## Enterprise Mobility Total Cost of Ownership





VDC Research

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#### **INSIDE THIS REPORT**

This report covers the lifecycle costs of enterprise mobility solutions supporting business-critical workflows. The research, based on a survey fielded to enterprise mobility decision makers, assesses the total cost of ownership (TCO) of critical digital assets from acquisition and deployment to support and end of life. Enterprise leaders surveyed represented the manufacturing, retail, healthcare, and transportation & logistics verticals.

The research examines common issues that can affect these solutions, as well as the resulting impact of hardware, software and network-related disruptions on workflows. The research also takes a close look at mobile analytics' ability to identify, anticipate, and respond to issues, and the infrastructure required to provide the necessary visibility. This report offers enterprise mobility decision makers critical intelligence to support their investment decisions.

#### WHAT QUESTIONS ARE ADDRESSED?

- » What is the impact of issues experienced by enterprise mobility solutions on workflows?
- » What factors most commonly lead to enterprise mobility solution disruption?
- » How do non-rugged grade mobile devices compare to rugged grade / enterprise class mobile devices?
- » How much visibility do organizations have today into how their mobile solutions are operating and are being used?
- » How are analytics factoring into how organizations are identifying and addressing potential enterprise mobility issues prior to them occurring?
- » How are mobile device lifecycles changing in the context of inflation and recession?
- » What impact does a tightening labor pool have on mobile device investment decisions?
- » What is the relationship between mobile worker preferences and enterprise mobility investments?

#### WHO SHOULD READ THIS REPORT?

The target audience for this report is decision makers within marketing, product development, and sales/business development roles at mobile hardware OEMs, system integrators, value-added resellers, and distributors. End users with enterprise mobility purchasing, specification, and/or support responsibilities would benefit from reading this report.

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### EXECUTIVE SUMMARY

The past three years have proven difficult for enterprise operations, with challenges to the supply chain and increased pressure on operational efficiency. Enterprise leaders seeking to balance the need for operational improvement with budget limits must make trade-offs as they seek to both incorporate more digitization and extend the lifespan of assets. Pushed to optimize performance and tighten margins, mobile workforces rely on devices to share information and complete tasks. Mobile devices are constantly evolving, and in addition to making physical processes faster and more ergonomic, they can offer data integration, connectivity, and monitoring services.

As enterprise decision makers work to make the best investment decisions for their organizations' unique workflows and use cases, it is essential that they choose the best mobile solution for their application. A holistic approach to mobile solution investment can incorporate both initial adoption costs and overall lifecycle costs of devices. For example, lower upfront costs may be accompanied by high failure rates: solutions that fail due to hardware issues, software failure, or connectivity challenges can prevent mobile workers from doing their jobs for hours, leading to a loss of worker productivity.

TCO analysis should include a comprehensive review of device adoption costs, training costs, support costs, mobile device replacement costs over the course of the product lifecycle, opportunity costs resulting from lost productivity, etc. This report examines the various components of mobile solution TCO and device deployment decisions, providing insights for enterprise mobility decision makers looking to effectively manage their mobile device fleets.

### **KEY FINDINGS**

- Ease of use is a top priority for decision makers when making new technology investments. Looming recession has pressured enterprises to use devices for longer, and leaders do not seek devices with the cheapest purchase price; rather, ease of use and hardware reliability are top priorities when making purchase decisions. As organizations face higher attrition and smaller labor pools, crafting a worker experience with easy-to-use devices has become an essential factor in crafting a work environment that attracts and maintains talent.
- The COVID-19 pandemic and ensuing "great resignation" catalyzed transformations across a range of enterprises and shook common enterprise mobility models. In addition to pushing many businesses to optimize operations for fewer staff, fear of contamination propelled leaders to increasingly evaluate 1:1 device sharing models, which could lower the risk of disease spreading between employees. The share of businesses that used a 1:1 model exclusively has increased from past years.
- Rugged devices continue to have a strong presence in enterprise mobility, although consumer grade can be attractive when considering end user satisfaction and BYOD ownership models. Rugged devices are assets to mobile environments where respondents report facing dusty conditions, direct sunlight, extreme vibrations, wet conditions, occasional or frequent dropping of the device, and extreme temperatures. These conditions can put consumer grade devices at risk, even if those devices are used with rugged cases. While standards for consumer grade devices have risen in recent years, making their lower adoption costs attractive, rugged devices continue to have a lower TCO across many front line mobile worker use cases.
- Problems persist with issue identification at service centers. A sizeable share of devices sent to a service center being returned with "no trouble found" (NTF). There remain significant costs for these issues, for which lost mobile worker hours compound with IT service costs, shipping fees, and wait times as devices are rebooted. NTF returns put users in a position of precarity, with no issue resolution that could prevent reoccurrence.

## **KEY STATISTICS AT A GLANCE**



#### Executive Summary

# TCO Models

#### ABOUT THE AUTHORS



Emily is a market research professional within VDC's Enterprise Mobility practice, supporting syndicated research and custom projects. She brings experience integrating new technologies into logistics, sales, and inventory management spaces, and has a research background in the cross-cultural consumption of various products. Emily holds a BA in Anthropology and Gender Studies from the University of Richmond and an MA in Anthropology from SOAS University of London.

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David has more than ten years experience covering the markets for enterprise and government mobility solutions, wireless data communication technologies and automatic data-capture research and consulting. David focuses on identifying the key drivers and enablers in the adoption of mobile and wireless solutions among mobile workers in the extended enterprise. David's consulting and strategic advisory experience is far reaching and includes technology and market opportunity assessments, technology penetration and adoption enablers, partner profiling and development, new product development and M&A due diligence support. David has extensive primary market research management and execution experience to support market sizing and forecasting, total cost of ownership (TCO), comparative product performance evaluation, competitive benchmarking and end user requirements analysis. David is a graduate of Boston University (BSBA).

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#### ABOUT VDC RESEARCH

VDC Research

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consultation, our methodologies consistently provide accurate forecasts and unmatched thought leadership for deeply technical markets. Located in Southborough, Massachusetts, VDC prides itself on its close personal relationships with clients, delivering an attention to detail and a unique perspective that is second to none.

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