

A person in a dark suit and blue tie is holding a tablet. The background is a large warehouse or industrial facility with many stacks of goods and cranes. There are glowing white lines and a bright light emanating from the tablet, suggesting a digital or data-driven environment.

The Ultimate Supply Chain Mobility Buyer's Guide

How to Find the Best Enterprise
Mobility Solution for Warehousing,
Manufacturing, Maintenance and
Asset Management

TABLE OF CONTENTS

- 01** ABOUT THIS GUIDE
- 02** 7 INDICATORS YOU NEED ENTERPRISE MOBILITY
- 04** SOFTWARE
- 05** HARDWARE
- 06** DATA COLLECTION
- 07** INTEGRATION
- 08** EXTENSIBILITY
- 09** PROFESSIONAL SERVICES
- 10** SKILLED VENDORS

ABOUT THIS GUIDE

This guide is intended to assist IT and business personnel evaluate enterprise mobility solutions for your supply chain operation (“supply chain mobility”). Mobility is a powerful, transformative technology. It is already a status quo for many enterprises engaged in warehousing, manufacturing and maintenance activities across the globe.

Supply chain mobility is not a single dimension solution. Your mobility solution should encompass not just software, but also hardware, data collection capabilities, validated or certified integration, extensibility for future development, support and

implementation services, and a vendor with a proven history of success and satisfaction.

In this guide, each of these dimensions will be explored. You will be given key criteria to look for, questions to ask the vendor, as well as a worksheet to compare potential solutions.

Your team is encouraged to scrutinize your supply chain processes along the way and create an honest self-assessment. This will help you target critical bottlenecks and areas that stand to benefit from a modern enterprise mobility solution for the supply chain.

WHAT IS ENTERPRISE MOBILITY?

Enterprise mobility consists of mobile software operating on wireless devices, and how that combination of hardware and software integrates into your workflows and tech environment.

7 INDICATORS YOU NEED ENTERPRISE MOBILITY

Thousands of warehouses, manufacturing facilities, maintenance/repair operations and field services companies have already modernized their supply chain activities with enterprise mobility. If you are one of the many operations at risk of falling behind competitors, the following are seven red flags that indicate a need for supply chain mobility:

1. **Your inventory accuracy is below 99%.**

In today's fast-paced digital age, businesses that handle inventory day-in and day-out must have accurate, up-to-date inventory data. Manual and paper processes involving data entry can only achieve a marginal accuracy of about 60%—far short of world-class accuracy of 99.5% or higher achievable with wireless enterprise mobility and barcode data collection.

2. **Your inventory data is constantly out-of-date.**

Even if your data collection practices yield high-quality data, traditional methods rely on labor to increase productivity. With labor shortages a consistent challenge, inventory data can take hours or days to be updated in your ERP database. Mobile barcoding technology can ensure data is collected and then transmitted to the ERP in real time or near-real time.

3. **You struggle with productivity and not enough labor.**

As mentioned, the struggle to expand operations and handle greater volume traditionally requires a larger workforce. Enterprise mobility solutions can mitigate labor challenges by acting as a force multiplier, enabling your existing workforce to handle more work without hiring additional employees.

4. **You need true visibility and/or traceability.**

46% of manufacturers are prioritizing visibility across their operations to support growth. However, many manufacturers and other supply chain operation types struggle with transparency. Enterprise mobility technologies can automatically create end-to-end transparent, traceable paths for materials of every type.

5. **Your processes aren't scalable or flexible.**

Manual processes aren't scalable. Digital process automation of manual processes can be scaled to multiple operation types and tailored to individual site needs. Using enterprise mobility to automate and digitize inventory processes thus becomes a crucial step in preparing your company for growth and flexibility.

6. You need a cost-effective way to modify or develop your solution.

Buying, implementing and maintaining new mobile technology can be daunting. After implementation, additional budget may need to be allocated to refine, modify or further develop your mobile solution. But many operations are already hard-pressed to unlock funds, even if the developments would offer benefits. Having a low-code mobile app development platform (MADP) can equip your in-house IT teams with the ability to become self-sufficient in expanding your mobile supply chain solution.

7. Your facilities require reliable off-network capabilities.

Many operations must collect data and transact inventory in areas with unreliable or limited network connectivity. Workers may have to stop collecting inventory data while the ERP is undergoing planned maintenance. In both instances, having an off-network mobile data collection solution to ensure work continues during outages is crucial to today's rapid-moving market.



SOFTWARE

Software is the primary component of your supply chain mobility solution. Its architecture must be designed to handle throughput, multiple operating systems and devices, connect to multiple databases (including your ERP), and must be appealing and intuitive to use for end-users. In addition to back-end structure, most software components will consist of mobile apps and admin tools. Ideally, your software framework will also include a mobile app development platform (MADP) to modify mobile apps after initial implementation.

PROBLEMS MOBILITY SOFTWARE SHOULD SOLVE:

- ▷ **Productivity:** Mobilizes and extends inventory transactions to point-of-work.
- ▷ **Lack of Timely Data:** Enable real-time transactions to your ERPs, databases and other business systems.
- ▷ **Labor Shortage:** Simplify, focus and accelerate end-user tasks, so more is accomplished each day.

QUESTIONS TO ASK:

- ▷ Will the software run on multiple hardware form-factors (tablets, scanners, phones, etc.) and operating systems (Android, iOS, Windows, etc.)?
- ▷ Does the software use Native Client Architecture?
- ▷ What does the end-user's UI look like?



HARDWARE

Hardware is often an afterthought for mobility buyers. However, having the right hardware to accomplish various supply chain tasks is crucial to ensuring user adoption. If end-users become frustrated with a screen that's too small or a device that seizes in extreme heat or cold, then they may refuse to use the technology.



PROBLEMS MOBILE HARDWARE SHOULD SOLVE:

- ▷ **Efficiency:** Increase the speed and ease of task completion for end-users.
- ▷ **Accuracy:** Eliminate opportunities for human error.
- ▷ **Cost Reduction:** Ruggedized enterprise-grade mobile devices with upgradeable OS capabilities.

QUESTIONS TO ASK:

- ▷ Does the mobility vendor offer enterprise-grade hardware?
- ▷ Does the vendor have a hardware consultant to advise on best-fit hardware for my specialized environments?
- ▷ Does the vendor offer mobile barcode printing and labeling hardware?

DATA COLLECTION

Data collection technology is a must for supply chain mobility. In addition to equipping your workforce with the flexibility afforded to wireless mobile computers, mobile data collection adds the ability to scan barcodes and automate everyday inventory processes wherever employees complete their tasks. Mobile barcoding technology takes this functionality a step further, integrating mobile data collection, enterprise mobility, and advanced barcode and data collection capabilities.

PROBLEMS AUTOMATED DATA COLLECTION SHOULD SOLVE:

- ▷ **Data Accuracy:** Maximize data quality with automated data collection (ADC) technologies, such as mobile barcoding, thus eliminating paper processes and manual data entry.
- ▷ **Throughput:** Processes data captured at volume from barcoding scanning devices.
- ▷ **Productivity:** Inventory can be transacted, or barcode labels generated and printed at end-user's point-of-work.

QUESTIONS TO ASK:

- ▷ Does the architecture support enough throughput for high-volume, sub-second data transfers against your ERP?
- ▷ Does the solution have the ability to collect or communicate data with other device types, such as RFID, IoT/IIoT, helper bots, physical automation devices, laser-guided vehicles (LGVs) and program logic controllers (PLCs)?
- ▷ Does the solution include reliable off-network, high availability or field services data collection contingencies?



INTEGRATION

Buying a supply chain mobility solution provides few benefits if the integration is flawed. Finding a solution built specifically for integration with your ERP is a number one must-have. Certified or validated integration ensures the vendor's solution has been developed based on deep, nuanced knowledge of the ERP.

PROBLEMS CERTIFIED/ VALIDATED INTEGRATION SHOULD SOLVE:

- ▷ **Minimal Impact on ERP:** No hindrance to ERP version upgrades or cloud migration due to zero footprint on ERP and being version-independent.
- ▷ **Low Maintenance:** Certification or validation provides proof that the solution will have fewer errors and troubleshooting during and after implementation.
- ▷ **ERP Partnership:** Enables you to leverage the vendor's pre-existing relationship with ERP provider to overcome truly difficult challenges.

QUESTIONS TO ASK:

- ▷ Is the solution certified or validated for integration with my ERP(s)?
- ▷ Will the solution impact the performance of my ERP or require modification in core code?
- ▷ Can the solution integrate with other systems in my environment, such as MES, WMS, TMS, WOM and other databases?

EXTENSIBILITY

When researching mobility solutions, one of the key strategies for identifying cost savings and return on investment (ROI) is to determine how the solution can be expanded in the future without a full rip-and-replace. The addition of new functionalities that slot into your existing solution will be more cost effective than adopting a separate solution altogether in the future. A built-in, low-code mobile app development platform (MADP) also reduces time to ROI by providing the option to modify or develop your solution in-house without relying on the vendor or third-party developers.



PROBLEMS EXTENSIBILITY SHOULD SOLVE:

- ▷ **Cost Impact to Budget:** Extensible platform with most common transactions pre-written and pre-validated minimizes cost to add new functionality.
- ▷ **Expandable Functionality:** New functionality easily added to existing solution, including connection or integration to other ERPs and databases.
- ▷ **Self-sufficiency:** Pre-built mobile apps and low-code MADP purpose-made for supply chain enables user to modify, maintain or create mobile apps without vendor's assistance.

QUESTIONS TO ASK:

- ▷ How easy is it to add new transactions or functionality to the mobility solution?
- ▷ Can the solution be tailored for complex processes or unique functionalities not traditionally covered by the ERP?
- ▷ Does the solution provide advanced capabilities, such as High Availability, DSD, License Plating, Voice Picking, or Advanced Warehousing with directed-movement functionality?

PROFESSIONAL SERVICES

Professional services for consulting, development and implementation will be needed to oversee your integration process. You may be working closely with key personnel on your vendor's services team, who will guide your company with ERP and supply chain expertise, including best practices and subtle nuances unique to your industry and operation type. If the vendor offers a maintenance plan, be sure to set aside budget as this will help keep your system running optimally and provide much-needed support in the event an emergency. If your IT team is small or short on bandwidth, consider a fully-managed service to avoid placing additional burden on that department.



PROBLEMS PROFESSIONAL SERVICES SHOULD SOLVE:

- ▷ **Implementation Guidance:** Vendor consultants should work closely with your team to ensure smooth rollout throughout the process.
- ▷ **Support Assurance:** Customer service responsiveness and added protection of a solution maintenance plan should provide tech support 365/24/7.
- ▷ **Supply Chain Expertise:** Leverages vendor experience with supply chain challenges, complexities and best practices without hiring an outside consultant.

QUESTIONS TO ASK:

- ▷ Will the vendor conduct an initial Business Analysis Workshop (BAW) to accurately assess the needs that best-fit solutions for your operation?
- ▷ Will the vendor be handling implementation and professional services, or will the vendor use a subcontractor or third-party?
- ▷ Are there service options for a fully managed solution?

SKILLED VENDORS

While many supply chain mobility solutions may have similar offerings, your relationship and ability to trust in the vendor is a critical step in the complex sale process. Choosing the wrong vendor can lead to a negative buying experience, wasted time and money. Finding the right vendor for your business can mean the difference between a failed implementation and a successful one with all the benefits promised by the solution.



YOUR VENDOR SHOULD HAVE:

- ▷ **Proven History:** Demonstrated, successful track record of successful implementations with the same ERP(s) and/or industry.
- ▷ **Third-Party Validation:** Provides proof of effectiveness and customer satisfaction through testimonials, case studies and references.
- ▷ **Personal Touch:** Takes the time to help you honestly assess your existing processes and how they can be optimized or improved.

QUESTIONS TO ASK:

- ▷ Is the vendor willing to be transparent about true costs, including a thorough ROI workshop, and a reasonable estimate for professional services and project management fees?
- ▷ Does the vendor provide global reach with regional support for future expansion of the solution to other countries around the world?
- ▷ Will the vendor allow your team to take control over maintaining, developing and expanding the solution without being locked into availability of the vendor's professional services?

RFGEN SOFTWARE

THE MOBILE DATA COLLECTION EXPERTS

*Reduce supply chain implementation costs with
RFgen Mobile Foundations software—
one of the industry's most reliable and flexible mobile and wireless
automated data collection solutions on the market today.*

RFgen is a market leader in barcoding software solutions for mobile data collection, warehouse automation and inventory management, providing the industry's most reliable and flexible platform since 1983. We provide an end-to-end guided experience with a knowledgeable team of experts to help you establish a self-sustaining digital ecosystem that ensures long-term viability.

As your trusted advisor in this process, we are fully invested in your success and to position your organization for growth through transparency, visibility and mobility enablement of your inventory and fixed assets. After implementation, RFgen consultants will continue to provide support by empowering your team through training and education to maximize your investment and assure future self-sufficiency.

RFgen isn't just a solution to your business challenge. Our brand promise is to equip each of our customers to meet the competitive challenges of the 21st century. By introducing key technology solutions that extend existing software platforms and infrastructure, we help customers unlock hidden efficiencies to achieve significant gains in daily operations with downstream benefits to your enterprise, supply chain and business partners.

Whether you are looking for solutions to automate your warehouse and better manage your inventory, comply with government regulations, ensure 24/7 warehouse operations, track and trace your products, voice-enable your warehouse, or manage your remote inventory, RFgen is the smart choice.

*RFgen supply chain mobility solutions cover everything
contained in this guide and much more.*

To learn more, please call us at 888-426-2286, or
[click here to Request a Software Demo](#)

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