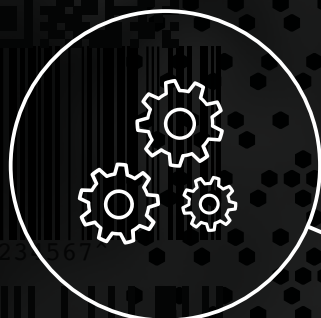


SCANDIT

Embracing Mobility: A Guide to Mobile Data Capture Solution Deployment in the Enterprise



A full-page background image of a warehouse. In the foreground, a man wearing a high-visibility orange and grey safety jacket and dark pants stands looking up at a high shelf. He is holding a tablet or clipboard. The warehouse is filled with tall metal shelving units. Some shelves are covered with large white bags, and others have wooden pallets with boxes. The lighting is industrial, with some areas being brighter than others.

Introduction

Changing Enterprise IT Landscape. The enterprise IT landscape is changing. Mobile devices such as smartphones, tablets and wearables are finding their way into the workplace. As a result, the enterprise as it has been in the past—closed and stagnant—is becoming cloud-connected, agile and integrated with every device imaginable.

This is having a unique impact on the auto identification and data capture (AIDC) industry. Previously, enterprise data capture solutions were limited only to expensive, dedicated handheld barcode scanners. Today, thanks to the advancements in mobile technology and software, companies are able to leverage the built-in hardware on smart devices to capture data at the enterprise level. Large companies are beginning to deploy mobile data capture solutions for a variety of use cases across the supply chain. These solutions are transforming enterprises by mobilizing thousands of employees and their workflows—driving productivity and changing operations forever.

IT departments want to capitalize on the increased flexibility and efficiency presented by mobile devices, but are hesitant about the risks and obstacles ahead of them, and it's understandable. Deploying enterprise mobile solutions comes with its own set of risks and concerns. However, the largest risk comes from not deploying these solutions at all. The benefits presented by mobile far outweigh the challenges, and enterprises will need the mobile advantage in order to succeed against competitors.

In this guide, you'll discover that the road to more efficient enterprise operations is best navigated with a smartphone. We've outlined some of the most important things to consider before purchasing a mobile solution, and addressed top concerns for today's IT decision makers. Gain insight into the challenges ahead, and better understand how your enterprise can implement an end-to-end mobile strategy that tackles some of today's toughest data capture workflows.

Looking Ahead: Mobile is Here to Stay — Don't Get Left Behind

Mobile technology has been making waves in the enterprise since its introduction to the market. Today, companies are leveraging mobile devices to transform business processes with innovative hardware and software tools for employees.



Employees

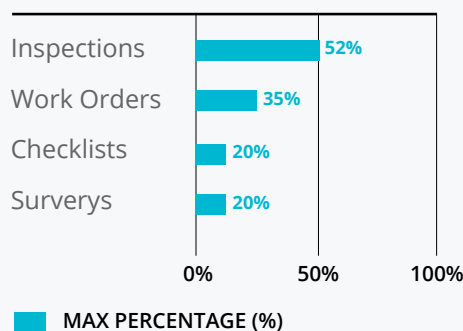
By integrating mobile devices into existing processes, companies stand to improve employee workflows and gain insight through real-time visibility into every corner of their organization. The combined ability to empower workers and leverage data to make better business decisions is giving enterprises a competitive advantage non-existent with traditional data capture solutions, such as dedicated barcode scanners.

Data, Trends and App Usage

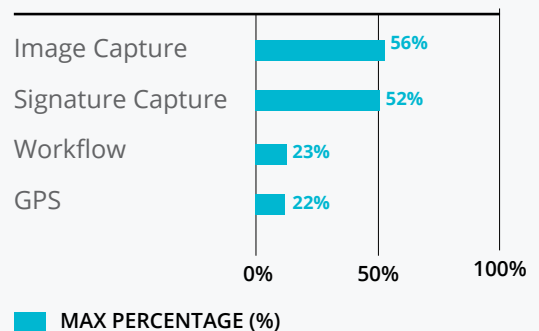


66% of Enterprises
use multiple mobile
business apps

BUSINESSES ARE USING MOBILE APPS FOR



POPULAR FEATURES OF ENTERPRISE MOBILE APPS



Source: How Businesses are Using Mobile Apps - 2015, Canvas Solutions



Updated Processes

Many enterprises have been built on outdated paper-based processes, legacy IT systems and expensive data capture hardware. These companies can dramatically increase their bottom line by embracing mobility and deploying smarter data capture solutions that increase employee efficiency and reduce costs and errors associated with paper.



Streamlined Operations

By streamlining processes through the use of data capture apps, companies can customize and enhance employee workflows to be more efficient and cost-conscious. Typical solutions require multiple devices to complete a daily shift, but smartphones make it possible to manage every aspect of an employee's workflow from a single, easy-to-use device.



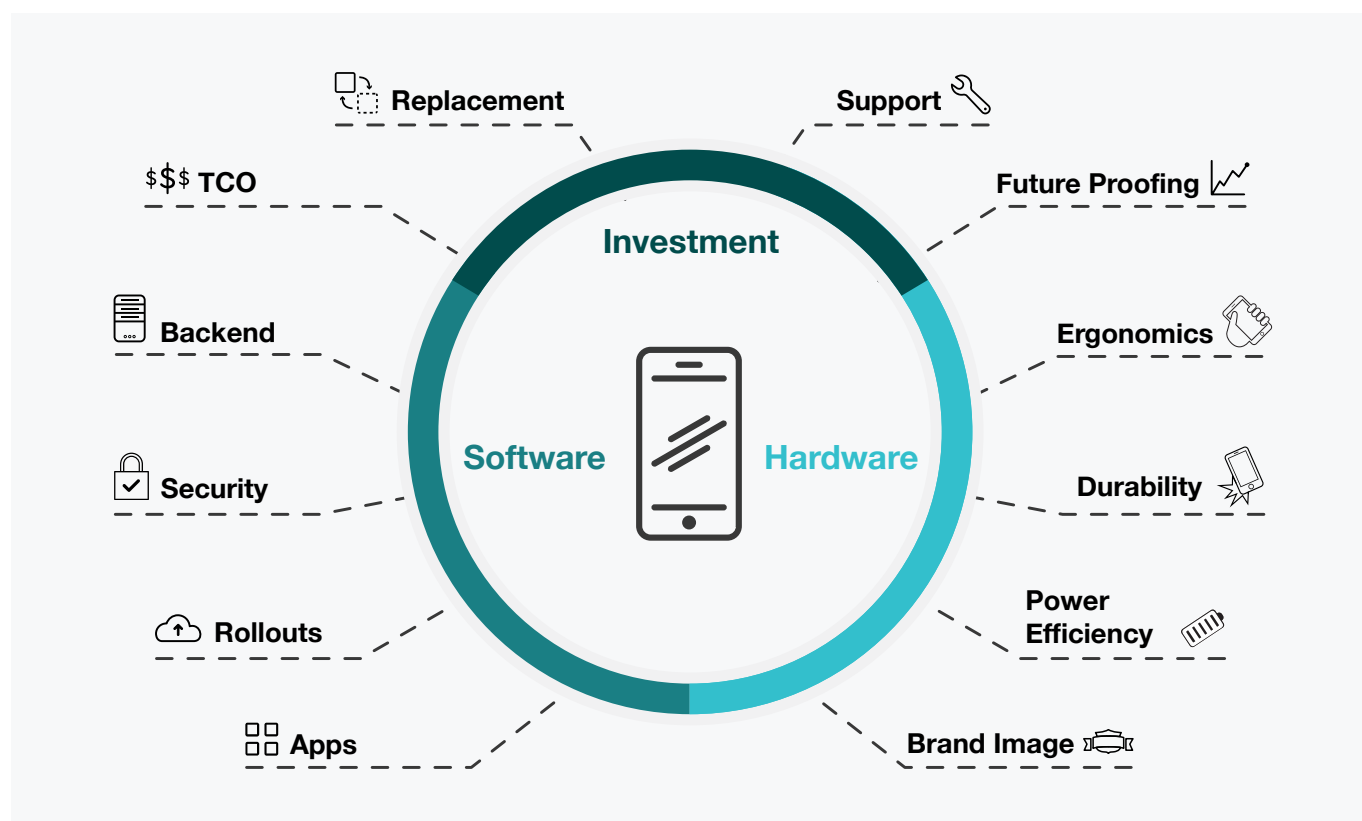
Lowered Costs

Mobile hardware and software can significantly reduce costs when compared to dedicated solutions such as handheld scanners. Lowered total cost of ownership (TCO), enhanced hardware and software capabilities and reduced labor brought on by increased worker productivity are just a few of the ways mobile solutions can reduce your IT spend.



Deploying Mobile Solutions in the Enterprise

Deploying an enterprise mobile solution is no easy task. However, a strong understanding of common IT concerns can help you make stronger purchasing decisions. Knowing what things to look for up-front will ease the hardware and software comparison process and help with planning the transition. This guide walks through each area of the mobile data capture ecosystem including investment, deployment and operations. We'll help you gain a better understanding of the various areas and why they matter to your business.

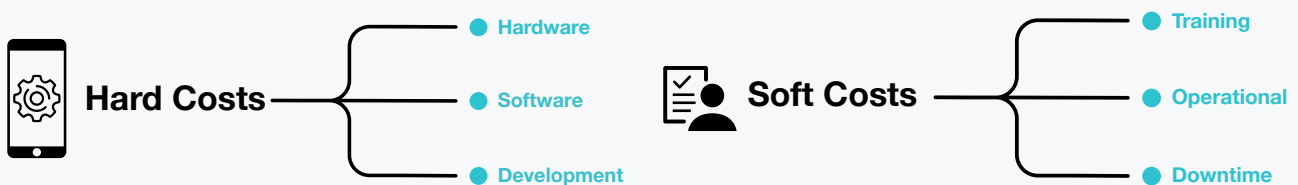


Investment: Lower Upfront Expenses. Reduced Costs.

Total Cost of Ownership (TCO)

\$\$\$ Understanding TCO

Reducing capital expenditure and maintenance costs is always a top concern for IT professionals. Identifying a solution that meets your requirements and your budget can be hard to accomplish. That's why it's so important to understand total cost of ownership (TCO) of the investment. TCO is calculated by assessing two categories of costs over a set time period: hard costs and soft costs. Hard costs involve the hardware itself, the software that runs on it and associated software development costs; while soft costs involve the training, operation and downtime costs. Analyzing the total costs associated with any major purchase can provide clarity in the buying process and help your IT team better understand the challenges ahead.



Why Does It Matter?

Smartphones offer equivalent scanning performance at a fraction of the cost of dedicated barcode scanners. Smartphone-based barcode scanners can be significantly more cost-effective than traditional alternatives, while providing access to a broader range of functionality. The reduced hard costs of purchase and replacement, coupled with the lessened soft costs associated with training and operation, mean that smartphones can often save companies a significant amount of revenue. While many hardware manufacturers will suggest smartphones present a higher total cost of ownership than traditional scanners, our study of consumer and rugged smartphones tell a different story. [Read more.](#)

Hardware Replacement Cycle



Understanding the Device Lifecycle

Like any enterprise hardware deployment, smartphones have limited lifecycles. IT decision makers need to keep lifecycle in mind when assessing any mobile hardware. Choosing the right device is crucial to ensuring that it can withstand the deployment environment without needing to be quickly repaired or replaced. Currently, the average lifecycle of a consumer-grade smartphone in the workplace is about two years. While this may be shorter than a traditional hardware device like a mobile computer or handheld barcode scanner, it allows enterprises to evaluate and upgrade more often, while maintaining a lower TCO.

Why Does It Matter?

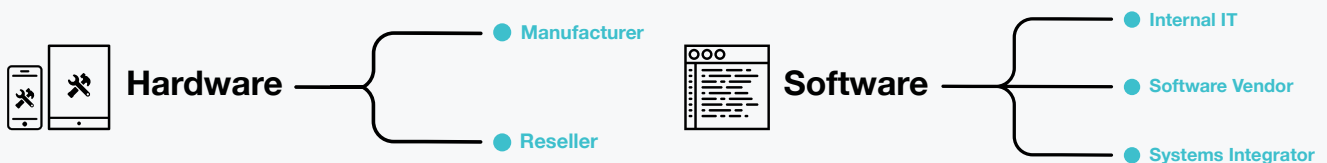
Smartphone lifecycles give IT departments increased control over software and hardware implementation as newer technology emerges. The traditional replacement cycles for dedicated barcode scanners are a much slower process, and can result in organizations being forced to work with outdated hardware and software over time. Gain the opportunity to evaluate new technology more often and decide when it's the right time to update or expand your solution.

Support



Understanding IT Maintenance, Repair and Downtime

Maintenance is an ongoing concern for any IT department. Devices can break, resulting in downtime and loss of productivity. In some cases, devices will need to be replaced entirely, which can result in additional unexpected IT spend. With mobile solutions, repairs and support are handled similarly to traditional enterprise IT solutions; the device manufacturer or reseller handles hardware repairs, whereas software support is often provided by internal IT departments, system integrators or the software vendor themselves. In some cases both software and hardware support is handled by the integrator.



Why Does It Matter?

Any mobile device or solution you choose will require some level of ongoing maintenance and repairs to be effective. Long repair cycles and device downtime can quickly drive up costs and slow down operations. Mobile solutions make it easy to conduct maintenance; fixing software is as simple as pushing the latest app update directly to employee devices, and hardware fixes can be handled by the manufacturer, reseller, or easily replaced at low up-front costs compared to dedicated handheld barcode scanners or mobile computers. In the case that hardware replacement is absolutely necessary, even when accounting for additional investments, the low up-front costs of purchasing a backup device still keep TCO below that of a traditional scanner.

Future-Proofing



Understanding Future Growth and Opportunities

Any major investment in technology solutions warrants considerations for improvement and flexibility in the future. Protect today's investments by deploying smartphones. Built on familiar platforms such as Android and iOS, mobile solutions and the devices they run on are continually evolving to better address enterprise demands. This allows for more flexibility in the future to strengthen the solution offering through updates and added capabilities over time.

Why Does It Matter?

Tools such as cloud-based services, real-time analytics and API's for further integration make expanding the scope of a solution easier for IT departments. Access to real-time business intelligence provides unprecedented insight into your operations, meaning you can make more informed decisions down the line. With constant research and development underway for both software and hardware, you're never limited to a single manufacturer or software vendor in the future. You can't predict what is to come, but it should be comforting to know your technology can quickly adapt to evolving business requirements and future advancements in technology.

Hardware: Streamlined Operations. Improved Results.

Ergonomics



Understanding Ergonomics

If you expect employees to use a mobile device day in and day out, ergonomic considerations shouldn't be left out. Not every device's design will perform at the enterprise level necessary to support your workforce. Keeping the size, shape, design, weight and overall form factor in mind is critical to employee success.

Why Does It Matter?

Good ergonomics are important in high-throughput scanning use cases in order to reduce strain and improve overall workflow efficiency. Several physical characteristics and design elements contribute to the ergonomics of any given smartphone. One major advantage of smartphone-based scanning solutions is the convenient and easy-to-carry design of most devices. Unlike handheld scanners, which are bulky, smartphones are light and can easily fit in your pocket. There are also many enterprise-ready accessories and case solutions that can deliver ergonomics for high-volume scanning, such as the Scandit Case.



The Ergonomics of a Dedicated Scanner at a Fraction of the Cost

Scandit's new case replicates the scanning experience of a dedicated barcode scanner, mobile computer or sled, at a fraction of the cost. Our innovative patent pending design protects the smartphone during everyday activities in a small and lightweight form factor, without compromising on ergonomics. Designed without the need for additional electrical components, our case leverages the built-in camera on the iPhone 6/6S to scan barcodes with unprecedented ease-of-use.

Durability

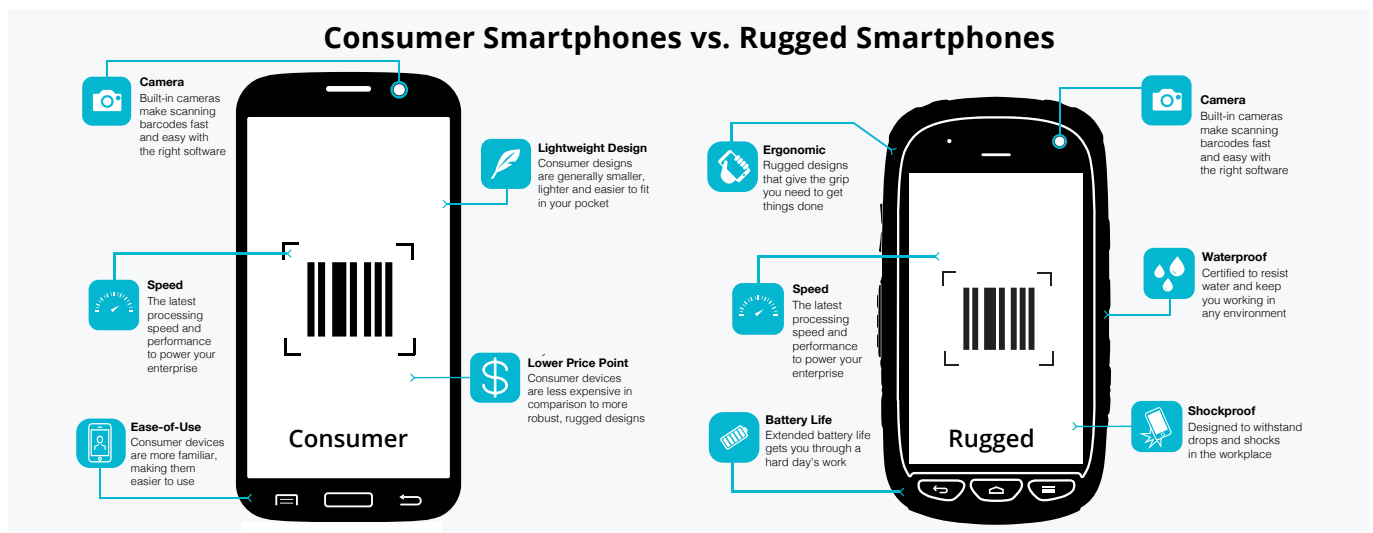


Understanding Durability

Environmental and application demands should play a big role in determining the right device. If you expect scanning to occur in harsh environments such as warehouses, construction sites or distribution centers, a fully-rugged device, whether achieved through manufacturer's design or accessory such as rugged cases, may be required to help increase device lifecycle. Other features such as form factor and glove touch capabilities might also be important to consider.

Why Does It Matter?

Like every mobile device, each working environment presents its own challenges. Considering how and where a device is going to be used will pay off in the end. Why invest in a device, accessory or solution if it's not going to be fit for the job at hand? Below is a comparison of consumer and rugged smartphones. Be sure to keep the benefits to each in mind when making your purchasing decision. If you are deploying smartphones for a high-throughput scanning scenario, and require everyday protection in the workplace, consider Scandit's ergonomic scan case for increased efficiency in day-to-day operations.



Power Efficiency



Understanding Power Efficiency

Device power consumption is influenced by many factors including display backlighting, GPS, Bluetooth and Wi-Fi activity. In general, the larger the battery size the longer it will run between charges. A smartphone operating Scandit's barcode scanning technology can easily complete more than 1,000 scans using a single charge. Still, certain devices are better at power management than others. When it comes to charging, there are a number of third-party hardware vendors that sell docking stations for a variety of devices. Usually, a solution can be found that works for the specific deployment needs.

Why Does It Matter?

Understanding a device's battery size can help determine how long it can last in an enterprise working environment. This is particularly helpful if you need to be sure a device can last an entire 8-hour shift, or even multiple shifts depending on your workforce. It may be necessary to consider additional batteries, or accessories such as extended-battery packs or mobile chargers in your IT purchase.

Brand Image

Understanding Brand Image

While many don't immediately connect the brand image with device deployment, it can play a significant role in enterprise operations. It's an often overlooked and important thing to consider when making IT decisions in various industries. Your IT purchase should reflect and support your brand's vision and style.

Why Does It Matter?

Deploying dated hardware or software in environments such as a retail store could be at odds with the current corporate image. Clunky handheld barcode scanners don't align with sleek, modern technology many stores are currently integrating such as tablet-based point-of-sale terminals or in-store beacons. By deploying state-of-the-art hardware and software, enterprises can show they lead the way in enterprise mobility and better align with existing brand messaging, solidifying their place in the industry's future.

Software: Fast to Build. Fast to Deploy.

Mobile Applications

Understanding Mobile Data Capture Applications

By deploying smartphone-based scanning solutions—instead of dedicated barcode scanners—enterprises can quickly create and distribute mobile data capture apps across the organization. These apps can be tailored to fit the needs of workflows such as order entry, inventory management, proof of delivery and track and trace among others.

Why Does It Matter?

Using platforms like Scandit Flow, IT departments can rapidly build iOS and Android apps at lower costs than traditional app development. These applications can be deployed and run across thousands of devices seamlessly, and easily adjusted to include corporate branding and consistent user experience. With smartphone capabilities, mobile app solutions can be leveraged to incorporate a wide range of functionality including voice, GPS, data, accelerometer and more. Unlike solutions of the past, today's mobile solutions can address multiple business applications from a single, easy-to-use device.

Rollouts and Updates

Understanding Application Rollouts and Updates

Enterprises considering new scanning solutions should keep updates in mind during the decision-making process. Every software solution will require updates over time, but ideally they should be able to be updated quickly and scale with the growth of your business.

Why Does It Matter?

Unlike traditional hardware, mobile devices and applications can be updated at any time. By deploying mobile solutions, your company can efficiently update apps and operating systems without breaking the bank. Roll out the latest version of your application via enterprise app stores for download, or push updates directly to devices using a mobile device management (MDM) or mobile application management (MAM) provider.

Mobile Security



Understanding Mobile Security

Security is a concern for any enterprise. Mobile devices and solutions present considerable challenges with security. How do you secure a device that can go anywhere and has the potential to be lost or stolen? With access to valuable data and private information, it's vital that companies take security seriously, and in turn deploy solutions that can deliver the protection they need.



Why Does It Matter?

Along with any mobile solution a company creates, there should also be a mobile application management (MAM) or mobile device management (MDM) solution to handle security, updates and user management. These solutions help companies manage devices and applications in a streamlined fashion, providing robust security features such as user management, remote wipe and data encryption. Third-party providers such as Apperian, SOTI, AirWatch or MobileIron offer solutions to manage these processes, giving IT decision makers peace of mind and protecting them from the many security threats facing enterprises today.

Backend Integration



Understanding Backend Integration

One of the toughest challenges facing IT professionals today is the mobilization of the enterprise. For many companies, this means taking legacy systems and operations to a mobile platform. These challenges require that the newer mobile solutions integrate seamlessly with existing backend infrastructure such as order management systems (OMS), warehouse management systems (WMS), enterprise resource planning (ERP) systems and transportation management systems (TMS).

Why Does It Matter?

To successfully integrate backend IT systems with mobile hardware and software, internal IT departments, third-party software vendors such as Scandit, or systems integrators may need to integrate mobile solutions with existing systems through REST and SOAP API's, Email/SMTP, FTP and other integration models. This means that if your existing IT systems are to be leveraged, any mobile solution you choose needs to be able to be integrated. Without the proper backend IT connectors for platforms such as SAP, Netsuite and IBM, this can be a time-consuming and challenging process.

Conclusion

Working Smarter, Not Harder. The evolving IT landscape is becoming more mobile by the day, leaving those who choose to ignore it behind. Embracing enterprise mobility is key to remaining competitive and improving operations throughout the supply chain. While there are many things to take into consideration before taking the leap, it's never been a better time to invest in mobile technology.

Choosing to develop and deploy a mobile data capture solution is not just about replacing existing processes, it's about improving them. Smartphones and mobile solutions have so much to offer every business. Legacy hardware and software solutions simply cannot compete with the power of mobile devices. From access to enhanced device capabilities, to real-time cloud connectivity, to insightful data and business analytics, mobility can give your company the boost it needs to transform daily operations and make better business decisions.

Mobility is not some passing fad, nor a fleeting trend, it's the future of the enterprise. While mobilization may seem challenging to many business decision makers, it's actually a smart, safe investment that will continue to pay off for years to come. Deploying smart devices is smart business. And smart businesses, like mobility, are here to stay. Get started today.





White Papers and eBooks

Check out Scandit's latest content, which provides valuable information across industries to help you find the right barcode scanning solution.

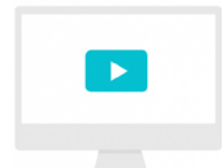
[Learn More →](#)



Case Studies

Scandit's mobile solutions are used by some of the world's most prestigious brands. See how customers have utilized our innovative software.

[Learn More →](#)



Videos

Check out Scandit's video showcases to see the performance of our mobile solutions. See our innovative solutions in action.

[Watch Now →](#)



Demo Apps

Interested in our solutions? Download one of our demo apps for a showcase of the performance and precision Scandit can offer your business.

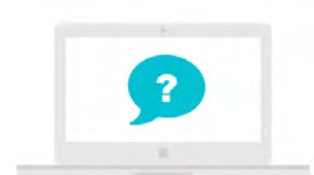
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Customer Apps

With hundreds of clients in over 25 countries, our mobile solutions are the technology of choice for many major brands around the globe.

[Learn More →](#)



Frequently Asked Questions

Find the resources and answers you need to know before choosing Scandit as your mobile solution provider.

[Learn More →](#)

Have Questions?

Talk to a Scandit Rep

[Contact Us](#)

About Scandit

Scandit is the leading enterprise mobility and data capture company, specializing in barcode scanning solutions that transform business processes across industries including healthcare, logistics, manufacturing and retail. Through its software technologies and cloud services, Scandit empowers organizations to rapidly build, deploy and manage mobile apps for smartphones, tablets and wearable devices. The resulting solutions offer a lower total cost of ownership than traditional, dedicated devices.

Scandit's solutions portfolio includes patented, software-based optical data capture technology, an innovative iPhone Case and rapidly deployable enterprise mobile apps. Built on its 'Flow' Mobile Application Development Platform (MADP) for Data Capture, the company's cloud-based mobility solutions are enabling business transformation for thousands of businesses worldwide, including top brands Cardinal Health, Coop, Louis Vuitton, The Home Depot, NASA, and Verizon Wireless.

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