Embrace Technology to Grow Your Service Business

By Andy Briggs

The service component of a generator company should be the most profitable segment of the business. For many, service work is 100% of your business. Therefore, it's imperative to focus on ways to grow service revenue and maximize the profitability of your service operations. Moving beyond the traditional methods of running a service business is essential for long-term success because ***the traditional way we have always run our service business simply cannot be sustained if you want to grow***. Do you have a vision of what your service business will look like five years and ten years from now? Evolving and adapting your service business is key to your future success. And the best way to do so is to leverage technology.

> To improve is to change; to be perfect is to change often. – Winston Churchill

Power Systems Market Overview

The power systems industry is strong and growing. It is a very lucrative industry to be a part of and most companies in our industry are experiencing growth each year. Below are some relevant statistics on our industry's growth.

Power Systems Research provides comprehensive data on our industry, including generator production, generator in-service population and growth trends. Thank you to Joe Zirnhelt, President of Power Systems Research, and his team for providing the details below (www.powersys.com).

NORTH AMERICAN GEN-SET POPULATION DIESEL & NATURAL GAS/LPG - 2024

OEM Power Range	Mobile	Stationary	Grand Total
<10 kW	1,395,277	1,137,734	2,533,011
10 to 20 kW	581,574	1,151,316	1,732,890
21 to 50 kW	427,775	487,668	915,443
51 to 300 kW	387,289	910,051	1,297,340
301 to 500 kW	11,235	163,396	174,631
>500 kW	13,641	231,235	244,876
Grand Total	2,816,791	4,081,400	6,898,191

Source: Power Systems Research PartsLink™

Mobile Includes
Portable Generator Sets
RV Generator Sets
Semi-Truck Aux Power Units
Trailer Mounted Generator Sets

Stationary Includes
Industrial Generator Sets
Residential Generator Sets

Fuels Included
Diesel
LPG & Natural Gas
(Does Not Include Gasoline)

2024 NORTH AMERICAN GEN-SET PRODUCTION PRODUCTION (<500KW) - ALL FUELS

Gen-Set Rating	Diesel	Gasoline	LPG & Natural Gas	Total
<10 kW	41,368	799,133	105,129	945,630
10 to 20 kW	22,717	10,370	108,147	141,234
21 to 50 kW	19,509	710	55,975	76,194
51 to 300 kW	44,882		32,054	76,936
301 to 500 kW	7,824		2,684	10,508
Total	136,300	810,213	303,989	1,250,502

Source: Power Systems Research OE Link™

2024 NORTH AMERICAN GEN-SET PRODUCTION (<500KW) - ALL FUELS

Gen-Set Rating	Mobile	Stationary	Total
<10 kW	858,590	87,040	945,630
10 to 20 kW	33,932	107,302	141,234
21 to 50 kW	13,252	62,942	76,194
51 to 300 kW	11,850	65,086	76,936
301 to 500 kW	501	10,007	10,508
Total	918,125	332,377	1,250,502

Source: Power Systems Research PartsLink™

Mobile Includes
Portable Generator Sets
RV Generator Sets
Semi-Truck Aux Power Units
Trailer Mounted Generator Sets

Stationary Includes
Industrial & Generator Sets

Fuels Included
Diesel
LPG & Natural Gas
(Does Not Include Gasoline)

OUTLOOK FOR NORTH AMERICAN GEN-SET PRODUCTION (<500KW) - ALL FUELS

Gen-Set Rating	2022	2023	2024	2025	2026
<10 kW	850,198	929,819	945,630	960,463	918,606
10 to 20 kW	122,364	136,342	141,234	145,885	142,405
21 to 50 kW	65,926	73,664	76,194	78,679	76,561
51 to 300 kW	67,223	75,494	76,936	79,368	78,365
301 to 500 kW	9,579	10,363	10,508	10,779	10,919
Total	1,115,290	1,225,682	1,250,502	1,275,174	1,226,856

Source: Power Systems Research OE Link™

Products Included
Portable Generator Sets
RV Generator Sets
Semi-Truck Aux Power Units
Trailer Mounted Generator Sets
Stationary Industrial & Residential Generator Sets

Fuels Included
Gasoline
Diesel
Natural Gas & LPG

What the Data Shows

Today, there are over 6 million existing generators (not including gasoline portables). If we also subtract the number of small portable diesel & LP generators, RV generators, and semi-truck auxiliary power units, there are conservatively over 5 million existing, permanently installed and towable generators in North America that require professional service. On top of that, over 350,000 generators in these categories are being sold each year, adding to the population of generators that need professional service.

While the industry is growing, many generator service companies are struggling to keep up. Most service businesses, particularly those focused on commercial and industrial generators, are still run on the same principles and processes that we have used for decades. However, there have been major advances in technology that can help you to better utilize your technicians with improved efficiency and increased productivity. Embracing technology will enable you to overcome today's growth challenges and substantially increase profitability.

Growth Challenge #1: Shortage of Skilled Technicians

The most significant growth challenge we face in our industry is the shortage of qualified technicians, especially in the commercial and industrial segments. Technicians in our field must be proficient with engines, electricity, electronics, and fuel systems. We must face the fact that most young adults are not pursuing skilled trades professions and many of our existing technicians are aging and retiring. Simple math…If there are not enough technicians today and not enough entering the profession, the traditional service business model of ***"growth by adding technicians" is no longer a viable approach.*** We must find new methods for service companies to serve more customers per technician AND grow revenue and profitability.

Growth Challenge #2: Inadequate Efficiency, Productivity, and Profitability

Most generator service companies are not as profitable as they should be. Company leaders and service managers are typically too busy "working in the day-to-day" of their business to step back for a moment to "work on" the business. There is a tried and true saying that "what gets measured gets improved."

There are many key metrics to analyzing the effectiveness of your service operations. These include labor gross profit, parts gross profit, productivity rate, efficiency rate, effective billing rate, absorption rate, parts/labor ratio, and vehicle expense ratio, just to name a few. Companies that track and maximize key metrics are stronger and more profitable. A few key minimum benchmarks are highlighted below. How does your business compare to these?

- Labor Gross Profit Margin = 65%+ (Labor Gross Profit/Labor Revenue)
- Parts Sales Gross Profit Margin = 35%+ (Parts Gross Profit/Parts Revenue)
- Productivity Rate = 85% (Technician Hours Billed vs Total Hours Paid to Technicians)
- Absorption Rate = 100%+ (Total Labor & Parts Gross Profit/Total Company Expenses)

Source: Service Management in An Equipment Dealership by George M. Keen – Wise Wolf Consulting, LLC (Available on Amazon)

Recommendation: Treat Available Technician Hours Like Gold! There are a limited number of technicians on staff and a limited number of available technician hours. Many service departments are graded on "how many hours are applied to work orders vs. unapplied" or "how many hours were billed out" each month. While these are very important measurements, we must focus more on how "profitable" those technician hours are. Since there is a finite number of technician hours available, focus on ways to maximize the profitability of those "hours bought" every day. If we view the available technician hours as an "investment and asset," then we should do everything we can to get the highest return possible on every hour.

The Future Relies on Remote Monitoring

Remote monitoring is the future of field service. It is already occurring in many other service industries. Many generator service companies have already adopted monitoring as a fundamental part of their service business. Monitoring technology is now so affordable that incorporating monitoring as part of a professional service business is an easy decision. Monitoring provides many benefits for the generator owner and even more for the service company. There are many significant advantages of implementing remote monitoring as an integral part of the new way service is done. Simply put, it is the best and most effective way for service companies to grow.

KEY BENEFITS

- Generator Owner Peace of Mind
- Customer Loyalty & Satisfaction
- Automated Communication to Your Customers
- Reduce Vehicle Expenses
- Fast, Proactive Service Response
- Service More Customers Per Technician
- Improve Efficiency & Productivity
- Increase Bottom Line Profit
- Improve Reliability
- Increase Top Line Revenue
- Reduce Unbillable Service Trips
- Differentiate from Your Competition

IMPROVING EQUIPMENT RELIABILITY

The definition of reliability in our business is simple…the power goes out and the generator works! Generator monitoring allows service companies to respond to issues before they become failures during an outage. Traditional, periodic maintenance schedules can leave room for unexpected problems between service visits. By using monitoring data, service companies can schedule proactive maintenance and repairs based on the actual condition of the generator rather than relying solely on calendar-based intervals. We know that inspecting a generator more often increases reliability and the likelihood of finding and resolving problems before the next power outage. **Remote monitoring provides 31,536,000 inspections per year without deploying a technician.**

ENHANCING CUSTOMER SATISFACTION AND RETENTION

Unexpected failures can damage a service company's reputation and weaken customer relationships. By offering monitoring, companies provide added value and peace of mind for their customers. When issues are caught early, it significantly reduces the risk of unexpected outages which leads to happier customers. This proactive approach helps improve retention and builds customer loyalty. Customers that stay with you through the life cycle of their equipment will allow you to capture those highly profitable quoted and scheduled recommended services. They will more often say yes to recommended services and will also be your advocate and provide referrals.

IMPROVED OPERATIONAL EFFICIENCY

With the shortage of technicians, the traditional practice of sending a technician out for multiple minor service inspections per year for each customer may be hindering you from servicing more customers and growing. Remote monitoring allows you to have supervisory visibility of all the generators you service to track their status, history, issues/faults, and outages. By receiving real-time insights and data-driven diagnostics, generator monitoring enables service companies to operate more effectively, reduce costs, provide better utilization of technicians, and most importantly enhance customer satisfaction.

A major advantage of monitoring is optimizing technician schedules and resource allocation. With access to the condition data of every generator, you can better prioritize technician efforts by routing and scheduling them to priority jobs and ones that better fit their skill level. This leads to a more efficient workforce, with fewer visits and less time spent on generators that don't require immediate attention. By reducing unnecessary site visits, generator service companies can significantly improve operational profitability and serve more customers per technician. For added benefit, many monitoring software systems can feed the generator data via an API into your service software to create automated actionable recommendations and work orders.

TYPES OF MONITORING SYSTEMS AVAILABLE

When generator monitoring systems first became available, they were very expensive. Like most technology, prices and performance have improved dramatically over the years. Some manufacturers offer monitoring systems at a low cost, but they typically only work on their brand of generators. Independent monitoring companies provide a variety of monitoring solutions that are universal to all brands, models, ages and sizes. The costs of these systems are also very affordable with a wide variety of options to best suit the needs of the owner.

Most service companies and generator owners are looking for a simple and cost-effective solution that tracks the activity and status of the generator. This includes tracking the run cycles, exercise cycles, battery voltage, engine hours, and the generator status to know if the generator is ready for an outage or is in a fault. ***Confidence that the generator will work when needed*** is the primary concern for generator owners and they are looking to their service company to proactively address any issues. There are some applications where a generator owner and service company need more detailed data such all engine and electrical parameters and values. There are quite a few Modbus connected solutions on the market today that meet these needs. Overall, there are a wide variety of cost-effective generator monitoring solutions that make implementing this technology into your service business affordable and an easy decision.

What is Your Vision?

What does your business look like in five years, or even ten years? How many service customers and technicians will you have? What does your revenue, gross profit, and net profit picture look like?

Picture that you are remotely connected to all generators you maintain. Every day, you know what generators need immediate attention, which ones are working properly, and which ones are due for maintenance and scheduled repairs. Every day you are routing technicians in the most efficient manner, maximizing your productivity and your profitability. Sounds like a dream, right? It is the future of field service!

How Do I Build a Technology Forward Company?

REVIEW HOW YOU ARE DOING THINGS TODAY

First, review the profitability of the different types of service you perform. Take a sampling of annual PM services, minor service inspections, scheduled repairs, and emergency repairs. Review the profit margin and profit dollars from these as well as the amount of labor hours consumed for each, including travel time. You will quickly see that the most profitable work orders are quoted repairs and emergency services. You will also likely find that the least profitable work orders are minor service inspections, aside from unbillable service calls.

MINIMIZE THE LOW PROFIT WORK

Reduce the amount of work that is the least profitable, typically minor service inspections. This consumes valuable technician labor hours, and you are better off redeploying your technician labor (hours bought) on higher profit jobs. This will have an immediate impact on your bottom line. If we are viewing the available technician hours as an "asset," the strategy should be to maximize the revenue and profit per technician already on staff.

A common statement from those following the traditional service model is "the minor service inspections are how we pick up our extra repair work" when a technician is on site. It is agreed that monitoring cannot take the place of a technician physically and visually inspecting and testing a generator set. However, experience shows that most minor service inspections do not result in "picking up extra repair work" and most often result in a low profit service visit. If you are properly tracking the "recommended services" including changing batteries, belts, hoses, coolant, etc., the recommended services can be automatically quoted based on the recommended schedule vs. having the technician "do the selling" to pick up these recommended services.

Again, if we treat the available technician hours as an "valued asset," then the strategy should be to focus on minimizing the low profit work as much as possible.

HOW TO IMPLEMENT REMOTE MONITORING

Many service companies have already embraced monitoring and include a monitor with **EVERY** service agreement. They have all confirmed much higher customer satisfaction and retention as well as significantly improved profitability and technician efficiency. Also noteworthy, they all confirm that the number of generator failures during a storm situation has been dramatically reduced to a very small and manageable percentage.

For service companies that are new to monitoring, we suggest that for all new customer agreements and renewal agreements consider quoting one annual service including remote monitoring. If the customer insists on a technician inspecting the generator more often, then add the additional service inspections as requested at a profitable margin. Typically, the cost of the annual monitoring service to a customer is roughly the same price you would normally charge for single minor PM visit. Again, minor service inspections are typically not very profitable, and they consume valuable technician hours, so the goal is to reduce the number of these as much as possible and feasible. For existing customer agreements, you might consider offering to "trade out" a minor service inspection or two for monitoring. You can keep the annual service agreement around the same price, gain the profit margin from monitoring, and redeploy the technician labor on other work. This is a Win-Win for you and the customer!

If you are not comfortable with the above approaches, simply offer it to your customers as many will say yes. Remember the benefits to the generator service company are significant!

Keep your focus on your long-term vision of what your service company looks like down the road. Technology solutions are fundamental to the growth and success of service organizations. Those who embrace this now and start to use technology to their advantage will be the most profitable market leaders of tomorrow.

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Andy has over three decades of professional experience in the power systems industry having held senior level positions with several leading generator distributorships, owned his own distributorship for over 10 years, and has provided consulting services for generator dealerships throughout the US. Andy also served on the Electrical Generating Systems Association Board of Directors and now serves as President of Power Telematics, Inc.
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