



**Advanced Diagnostics  
Technology as an AMS  
Business Differentiator**  
Picking the Right Platform can Transform  
Solution Offerings, Increase Revenue

## **An Evolving Business Model**

Business growth. It's a universal goal for every business. For after-market service (AMS) providers in the mobility sector, it means evolving solution offerings beyond simple depot repair to broader end-to-end capabilities. Advanced diagnostics technology has emerged as both a "table stakes" requirement and a potential competitive differentiator. But how best to deliver it remains a key consideration. Should you build this capability in-house or buy it through a technology partner?

**The biggest challenge related to the internal development of a mobile diagnostics platform involves vastly underestimating the resource requirements for ongoing engineering support.**

Just as mobility customers outsource their non-core reverse logistics activities to AMS partners to streamline operations, it makes sense for AMS providers to rely on the expertise of technology partners to build, provide, customize and support sophisticated and proven diagnostics tools that enable new comprehensive service models. Doing so allows you to deliver a superior customer service experience and enhance brand equity while lowering costs.

## **The Challenges of DIY Solutions**

While you may have some technical capability to build your own diagnostics tools, it's unlikely those resources are dedicated to that task alone. Additionally, solution development requirements are often severely underestimated, as are the ongoing support requirements. Even if adequate resources are available, proprietary options are difficult to leverage economies-of-scale and are difficult to evolve to meet the needs of multiple, diverse service customers.

# Finding the Right Partner

When selecting a diagnostics platform partner to bring into the fold, choose wisely. Not only is it important to source the tools needed to address today's needs, but to ensure they offer the flexibility to scale to support rapidly changing service model requirements. Evaluate partner solutions based on the following criteria:

## Mature Technology Experience

It's important to understand the history, expertise and core competencies of a potential partner. Diagnostics vendors often come from the mobile software industry, but also hail from the hardware manufacturing and/or repair domain. While the ability to demonstrate attractive user interfaces and feature functionality are certainly helpful, a potential vendor's ability to accurately diagnose software or hardware faults, with very low false positive or false negative occurrence rates is critical to effective operations. Elevated rates of either cause unnecessary repairs and parts consumption, loopers in the repair line and bounces from operator B-stock. Beyond lab testing and benchmarking, efficacy is best evidenced by a proven track record – in years – of field experience handling mobile phone transactions. Conversely, manufacturing and repair vendors have excellent hardware transaction experience and intimacy with triage and QA testing, but their experience may be limited to certain OEMs, operating systems and even models. Their focus may center on mechanical fault detection at the expense of software conflict and configuration issues that drive no-fault-found (NFF) rates. Ultimately, a documented history of successful mobile phone transactional experience managing a broad spectrum of device platforms should be requested from each vendor to validate the effectiveness of their solution offering.

## Demonstrated, Field Tested Scale

Does the supplier have an established and scaled base of customers for deployment, training and ongoing maintenance? Has the solution demonstrated durability and reliability in the field beyond simply stress testing in a QA environment? Technology solutions, particularly those in early stages of development or without scaled field deployment can perform well in a lab or pilot setting, but then stumble significantly when ramped up to full production levels across a broad geography. Real-world deployments often incur challenges such as unreliable network connectivity and operator abuse or lack of training, significantly impeding the effectiveness and reliability of a solution, even in a factory repair environment. This risk only increases if elements of the solution are planned to be deployed in a consumer-facing environment, for example at the storefront or via web access. Therefore, how a vendor has scaled its solution in the field should be closely examined and verified.

## Financial Stability

Any investment in a technology platform represents a long-term commitment. As such, you need to be confident in the long-term viability of all suppliers. This can be tricky when dealing with non-publicly traded companies whose financials are not disclosed. Regardless, the ability to get a sense of overall revenue (general range, growth rates, product/service sources and diversification, customer mix, and overall profitability) and sources of financial backing should be readily disclosed in the RFP response.

## Engineering/R&D Resource Investments

As mentioned previously, the biggest challenge related to the internal development of a mobile diagnostics platform involves vastly underestimating the resource requirements for ongoing engineering support. This is not just for new product introductions (NPI) of devices, but also ongoing OS upgrades and multiple version releases, not to mention refinements for legacy devices. Potential diagnostics suppliers should be vetted according to the level of investment and resources earmarked for engineering and R&D support. Some key questions to ask:

- How much is being invested on an annual basis?
- How large are their engineering and R&D teams?
- Where are they based?
- Is this work actually performed "in-house" by dedicated engineering teams that preserve "tribal knowledge" or is it outsourced to low-cost-of-labor IT markets like India or Eastern Europe?

RFP responses should also detail the size, average tenure, location and employment status of their respective IT teams.

## Global Footprint

While some AMS suppliers operate regionally, many are global in scope. Indeed, it is appealing to award global service contracts to drive further price concessions as well as generate savings from global parts management and resource optimization. Even where the focus is still regional, repairs generated in one country may actually be performed in another to take advantage of a lower cost of labor where transportation and logistics allow. A diagnostics vendor needs to be able to support platform deployments where depot repair facilities are located as well as where returns are generated from (for example, in retail or customer service center (CSC) locations, sorting and screening hubs, etc.) Diagnostics vendors should detail their global footprint in their RFP response, breaking down staff by function in key locales relevant to your business.

### **Adjacent Value-Added Capabilities**

Many players in the mobile technology domain have capabilities and strengths in only certain functions required by AMS providers. While in the past it has been sufficient and even advantageous to procure point solutions for certain functions such as mobile data removal (wipe) or transfer/backup/restore (TBR), feature differentiation between suppliers in any one of these specific areas has largely disappeared. The problem with using a variety of point solutions from different suppliers is self-evident: potential issues with the management of multiple vendors; lack of integration between the various solutions; the loss of “bundling” discounts; and overall supplier misalignment preventing true process improvements. Advanced diagnostic platforms integrate these critical business functions, increasing operational efficiencies and lowering costs. All RFPs should highlight which diagnostics suppliers truly provide all the adjacent capabilities in their platforms.

### **Architectural Flexibility and Options**

Technology deployments within a repair facility can sustain strict hardware platform requirements, provided that those hardware requirements aren't cost prohibitive. When service is being performed beyond that facility, however, the more architectural flexibility and formats a supplier can offer, the better – appliance, desktop, web-based and mobile applications. Stores and walk-in centers are increasingly deploying diagnostic service tools and applications on tablets. While there is a clear movement away from proprietary appliances, their use will likely continue especially in cases where a ruggedized platform is required. As the trend toward customer self-help and automation grows, solution delivery will go beyond simple web access to having a solution “built-in” by the operator and even the OEM, where that OEM's distributor requires an agnostic support and service platform. If this approach is being contemplated, the technology provider should be able to demonstrate its solution flexibility via all of these platforms.

## **Having multi-channel customer reach is especially important if you are planning to expand and extend service models beyond traditional depot repair.**

### **Multi-Channel Touchpoints**

Having multi-channel customer reach is especially important if you are planning to expand and extend service models beyond traditional depot repair. Such an extension necessitates getting closer to (and ideally interacting directly with) the end user. The solution you select must have the flexibility to support how the consumer wishes to initiate key interactions, including: in-person at a retail store, walk-in center or automated kiosk; via phone; or online in a self-help automated process or a chat session. Since the first interaction requires diagnostics and data management tools (and possibly others such as remote take-over in a call center environment) it is critically important to ensure that the technology supplier's solution supports all key channels.

### **Broad Customer Base**

While vendor focus on any one customer type is not necessarily cause for concern, a diverse customer base demonstrates a broad understanding of the specific needs and requirements of the various elements of the reverse supply chain ecosystem – and how to support them. Retail and carrier presence indicates experience and knowledge with consumers which may be important if you are looking to extend reach directly to the end user. A proven track-record in these channels also requires the ability to support both high mobile device volumes and high mix rates, while solutions sold to some In-Warranty AMS providers may only need to support a limited number of models or device types. Similarly, 3PL customers may have been doing simple screening and sorting activities and therefore their vendor's diagnostics technology may not have been utilized as deeply as it may need to be in a wider AMS environment.

### **Proven Professional Services Organization**

An advanced diagnostics platform should deliver professional services capabilities beyond simply solution engineering (commonly a sales function) or implementation staff being assigned to provide customization work for a client, generating additional revenue streams. A dedicated and credible professional services organization should be detailed in the organization charts provided in the governance section of a proposal. This demonstrates a vendor's understanding of and commitment to technology, adding value by positively changing or evolving current processes, in addition to systems integration and not merely delivering client customization. This is often done in conjunction with both the AMS provider and their customers. Real business value is achieved by taking advantage of the disruptive nature of technology to completely optimize process flows and change service models to lower cost and enhance customer satisfaction.

### **Training and Support Resources**

A key element in the successful introduction and implementation of any new technology solution (and especially one where current processes are disrupted and radically changed) is how well it is embraced by the client organization. A common pitfall is a lack of adequate training and ongoing support. If your technicians do not have confidence in the efficacy or reliability (up-time) of the solution/tools being used, then the deployment will likely fail, negatively impacting costs and quality, especially in the eyes of your customers.

## No “Conflict of Interest”

The various silos of the AMS ecosystem are rapidly merging as suppliers expand their service offerings into new areas to differentiate themselves, add value and stickiness, align revenue rewards with customer KPIs, avoid commoditization and increase margins. Examples of merger and acquisition activities that illustrate this are:

- FedEx acquired GENCO
- Ingram Micro acquired Brightpoint
- iQor acquired Jabil Global Services
- Regeneris acquired both Blancco and Xcaliber

Where a diagnostics technology partner shares ownership with a competitor triggers an immediate conflict of interest concern. The data analytics derived from a diagnostics solution generate invaluable corporate intelligence on volumes, device types and repair mix. This can potentially expose critical customer detail that can be used to uncover opportunities and unseat an incumbent. Conversely, a diagnostics technology supplier is unlikely to disadvantage their parent or provide a level playing field to other AMS providers when it is in their best interests to favor their corporate owner. After all, the reason their parent made an investment in them in the first place was to expand their own footprint in the AMS ecosystem and add additional value to their own solution offerings. The RFP should favorably score vendors whose sole business (and ownership) is in the technology (and not services) domain.

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### Reference Customers

While lack of reference accounts is a sure-fire way to weed out start-up and immature solutions, the breadth of reference customers can highlight further credibility of the technology vendor with multiple constituencies and partners in the reverse supply chain. In addition to demonstrated scale, find out if the supplier has experience working with OEMs, operators and retailers in addition to service providers.

## Making a Smart Choice

Your RFP process should thoroughly vet each contender across each of the criteria listed above, weighing each as appropriate for your business model. Any perceived price differences of available diagnostics solutions can be completely overshadowed by positive (or negative) impacts to reputation, brand, quality and customer satisfaction. Compromises should be carefully scrutinized and strategically evaluated to understand potential impacts.

Stronger market differentiation. Better more responsive service. Improved efficiencies and revenues. Isn't it time to broaden your mobile lifestyle offerings to achieve your business goals?



### About Cellebrite

Cellebrite is a world leader in providing Operators, Retailers and Aftermarket Service (AMS) Providers, with advanced mobile lifecycle solutions to enhance the customer experience, improve satisfaction, reduce cost, and generate revenue. With delivery channels in-store, on-device, and over the web, mobile retailers can take advantage of Cellebrite's full suite of mobile lifecycle solutions: diagnostics, phone-to-phone content transfer, backup, restore and wipe, automated phone buyback, and application and content delivery. In addition, Cellebrite offers retailers monitoring, statistics and analysis of all activities. Cellebrite's global leadership is demonstrated through its deployment of over 150,000 units at more than 200 mobile operators and retailers globally, representing well over 100,000 stores and handling hundreds of millions of transactions per year.

Founded in 1999, Cellebrite is a subsidiary of the Sun Corporation, a publicly traded Japanese company (6736/JQ).

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