TURNING MOBILE DEVICES INTO ENTERPRISE SCANNING SOLUTIONS

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WHITE PAPER

CORTEXDECODER®

INTEGRATED SOFT-SCANNING

It's pretty clear—nearly everyone relies on mobile phones these days. Companies are aware of employees' familiarity with smartphones and as with many efforts to increase worker productivity, they seek to take advantage of this trend in their own mobile device workflows.[1] Leveraging the benefits of the smartphone in the workplace requires informed decision-making, especially when it comes to evaluating and deploying barcode scanning software apps available on the market today.

FREEMIUM VS. ENTERPRISE-GRADE DECODING ALGORITHM

Interested in adopting modern barcode reading methods, executives naturally turn to the explosive surge of QR code scanning popularized a few years ago by marketing and advertising industries, using third party applications downloaded to iOS®, Android™, and Windows® devices.[2] These applications are available from a few hundred different vendors on App Store®, Google Play™, and Windows Store.[3]

Although these consumer grade apps are offered at little or no charge and are quite ubiquitous, some serious considerations are in order when planning to roll out enterprise solutions like many have discovered the hard way. Consumer grade, or even freemium decoding software is simply not gifted with the intuitive ability 20-years of learning and problem solving delivers. Code's decoding algorithm was designed to outperform no matter the environment. This means it can read any barcode symbology one or hundreds at one time. Our image-based processing compensates for damage, high or low contrast, reflective surfaces, and colored barcodes. No matter the workflow, Code's decoding software (CortexDecoder) will deliver results when, where, and parse the data exactly how you need it. Freemium decoding offerings have their place, when user experience matters and performance a priority, enterprise-grade is the only solution.

CortexDecoder soft-scanning SDK integrates within any application wanting to serve mobile device users a real enterprise decoding solution and is compatible with any operating system, including iOS, Android, Windows and Linux®.

PERFORMANCE- SPEED & SCAN RESPONSE

There are many barcode types or symbologies other than QR Codes in enterprise applications. Ever since 2D barcodes were created to pack thousands of data characters into the same space as a 1D barcode, several 2D barcode symbologies have been introduced to accommodate enterprise workflows. These symbologies feature barcode characteristics such as small physical size and unique shape depending on the asset being labeled. Sometimes barcode types are imposed upon the organization by external suppliers and the company

must conform. At most, free QR Code scanner apps can typically read only QR and possibly a few other 2D types. In addition, those apps are unlikely to offer the ability to configure which symbologies can or cannot be read by the phone. Such versatility would allow the user to optimize scanning performance by toggling off specific unneeded symbologies. CortexDecoder can read all major 1D, 2D, Postal, and direct part mark barcodes as well as offer the flexibility to toggle on/off the symbologies of interest.[4]

Worker productivity requires that an employee scans a barcode swiftly and reliably, without having to re-scan. It becomes extremely frustrating and inefficient if a weak decoding algorithm, or a damaged or poorly printed barcode causes a user to re-scan the same barcode and wait for a successful read. Whereas high mega-pixel image sensors and lens systems were traditionally needed in purpose-built barcode scanners, smartphone camera resolution has finally improved to the point where the real secret to enterprise level performance comes from decoder algorithm design expertise. Code's own PhD-degreed scientists and experts have developed CortexDecoder's algorithms to easily and quickly decode poor quality, damaged, and even curved barcodes.

Barcode scanning has also moved far beyond consumer packaged goods and traditional marketing advertising in terms of the media on which barcodes are printed. Environmental efforts to reduce the dependence on paper products along with the advent of convenient, smartphone-centric lifestyles have stimulated the demand for reading barcodes directly off other smartphone LCD screens. Applications vary, but some familiar examples are: 1) Passing loyalty or coupon information from a smartphone to a point of sale (POS) system, and 2) Presenting an electronic boarding pass at an airline terminal gate. 2D mobile barcode scanning is here to stay, and expected to continue growing.[5]

Enabling a smartphone to read a barcode displayed on another smartphone's screen is no trivial feat. At times the screen may be too reflective or the scanner cannot pick up the contrast between the bars and spaces, no matter how large or bright the image may be. This may result in spotty, inconsistent scanning performance at best.

CLUTTER-FREE SCREENS & SECURITY

An enterprise device needs to be fit for the job at hand, without pop-up ads, banners, logos or irrelevant notifications that block a view of the screen, or confuse or distract an employee. One dissatisfied customer commented on Amazon about a typical QR scanner app: "[Loaded] with ads that keep taking up screen space. I deleted it about ten minutes after downloading it. Will look for something better."[6]

Many times free QR Code software apps also utilize a revenue model that depends on consumers clicking on those ads. Not only that, underlying programs may be running to capture device or usage data, which may not be in the best interest of company security. Enterprise software like CortexDecoder comes with no embedded malware, and supports an end user's goal to get his or her barcode scanning job done efficiently and effectively, and not get distracted.

DEPENDABLE CUSTOMER SUPPORT

When deploying a new-to-company solution, having confidence that technical support—if required—is only a phone call away, is a factor to success. App stores do not discriminate against individuals uploading their QR code scanner apps. These individuals or small job shops typically do not have the capacity to provide reliable customer support or robust technical documentation. Make sure to choose a company that will stand behind their product and give the support necessary to get business applications up and running quickly.

CONCLUSION

For a companies to succeed in deploying smartphone-based barcode scanning software in its workflows, they should ensure that barcode variety, scan speed and performance, clutter-less screens, security, and vendor support are at the top of the list when evaluating options.

In a press release announcing CortexDecoder, Code's CEO and President, remarked: "There are many software-based barcode reading options on the market today, but they lack the performance and reliability that is both expected and required to meet the demands of enterprises. For years, Code has been solving the unique barcode reading challenges of many different applications and leading the way with best-in-class, high-quality products. CortexDecoder continues that tradition, giving our customers a world-class software platform that supports their business needs."[7]

Designed to be flexible and reliable for enterprises, CortexDecoder is the most innovative software-based barcode scanning system, providing unparalleled performance on virtually any platform and operating system. With incredibly fast read times, the ability to read more barcode types, and the versatility to read damaged barcodes, CortexDecoder easily outperforms the competition.

For more information on CortexDecoder for healthcare applications visit codecorp.com/software.

To test drive our tech please feel free to: Download Code's demo app, CortexScan®, from App Store, Google Play, or Windows Store.

For information on software scanning integrations outside of healthcare, visit Code's software brand, TachyonIQ's website at tachyonIQ.com.

Sources

1) Employees Feel the Love When Companies Embrace BYOD (https://www.entrepreneur.com/article/247266)
2) Are QR Codes Thriving or Dying? (http://www.business2community.com/marketing/qr-codes-thriving-dying-01228016#IXF18yREHOfvFjo8.97)
3) Top 14 Things Marketers Need to Know About QR Codes, Item #11: Consumers Need Guidance to Scan Barcodes (https://searchenginewatch.com/sew/how-to/2066777/top-14-things-marketers-need-know-about-qr-codes)
4) CortexDecoder Datasheet, Code https://www.tachyoniq.com/software-solutions/cortexdecoder-2/
5) Mobile Marketing Facts & Statistics - CMO Council (https://www.cmocouncil.org/facts-stats-categories.php?view=all&category=mobile-marketing)
6) Customer Review of ScanLife QR Barcode Reader on Amazon.com (http://www.amazon.com/ScanLife-QR-Code-Barcode-Reader/product-reviews/B004XJNLQO?filterByStar=one_star&pageNumber=1)
7) CortexDecoder Press Release, Code, codecorp.com/press-releases/