Vendor Profile

Scandit Is Reinventing Barcode Scanning with Mobile Computer Vision Capture

Allison Correia

IDC OPINION

Scandit provides mobile data capture solutions built on proprietary computer vision, machine learning, and augmented reality (AR). Scandit helps business users and consumers augment the physical world with relevant digital information and interact with everyday objects in real time through barcodes, images, and other visual identifiers captured with smart devices such as smartphones, tablets, wearables, drones, and robots. With Scandit's MatrixScan, a combination of real-time image segmentation, code localization, tracking, augmented reality, barcode scanning, and optical character recognition (OCR), Scandit enables process automation and operational efficiency gains along the entire supply chain, from central distribution hubs to local post offices, retail stores, and delivery trucks all the way to consumers' homes. In public service sectors, such as healthcare and government, it improves the efficiency and quality of services to customers and patients. Through smart device-based computer vision, Scandit enables seamless interaction with everyday objects such as fast-moving consumer goods, parcels, or palettes for employees and consumers alike, creating increased visibility and higher efficiency for the businesses involved. Further:

- Scandit positions smart devices equipped with its software as viable replacements for traditional dedicated barcode scanners.
- In addition to enabling employee-focused barcode scanner replacement, Scandit also equips consumer-facing apps and bring your own device (BYOD)-focused mobile applications with enterprise-grade scanning and data capture capabilities.
- Scandit targets various vertical markets including retail, logistics, manufacturing, transportation, government, and healthcare, as well as the OEM business.

IN THIS VENDOR PROFILE

This IDC Vendor Profile examines Scandit, a provider of next-generation mobile data capture solutions built on proprietary computer vision, machine learning, and augmented reality. Scandit helps businesses unlock insights into enterprise processes and workflows, resulting in more efficient decisions, effective employees, satisfied customers, and lower costs.

This document provides an overview of the important characteristics of the vendor including company strategy, partnerships, go-to-market (GTM) plans, product portfolio, and future road map.

SITUATION OVERVIEW

Company Overview

Scandit was founded in 2009 and is headquartered in Zurich, Switzerland, with offices in San Francisco, Boston, London, and Warsaw, Poland. The company has 90 global employees, with 20 employees in the United States.

Scandit seeks to transform enterprises by allowing them to lower costs, design and implement more efficient workflows, and uncover previously hidden data about their operations. By using smartphones, tablets, and wearables instead of traditional cost-intensive hardware, Scandit enables enterprises to save in software development costs and reduce total cost of ownership (TCO), and by leveraging the rapid evolution of smart devices, Scandit removes dependency on dedicated scanning equipment to enhance innovation and business transformation.

Scandit can also equip consumer-facing apps (such as mobile shopping, customer loyalty, or self-scanning) and BYOD-focused mobile applications (such as B2B commerce, order entry, or asset tracking) with enterprise-grade scanning and data capture capabilities.

Product Portfolio

Scandit offers a cloud-based enterprise mobility and data capture platform for smart devices built on proprietary computer vision, machine learning, and augmented reality.

At the core of Scandit's platform is a data capture engine that combines a wide range of mobile data capture technologies, such as barcode scanning, text recognition, form capture, and image recognition, along with associated cloud services.

The Scandit barcode scanner scans any barcode via any smart device's built-in camera/video feed, no matter what the conditions are. One of the key features of the data capture engine is MatrixScan. It enables users of any camera-equipped device to locate, track, and decode multiple barcodes at once. It allows the capture of an entire set of barcodes in a single sequence, greatly easing search and find activities. MatrixScan allows for scanning multiple barcodes at once and also provides the possibility of overlaying relevant product information in real time using augmented reality. In addition, MatrixScan can superimpose AR data, such as product images, on physical goods.

Beyond barcodes, the data capture platform also offers optical character recognition for mobile apps. It allows users to capture predefined data from sources such as forms, packages, and labels via any smart device's camera. This eliminates the need for manual input and reduces the potential impact of human error.

The data capture engine can be integrated into existing IT environments by leveraging a variety of integration options:

- **Native software development kit (SDK)** for mobile applications, including support for various popular mobile app development platforms (MADPs) such as PhoneGap/Cordova, Xamarin (Microsoft), Telerik, or Appcelerator/Titanium
- **Web SDK** for scanning in the browser, for example, for ecommerce platforms such as SAP/hybris, Magento, and Demandware; no mobile app needed

- **Keyboard wedge** for use with enterprise platforms and corresponding mobile apps such as those from SAP, Oracle, Salesforce, and NetSuite or legacy apps
- **Flow,** a rapid app development tool for easily building, deploying, and managing cross-platform data capture applications for employee-focused use cases

The Scandit Case replicates the scanning experience of a dedicated barcode scanner, mobile computer, or sled, at a fraction of the cost. The Scandit Case leverages the built-in camera on the device and protects the device during every activity. It is currently compatible with iPhone 6, 6s, 7, and 8; iPod touch; and select Android devices.

Scandit offers its products following a software-as-a-service (SaaS) model via separate subscriptions or, where applicable, via traditional licensing models. The company also enables users to purchase the products in bundles. For example, the keyboard wedge can be purchased on its own or in combination with the Scandit Case. Scandit also offers a retail bundle with license support for various consumer and in-store applications that can include multiple solutions.

Competitive Landscape and Differentiation

Scandit competes with vendors of traditional scanning devices such as Zebra Technologies, Datalogic, and Honeywell. These companies sell dedicated scan devices to the same retailers or transportation and logistics (T&L) companies that Scandit targets. In consumer-facing scenarios, Scandit competes with other software offerings, including open source software.

Scandit's data capture software enables customers to leverage smart devices for scanning, lowering the TCO compared with dedicated barcode scanners over the life cycle of the device. Further cost savings are achieved by lower maintenance costs and the ability for Scandit to instantly upgrade software via the cloud as well as support instant OS upgrades from the platform provider. There's possible further cost savings in organizations with a BYOD policy in place and reduced need for training as employees are more familiar with the form factor in smart devices.

Scandit's solutions can be integrated with existing mobile applications or deployed on traditional scanning equipment. Using Scandit's keyboard wedge, scanning capabilities can also be deployed to existing enterprise software apps with no modifications. Another unique and differentiating feature that has been recently added to the Scandit portfolio – Scandit Barcode Scanner SDK for the Web – allows users to directly enable barcode scanning via any desktop or mobile web page into ecommerce platforms such as SAP Hybris and Salesforce Commerce Cloud.

Scandit is in a unique position to deliver high-performance data capture on camera-equipped devices such as smartphones, tablets, wearables, kiosks, and even drones and robots.

Company Strategy

Scandit has a direct sales force focused on upper midmarket and enterprise retail, transportation and logistics, post and parcel, manufacturing, and healthcare organizations in every major global region, with attention on North America and EMEA. Scandit also promotes indirect sales efforts through marketing activities such as SEO and SEM, as well as exhibiting and speaking at trade shows and events. Promotional content such as white papers, ebooks, client success stories, webinars, executive guest columns and interviews, press releases, and blog entries always include a call to action directing prospective clients to contact a Scandit solutions representative. Scandit also delivers targeted nurture streams via email to prospects that engage with it through its website or mobile apps or at events.

Scandit has focused on working closely with device manufacturers like Samsung and Apple to position their smartphones and tablets equipped with Scandit software as viable replacements for traditional dedicated barcode scanners. The relationship focuses on co-selling and co-marketing to large enterprise clients and telling a joint story on device replacement. With the addition of the keyboard wedge, Scandit has made it easy for partner sales teams to quickly and easily add enterprise-grade barcode scanning to any enterprise application running on smartphones with virtually no integration required. The introduction of Scandit's MatrixScan AR-enhanced data capture feature has also enabled smartphone manufacturers to show how Scandit's AR capabilities can be leveraged in the enterprise to innovate beyond the traditional barcode scan.

Scandit's target customers include leading retailers, logistics companies, transportation providers, manufacturers, and healthcare providers that have a need to streamline core enterprise workflows such as inventory management, asset management, shipping and receiving, and patient and medical device identification. Scandit targets customers that want to replace or expand upon their usage of dedicated scanning devices, which are typically more expensive and require more maintenance and user training.

Customer Use Case

One of Scandit's customers, Swiss retailer Coop Group, has integrated the Scandit Barcode Scanner SDK into multiple consumer-facing and employee-facing apps including passabene, its self-scanning app for physical stores, and internal inventory management and track and trace applications. Coop employees use the Scandit mobile data capture functionality to keep accurate track of inventory levels, which improves stock accuracy and availability. Coop plans to utilize mobile data capture to streamline workflows in areas including expense and salary tracking, logistics, store merchandising, and forecasting. Moving data capture from dedicated scanning devices to smart devices also provides financial benefit to Coop. According to Coop executives, the retailer saves two to three times on hardware costs by using traditional mobile devices as opposed to dedicated scanners.

FUTURE OUTLOOK

Scandit continues to innovate and transform the data capture market by redefining when, how, and by whom the scanning is performed.

Scandit already enables barcode reading functionality for cutting-edge devices such as drones and robots and is expanding the capabilities of its augmented reality-enabled scanning to allow employees and consumers to perform mobile scanning in various use cases: in-aisle product search and navigation, planogram compliance, and instant on-the-spot shelf management.

With its computer vision and machine learning-based solutions, Scandit wants to position itself to enable retailers to compete with the likes of Amazon Go, which is just one of the recent examples of the proliferation of online retailing into the brick-and-mortar space. Leveraging Scandit's technology, retailers can blend digital and physical shopping experiences in a way that boosts customer satisfaction and loyalty while streamlining operations and reducing costs.

Scandit will continue to expand the type of data its solutions can decode, in both the range of symbology and the type of data, such as image recognition. Scandit will also focus on growing the range of supported mobile devices, including those that are compatible with the Scandit Case. In

addition, Scandit is looking to expand the accessibility of its barcode scanning engine through innovations like keyboard wedge that bypass app development.

As far as future go-to-market plans, Scandit will increase focus on channel partnerships with leading device manufacturers and outbound sales efforts with major organizations.

ESSENTIAL GUIDANCE

IDC recommends that organizations recognize the continuous digitalization in the supply chain in retail, production, and logistics and look to make transformative technology investments that can address business needs and improve competitiveness. Barcode scanning is important in consumer-facing in-store and back-of-the-house processes, and the use of smart devices in business has increased tremendously over the past decade. Smart devices equipped with software can be, and are, used as viable replacements for traditional dedicated barcode scanners. The utilization of cloud-based mobility and data capture solutions can reduce operating costs, decrease risk of human error, increase productivity, and improve end-user experience.

Advice for Scandit

- Scandit should continue to develop its scanning capabilities while expanding its machine learning solutions to fully realize its potential of providing retailers and other industries with the technology to compete against Amazon and the like, truly automating and streamlining everyday tasks such as grocery shopping.
- Scandit could extend its presence in the market by forming additional distribution and technology development partnerships with equipment manufacturers and mobile providers outside of its current base.

LEARN MORE

Related Research

- *IDC PlanScape: Mobile Print and Scan Vision* (IDC #US41990917, September 2017)
- *AI, Robotic Process Automation, and Robots Changing the Way People Work, Interact, and Communicate* (IDC #US41991417, September 2017)
- *Worldwide Document Imaging Scanner Forecast, 2017-2021* (IDC #US42527617, May 2017)
- *North America Document Imaging Scanner Market Shares, 2016: Multifunction Device and Mobile Capture Pressure Document Imaging Scanners* (IDC #US41991617, May 2017)
- *Nuance Helps Organizations Operate More Efficiently with eCopy ShareScan 6.0* (IDC #US42574117, May 2017)
- *Avantech Brings Scanning to the Masses with Document Imaging Solution ScanStation* (IDC #US42366017, March 2017)
- *Nuance Enhances Capture Offerings with OmniPage SDK 20 and OmniPage Server for Windows* (IDC #US41695716, August 2016)

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

Global Headquarters

5 Speen Street
Framingham, MA 01701
USA
508.872.8200
Twitter: @IDC
idc-community.com
www.idc.com