The Ultimate Cheatsheet: Smartphone Scanning vs Barcode Scanning

Smartphones are exploding with power. Between the Google Play Store and Apple App Store there are 4.2 million smartphone apps. These apps range from measuring heart rate to controlling your vehicle. But is a smartphone the right choice for barcode scanning?

A smartphone isn't cut out for business-grade barcode scanning. Here's some reasons why:

Slow speed

Short battery life

Not rugged – easy to crack when dropped

No long range scanning – can't scan products on a high shelf

No omnidirectional scanning – time waster

Not capable of scanning damaged or poorly printed barcodes.

Honeywell tells us that: Smartphones for Data Capture

"Although consumer grade devices offer barcode scanning capabilities to look up prices, access data, or access content on a QR code with the simple download of a mobile app, they have limitations that make them unsuitable for many business applications. Although smartphones are capable of scanning and decoding barcodes, they are not designed for use in high-volume, high-velocity scanning applications, or when poor lighting or poorly printed barcodes are involved. Smartphones are not ergonomically designed for worker comfort and ease of use in these types of applications. And their lack of motion tolerance makes scanning even more cumbersome and time consuming."

Let's look at some scenarios where a barcode scanner shines:

1. Storing information in a spreadsheet or database – a smartphone saves information in .csv format
2. More secure – a smartphone with stored information can be taken home (Bring Your Own Device) while a barcode scanner stays at work.
3. Less money – a barcode has one purpose whereas a smartphone can have many purposes. The total cost of ownership for a smartphone can be much more than a simple barcode scanner.
4. More rugged – won't get cracked screens like a smartphone. Cost to repair a scanner is less.
5. Long range scanning

Questions to consider are:

Will you be scanning 1D/2D (including QR codes)?

Will you be scanning hundreds of barcodes or just a few?

Are the barcodes legible or damaged?

How is the lighting where you'll be scanning?

Can the battery last a single shift/day without needing a recharge?

In conclusion, if you want to price check items at a store or scan QR Codes – go with a smartphone. If you have business driven applications, focus on a scanner/reader.