within the framework of consolidation, replace the service stations' ERP systems in succession by 2006/2007. The new model envisions separate accounting system capabilities for larger service stations; initial stations in Germany and Norway are already functional. For smaller stations, rudimentary functions like invoicing will be provided by the headquarters via an ASP model.

6 Conclusions

With ATURB@WEB, ABB Turbo Systems can supply all maintenance-related information to service stations worldwide without delays. The data is linked to such an extent that they can guarantee fulfillment of service expectations. For instance, service stations can determine the availability of a spare part for a ship on its way to port for repair in advance and order it directly.

The elimination of manual steps and the heightened transparency of the service process (e.g., through warehouse information and service reports) allow a reduction in process costs and have shortened the processing time. At the same ABB Turbo Systems can increase the process quality through improved service disposition (such as availability of stock, configuration, and maintenance data) and the integrated provision of process knowledge (e.g., customer databases or service station information).

The customer benefits from the faster and better service ABB Turbo Systems is able to offer through worldwide access to all necessary updated service data. The following points particularly distinguish the case of ABB Turbo Systems AG:

- **The information technology support of its service strategy is continually being further developed on an evolutionary basis.** ABB Turbo Systems' evolutionary development through short (partial) projects, within the framework of application and middleware concepts, allows not only for quick adaptation of new technologies, but also increases acceptance by its workforce through fast and continued response to requests by the service stations.
- **ATURB@WEB is an in-house development based on standard software.** The in-house development of the service portal can be traced back to the limited capabilities of standard software in covering the demands. ABB Turbo Systems can strategically safeguard its service leadership position with an in-house development and lengthen the time span competitors will need to acquire comparable know-how. At the same time, the company employs standard software wherever a comparable differentiation potential is lacking.

Expert Interview

Roland Bossy, Head of IS-Organisation, ABB Turbo Systems AG, Baden (Switzerland), March 5, 2002 and September 11, 2003.

Portrait



Roland Bossy, head of the IS-Organization of ABB Turbo Systems AG, was born in 1950 in Geneva. After an apprenticeship as an engineering draftsman, various professional way stations and continued education, he arrived at ABB Turbo Systems in 1976.

In 1979 he took over the direction of the Department of Technical Documentation. Early on he supported utilization of information technology and profoundly reformed the work processes in technical documentation. As head of the Department of Central Technical Services he has been the driving force behind the projects to improve customer service (including ATURB and ATURB@WEB) since 1989.

He has been in his current position since January 2000.