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White Paper
Field Service Solutions for Machine Manufacturers

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Content

Field Service Solutions for Machine Manufacturers

Ensuring Best-in-Class Field Service Through Field Service Automation Software

Executive Summary

The purpose of this white paper is to guide you through the ideal service process for machine manufacturers, thereby showing you how field service automation software can help you improve every step of the way. It provides data on the Best-in-Class manufacturers and tips to streamline your field service, make your customers happy, and make your business stand out from your competitors.

Introduction

What do companies like BMW, Siemens, and Bosch have in common? Or ABB, Schindler, and Boeing? You might think cars are coming from Germany, elevators from Switzerland, and airplanes from the US. That might be true. However, these companies are also amongst the largest manufacturers worldwide; at the same time, they are service providers. Take for example BMW. The car manufacturer has tapped into the on-demand service sector by providing carsharing through "DriveNow" in big cities in Europe and North America. Since margins for products are in a decline, the machine industry is moving further towards a service economy. The tertiary sector already constitutes two-thirds of the GDP in most western industrial countries[1].

Today, industrial machine manufacturers have to deal with challenges including rising customer expectations, increased customization, and digitization. As a report by the World Economic Forum on the future of manufacturing[2] states: The ability to innovate will define whether manufacturers will be competitive in the future.

Drivers of Industrial Machine Manufacturing

Rising Customer Expectations With Regard to Service

Customers are more demanding than ever. As competition in the service economy increases and differentiation in saturated markets becomes more difficult, manufacturers need to focus on making customers happy. It's not simply about fixing a problem. An industrial machine out of order costs a customer thousands of dollars. And with predictive maintenance, it is expected that problems will be resolved before they occur. As a report by PwC's Technology Institute states: "The next generation of customer service will be proactive, integrated and omnipresent."[3]

Servitization in Manufacturing Requires Field Service Automation

What would you do if you had a one-man coffee delivery service and you realized that this service is in high demand? Wouldn't you want to try and make it more efficient to satisfy more customers? Would you hire more people or maybe allocate every employee a certain neighborhood? With field service, it is a very similar story: once your biggest share of revenue is coming from services, you will want to make the service process as efficient as possible, and at the same time deliver a great customer experience. Automating the process through technology is the first step.

Speed, Despite Complex Service Processes

With advanced technology, industry 4.0 is not far from reality. With RFID chips getting cheaper and machines increasingly connected to the Internet, it is expected that manufacturing will reach maximal efficiency reducing downtime to a minimum. Especially when a whole business depends on industrial machines running smoothly, downtime represents significant financial losses. Fixing an industrial machine as fast as possible is a must for field service organizations today. However, the complexity of these expensive industrial machines requires interdisciplinary teams that are involved in elaborate service processes. Delivering service in an accelerated complex environment will require automation through technology.

1: http://data.worldbank.org/indicator/NV.SRV.TETC.ZS

2: http://www3.weforum.org/docs/WEF_MOB_FutureManufacturing_Report_2012.pdf

3: http://www.pwc.com/en_US/us/technology/publications/assets/technology-institute-service-innovation-final-august-2014.pdf

Product Purchase

Service Request

Preventative Maintenance

Work Order Creation and Planning

Dispatch

Repair

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Close

Analyze

Market and Upsell

Efficient Field Service Chain for Machine Manufacturers

Product Purchase

When your customer purchases a machine, the first step would be to capture all the data on the product. Many machine manufacturers have insufficient data on a product's warranty status or the way customers use their products. Collecting this kind of data ensures that your contracts are profitable and that you don't give services for free when a product is already out of warranty.

Upon product purchase, your field service solution should allow you to:

- Collect all relevant information on the product including the client's data, when the product was installed, and how your client will be using it.

- Capture the warranty status of your service agreement to avoid warranty leakage.

- Offer additional services or extended warranties when needed.

- Make this information available to your customer service and field service engineers to facilitate their daily work.

Fact

A survey conducted by IBS among German automotive suppliers and OEMs concludes that lacking data and transparency is one of the main reasons for an increasing number of warranty claims and expenses.

Service Request

Servicing a complex industrial machine is not like fixing a coffee machine. Customers expect their machine to be fixed quickly, efficiently and at a time they need without losing money due to unplanned downtime.

Once a customer calls in, you must be able to view the history of the machine that needs to be serviced and see whether this customer is entitled to a free service. Some issues may even be resolved over the phone.

Field service software will allow you to document, track, and analyze service requests:

- Capture service calls coming in via email or phone to immediately include the contact person and the problem described by the customer.

- Which service call needs to be prioritized? – Assign levels to ensure easier scheduling.

- Categorize or tag customer issues, as well as specific complaints about the machinery or equipment to use for further analysis.

- Have all your data ready when a customer calls in to ensure you know what repairs have already been done, and which equipment needs to be serviced.

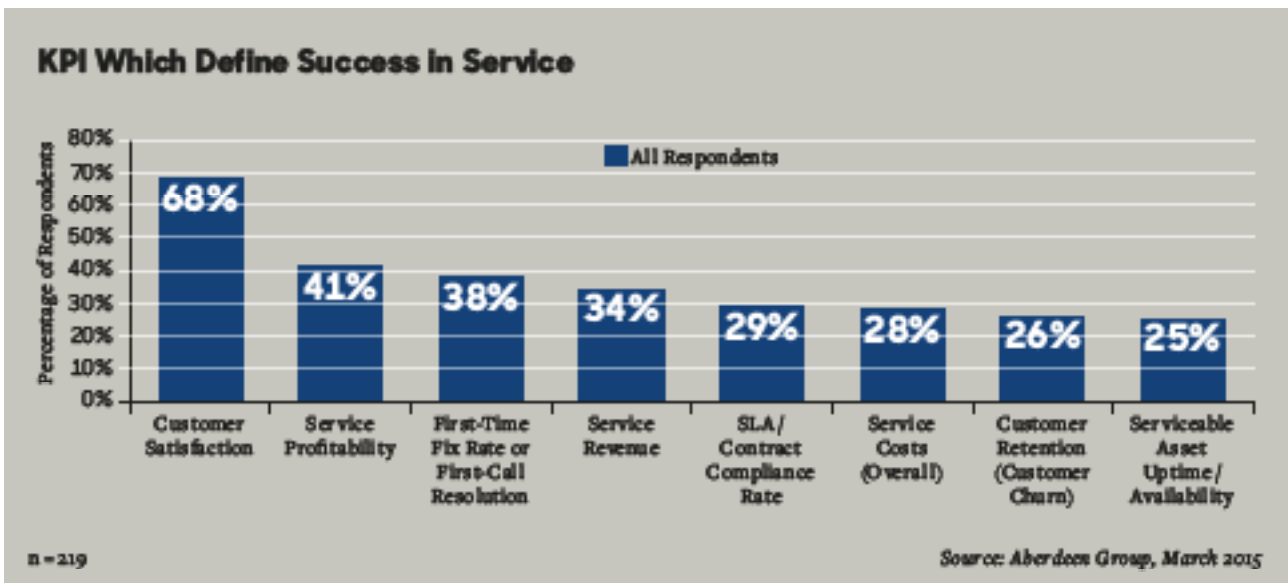- See whether your customers are entitled to free service under the current service agreement.

Preventative Maintenance

According to research provided by Aberdeen Group, 68% of manufacturing organizations define success in service through customer satisfaction. Now imagine you could have valuable data to predict when the next maintenance of a machine is due.

Using data entered by field service technicians on site and combining it with data such as hours of peak performance and uptime will help you prevent repairs and downtime. This, again, will save your customer money and increase customer satisfaction.

Make your customers happy by setting up a preventative maintenance plan with the help of field service automation software:

- Collect and classify data during every service call for easier analysis.

- When a lot of data has to be entered, create checklists to avoid mistakes and capture data in a structured and clean way.

- Carefully consider the KPIs, metrics, and other data points you will need to align with your business goals. Do you have the flexibility to capture and add ones tailored to your company?

- Enlist your business analytics team to construct sophisticated reports based on the KPIs to indicate what is being done well and what needs to be improved.

KPI Which Define Success in Service

n = 219

Source: Aberdeen Group, March 2015

Work Order Creation, Planning and Dispatch

Servicing complex industrial machines includes a number of tasks and subtasks, cross-functional teams, and often a lot of equipment. In order to ensure a smooth service process and fast problem resolution, the project manager will need to be able to accurately plan a service or maintenance job.

Field service software will allow you to plan your project:

– Define the project scope by using a task configurator, including timings, task checklist assignments, documents used, etc.

– Assemble a team of field service technicians who have the necessary set of skills to do the job.

– Allow the project manager to assign tasks to team members and to add, update or delete tasks.

– Dispatch the right techs with the right skills and the correct equipment.

Repair

Your customers will be happy if you can fix their problem right the first time. Servicing complex machines may require field service engineers to follow certain security procedures. They might need to work in remote locations without an Internet connection or have to order parts while on the job. Similarly, repairing an industrial machine can include a number of field engineers that need to collaborate closely.

Service automation software ensures that you can:

– Follow procedures by using customized checklists that allow you to insert measurements, take pictures, and mark them or give recommendations either by text or voice recordings.

– Ensure smooth collaboration between different service teams by making data available to all team members via mobile devices.

– Use predefined tables and lists to reduce errors when entering data on-site.

– Work offline and synchronize the data entered using cloud computing.

Inventory Management

Complex machines have many parts. Imagine you need to bring catalogues full of inventory lists. Sounds like a pain, right? Instead, you can have your toolkit with you at all times.

Manage your parts and equipment using field service software:

– Manage your parts, taking into account the service history and the relationships between different parts of equipment.

– Make your customers happy by having the right parts with you or order them right away from a colleague to increase first-time fix rates.

– Dispatch field service technicians only when the necessary parts are in stock.

– Increase stock in your warehouses, if certain parts are required on a regular basis.

– Automate your inventory management by reordering parts, when you are out of stock.

According to the Aberdeen Group,

58%

of Best-in-Class manufacturers are looking to improve forecasting and planning for future service demand.

Close

Now imagine you have done the hard work, got the machine running again, and saved your customer a lot of money, but then you start arguing about how long the service took and what was done. This type of problem can occur with lengthy service calls on complex industrial machines, and this problem can stop your cash flow. An accurate reporting will considerably speed up the process of invoicing and facilitate the closure of a job.

Field service technology will allow you to:

– Send a daily report after every check out to ensure your customers stay ahead of the project and understand the progress.

– Create any type of sophisticated report and have it approved by your customer through digital signature once a service call has been closed.

– Send your invoice within days after the service call.

Analyze

Once your field service staff has collected valuable data, you have all the advantages to be ahead of competition. Use this data to deliver an outstanding service, further develop your products, or add new ones to your portfolio.

Set up your analytics using field service automation software:

– Use the data collected to analyze and make your manufacturing business more efficient.

– Get insights on machine failure and set up your predictive maintenance program.

– Improve your field parts management and predict which parts are needed when.

– All data fields used in checklists are identified by IDs, and stored in the cloud. This also allows data mining at a later stage.

– Analyze and understand how your products and services can be improved and which new services you can introduce.

Market and Sell

Once your customer is happy with your service, ensure your field service engineers have time to consult them on additional products and services. Field service technicians have high credibility and expertise and can upsell and cross-sell directly on-site. With regard to increased servitization in the machine industry, this is becoming more important to generate revenue for your business.

Using field service automation software for sales will enable you to:

– Have your master data with you at all times.

– Create sales orders with the relevant information including contact person, shipping address or other remarks.

– Enter the price and grant discounts for particular products.

– Sync your sales order to the ERP-system to be processed.

Learn from the Past, and Build for the Future of Service

Source: Aberdeen Group, April 2015
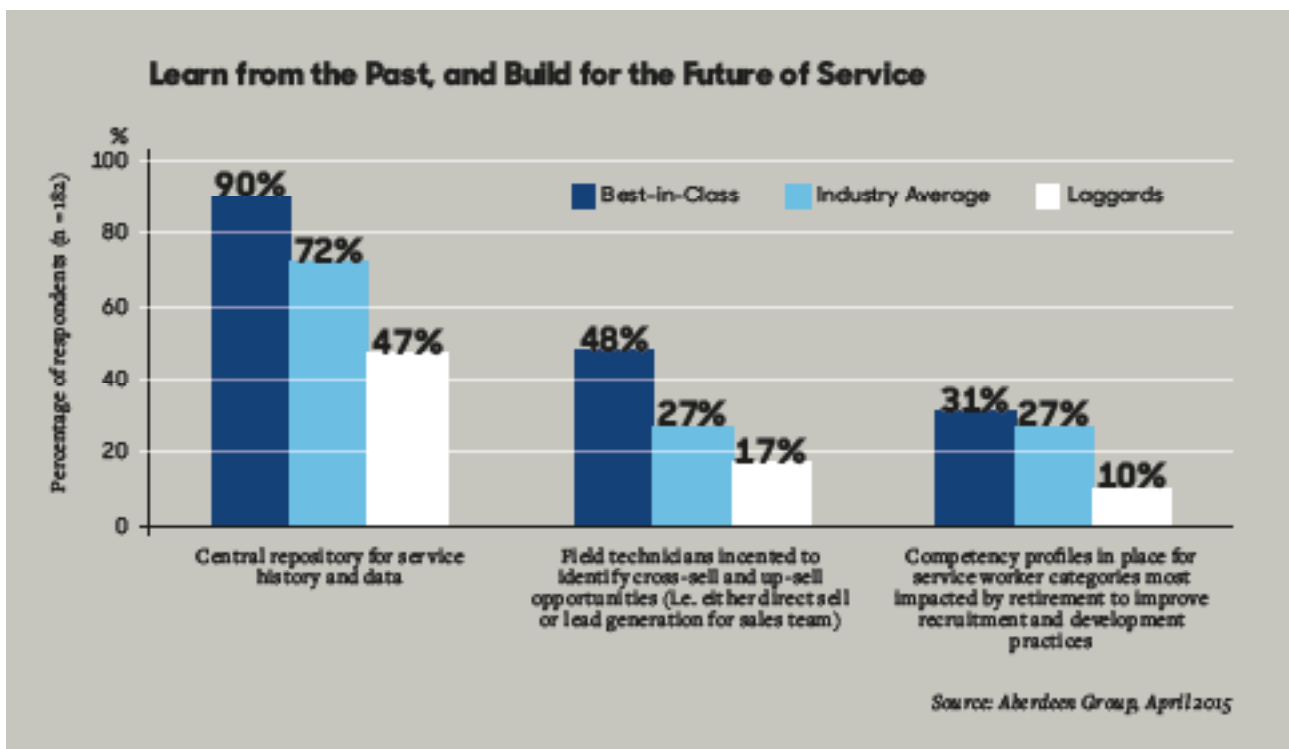
Ink IT Solutions Field Service Automation Software in Practice

Case Study: DeLaval

DeLaval is the world's largest dairy equipment manufacturer and has a presence in most countries in the world. In order to serve its customers' needs, the company must provide service on dairy farms. Historically, this meant that the technician needed to be self-sufficient in all areas of his trade.

With today's technology, the technician can be supported through a variety of media that makes him more efficient and effective. This includes being able to perform point of sale transactions on the farm. The quicker DeLaval can resolve the customer's issue, the more productive the dairy farm. Michael Pedrigi, Business Analyst at DeLaval explains the most important requirements for a field service solution:

"For us it was important to be able to use the field service solution offline, as our field service technicians don't always have access to a wifi connection. Another requirement was the ability to upsell directly on the farm. The data entered in the application should sync to our ERP system, so a cloud-based solution was key."

Case Study: Wolffkran

When a construction project reaches for the skies, the red revolving tower cranes from Wolffkran are never far away. Wolffkran's current leasing fleet consists of 600 cranes, which are used all over the world. As construction projects progress, the service technicians assemble, extend, dismantle and transport the cranes to the next building site. To track these service activities and record hours worked, the company used a purely paper-based system. After switching to Ink IT Solutions Field Service Software, Wolffkran has empowered its field service technicians with real-time information on current and past projects.

"We are now able to create a digital lifecycle for each crane, which contains all the information from the production of a crane up to its demolition. With Ink IT Solutions Field Service Software we will be able to access this information from everywhere," says Andreas Berg, CIO at Wolffkran.

Providing Excellent Service in the Machine Manufacturing Industry

Ink IT Solutions' end-to-end mobile and cloud-based field service solution will help your company:

- **Optimize the Service Process:** Standardized processes based on best practices and locked into checklists allow field engineers to carry out service calls in a uniform manner, no matter where they are.

- **Reduce Response Times and Improve Quality:** Improve response times – from the minute an order comes in to on-site execution – with pre-defined checklists, procedures and planning templates. Reduce reporting time and improve the quality of reports by using standard report templates that are automatically populated.

- **Reduce Costs and Increase Profits:** Reduce costs and wastage by increasing and improving back-office efficiency and reducing administrative work, speeding up work order resolution, and reducing planning and reporting time.

- **Improve Data Quality:** Improving the data quality and quality assurance starts with entering the correct data. Offering a limited, selected list of potential answers at the point of entry will improve the data quality, shorten the time needed for data entry time and ensure data consistency.

- **Capture Data for Continuous Improvement and R&D:** Valuable data that your field service technicians capture throughout their maintenance can be fed back to R&D teams for continuous improvement of products and future services.

- **Increase Visibility to All Stakeholders:** Provide access to the same information for all stakeholders, support employees with state of the art tools, strengthen the ambassadorship of employees.

- **Increase Service Revenues:** Give field technicians the tools to monetize their unique upselling capability to extend on-site services. Technicians can instantly produce quotations and seal service orders by capturing a customer's digital signature.

- **Satisfy Your Customers:** Proactive, transparent, visible field service will satisfy your customers by ensuring their valuable time and production runs reliably and efficiently, letting them satisfy their customers. Our automation can reduce your paper trail and ensure your customers have all the information they need for documentation and analysis. Happy customers are loyal customers.

About Ink IT Solutions

Ink IT Solutions is a leading provider of mobile and cloud-based field service and workforce management software for mid-sized and large enterprises' field service organizations. Since Ink IT Solutions' founding in 2006, more than 190,000 users across the world have utilized Ink IT Solutions' innovative, real-time field service management software to improve their business and field service processes. Ink IT Solutions has also pioneered "crowd service" – which allows customers to leverage an Uber-like platform to find available field service technicians in real-time. Ink IT Solutions is headquartered in Switzerland with international offices in San Francisco, Miami, Berlin, Freiburg, Shanghai, São Paulo and London.

Ink IT Solutions

info@inkitsolutions.com.au

Suite 119, 370 St Kilda Road,

Melbourne, VIC – 3004