IDC MarketScape

IDC MarketScape: Worldwide Rugged Mobile Devices 2020 Vendor Assessment

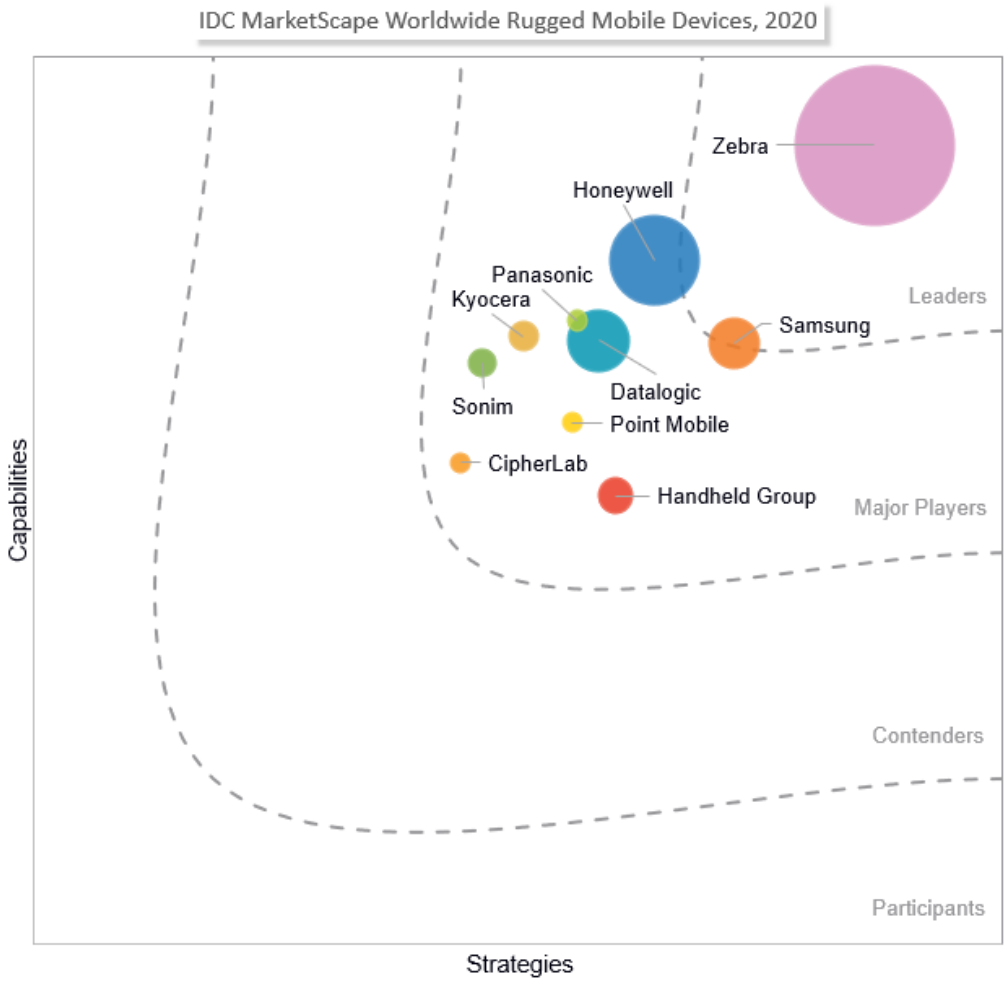
Bryan Bassett

THIS IDC MARKETSCAPE EXCERPT FEATURES ZEBRA

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Rugged Mobile Devices Vendor Assessment



Source: IDC, 2020

September 2020, IDC #US46826320e

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Rugged Mobile Devices 2020 Vendor Assessment (Doc # US46826320). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

The adoption of rugged mobile devices among large enterprises is strong overall, with 41% of U.S. enterprises currently using and planning to purchase more rugged devices in 2021, according to IDC's 2020 *U.S. Enterprise Mobility Decision Maker Survey: Devices,* results of which were reported in *The State of U.S. Enterprise Mobile Workers Webinar: Information, Frontline, and Work-from-Home Trends in 2020* (IDC #WC20200728, July 2020). These devices address a large number of growing mobile use cases for frontline mobile workers in industries such as warehousing, retail, transportation and logistics, public safety, and healthcare. Reliable and capable mobile technology designed to handle heavy use in challenging working environments is making it possible for businesses to mobilize larger segments of their workforces, increasing worker productivity, communication, efficiency, and safety.

Key findings include:

- Android is the dominant mobile platform for rugged mobile solutions worldwide, although Windows 10 is a priority for customers looking to deploy rugged tablets and detachables.
- There is a split between vendors when it comes to carrier and IT sales channels. Vendors that target industrial and high-volume scanning use cases typically sell through traditional IT channels such as SIs, IT distributors, and ISVs, whereas vendors that target general mobility and communication use cases more often sell through carrier channels and VARs.
- A common challenge for all rugged device vendors is to demonstrate and communicate better TCO and ROI for their offerings over more familiar and accessible consumer-grade devices.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

IDC invited vendors to participate based on two key criteria:

- A rugged mobile device offering portfolio that includes (but not limited to) hardware, software, and services designed for B2B mobile deployments
- A rugged product revenue of $10+ million for calendar year 2019

ADVICE FOR TECHNOLOGY BUYERS

Technology buyers should evaluate rugged mobile device offerings with a wholistic view of current and future goals for enabling rugged mobile computing. To that end, the criteria and attributes that are key for IT buyers to consider when evaluating rugged mobile device providers are discussed in the section that follows.

Key Measures for Success

- **Total cost of ownership (TCO) and return on investment (ROI).** While rugged mobile devices initially cost more to deploy than consumer-grade devices, in the long run, the TCO is usually lower. Compared with consumer-grade devices, rugged mobile devices are expected to have extended deployment life cycles beyond two years (as much as five to seven years) and see heavier day-to-day use in challenging environments. Rugged mobile solutions should present a clear ROI over consumer-grade mobile devices for businesses deploying them.
- **Defined and business-driven use cases.** Rugged mobile solutions should be designed to address specific business-driven use cases, with defined workflows that require the added features and durability that rugged mobile devices provide.
- **Device capabilities.** While increased durability and ruggedness are a core feature of rugged mobile solution, the devices should have capabilities on par with modern-day mobile devices, as well as additional features that make them suited for rugged deployments.
- **Device life-cycle management.** In most cases, rugged mobile devices are intended to be deployed beyond the traditional two-year refreshment cycles of consumer-grade mobile devices. Vendors that offer customers robust life-cycle management services have competitive advantages over vendors that do not.
- **Device support, maintenance, and downtime.** Rugged mobile devices are business- or mission-critical devices. Downtime due to outages, damages, or technical issues translate directly to lost productivity and a reduced ROI. It is imperative that vendors in this market have accessible and reliable customer service and support solutions to assist their customers.
- **Software, security, and operating system (OS) stability.** The ability to maintain a consistent and secure operating environment for users on rugged mobile devices is key. Mission- and business-critical devices must receive timely security updates and OS support over their deployment life cycles. In addition, IT organizations should be given control over when its fleet of rugged devices is updated to ensure application compatibility and workflow continuity. In some cases, rugged devices that update automatically or without the express authorization of the IT organization have the potential to disrupt or break critical business operations.
- **Fleet management.** The ability for customers to efficiently deploy and manage a fleet of rugged mobile devices and rugged end users is paramount to the success of the deployment. Most rugged mobile devices are dedicated corporate-liable devices, and therefore, the ease of management of those assets must be a priority for vendors.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

Zebra

Zebra is positioned in the Leaders category in this 2020 IDC MarketScape for rugged mobile devices vendor assessment.

Zebra Technologies' rugged device portfolio spans a host of purpose-built Android and Windows mobile computers that include mobile handheld and wearable computers, dedicated scanners, wearables, tablets, and detachables. Zebra's devices are primarily designed for enterprise customers in warehousing, manufacturing, transportation and logistics, utilities, healthcare, and public safety.

Zebra's devices are tiered by capability and features, allowing customers to select the device that best suits their deployment needs, and are supported by a suite of Zebra-developed enterprise software and solution services.

Strengths

Zebra Technologies offers a wide range of devices and form factors designed for specific enterprise use cases that are tiered by capabilities and features.

Zebra Technologies offers in-house developed enterprise software and solution ecosystem, in addition to a range of enterprise support features and services. Zebra offers customers LifeGuard for Android, a manufacturer-guaranteed extended security solution that delivers security/patch updates for up to 10 years.

Zebra Technologies is a participant in the Android Enterprise Recommended program, ensuring its Android devices will receive timely security updates and OS support during deployment life cycles. However, Zebra also offers its own in-house enterprise services and management toolsets for customers to ensure device support and security over device life cycles.

Challenges

Zebra Technologies targets industrial markets that are currently looking to increase levels of workflow automation. While Zebra's rugged devices enable highly efficient mobile workflows, it will need to find a way to address expanding and evolving customers' needs within its core markets.

Zebra Technologies is currently limited in expanding beyond its established enterprise industrial markets. While Zebra has a strong IT channel sales strategy for large enterprises, it should explore opportunities to expand its offerings to address broader enterprise and SMB customers that do not rely on traditional IT sales channels for mobility solutions.

Consider Zebra When

Enterprise organizations looking to deploy a variety of rugged mobile device form factors that address multiple dedicated mobile use case in warehousing, retail, logistics, manufacturing, and healthcare should consider Zebra Technologies high on their list as a provider of rugged mobile devices. While majority of Zebra's device offerings cater to high-volume scanning and asset management mobile use cases, its device offerings are sufficiently varied and tiered to provide customers with a broad range of options to meet their specific needs.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

Rugged mobile devices are devices of a handheld, wearable, detachable, or 2-in-1 form factor that are typically of industrial design with increased durability to withstand challenging or harsh working environments. These devices have mobile computing capabilities, are capable of data capture, and have wireless connectivity. Rugged mobile devices can address a variety of business use cases, but they are primarily intended for rapid data capture, increased communication, or enabling access to mobile business applications for frontline workers.

These devices must have a high-level operating system, application processors, and the ability to run third-party applications. Such devices are typically designed for data capture, may have 1D and 2D barcode scanning capabilities, and include onboard intelligence and wireless connectivity to back-end enterprise IT systems. Devices may also include a variety of additional biometric and environmental sensors, as well as touchscreens, cameras, voice command, and/or keypad input methods. These devices must have some form of wireless connectivity for data. Connectivity covers a wide variety and includes (but not limited to) one or more of the following: 802.11x WLAN, GSM-based WWAN, CDMA-based WWAN, Bluetooth or infrared WPAN, and GPS.

A general guideline of user environment specifications for rugged mobile devices is as follows:

- **Operating temperature:** -22F to 155F
- **Storage temperature:** -22F to 160F
- **Drops/tumbles to concrete:** 3ft minimum, up to 6ft
- **Environmental sealing:** IP68, IP67, IP66, IP65, or meet MIL-STD-810 specifications
- **Humidity:** 0–95% noncondensing relative humidity
- **Electrostatic discharge (ESD):** ±8kV to ±15kV for air discharge

LEARN MORE

Related Research

- *The State of U.S. Enterprise Mobile Workers Webinar: Information, Frontline, and Work-from-Home Trends in 2020* (IDC #WC20200728, July 2020)
- *Worldwide Business Use Smartphone Forecast, 2020-2024* (IDC #US46134920, March 2020)
- *Worldwide Business Use Tablet Forecast, 2020-2024* (IDC #US45806220, March 2020)
- *Market Analysis Perspective: Worldwide Enterprise Mobility Deployment Strategies, 2019* (IDC #US45485119, September 2019)

Synopsis

This IDC study represents a vendor assessment of providers offering rugged mobile devices through the IDC MarketScape model. The assessment reviews both quantitative and qualitative characteristics that define current market demands and expected buyer needs for rugged mobile solutions. The evaluation is based on a comprehensive and rigorous framework that assesses each vendor relative to one another, and the framework highlights the key factors that are expected to be the most significant for achieving success in rugged mobility over the short term and the long term.

"Rugged mobile devices enable flexible and specialized mobile workflows, as businesses look to mobilize larger segments of their frontline workforces with durable purpose-built devices," says Bryan Bassett, senior research analyst, Enterprise Mobility: Deployment Strategies, IDC. "As mobility continues to influence how people work around the world, the tools workers use to complete their tasks must be able to meet the demands of challenging and unique work environments. As a result, purpose-built rugged mobile devices are being deployed in numerous industries where traditional consumer-grade mobile devices fall short."

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