Voice Picking
Real Challenges Moving from Windows Mobile Devices

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Moving from Windows Mobile Devices

About three and a half years ago, Microsoft announced their intention of no longer supporting mobile operating systems, mainly on phones, bar code scanners and other handheld devices. This move fostered much consternation and press coverage in the supply chain industry specifically as CE, Microsoft Mobile as well as Windows OS's for tablets were all effected.

Many companies that were operating warehouses in the supply chain were left wondering what their options would be, how they would move their applications to new operating systems and how long would Microsoft take to actually decide to no longer provide support for these mobile operating systems. While these concerns were certainly valid, the movement of many companies to develop a strategy on migrating to another platform took a backseat to daily business issues.

The question of adding voice picking became more difficult as companies that had reviewed it before had to completely reeducate themselves on the platforms, how voice picking would perform, if at all on new OS's, and would it work with their WMS, if they had one.

Three years later, companies are now having to take a hard look at and systemically plan for a move towards Android, or even iOS. Why has it taken the vast majority of companies in the supply chain three years to tackle this issue? Here are the top reasons why.

Rugged mobile devices in the warehouse last for a LOONNGG time

The tablets, handhelds and wearables that operations deploy in the warehouse for mobile application usage are tough. Real tough. Many companies use them for up to 10 years. They last that long. With the cost of these ruggedized devices ranging from 500 to 2500 dollars, the longer they last, the better for the company's bottom line. All of these devices came with Microsoft OS's and who would think that would ever be an issue? That lead to all these companies developing applications on these mobile devices that run on the Microsoft OS. A very sticky application, on a device that can last for ten years.

This model for usage started in the early 2000's so a major shift was received as extremely disruptive. Many companies are and will wait until the last possible moment to squeeze every last drop of productivity and depreciation out of these devices. Unless they leased them, which a lot of companies do. This does provide some flexibility both financially and operationally to move to a new platform. This model still has the same challenge with porting over applications – it needs to be done.

Applications have been optimized and hardened on these Microsoft mobile devices.

The advent of the ruggedized mobile scanning device in the warehouse lead the way for utilizing terminal emulation for application development on these devices. Running a very simple green screen application made it very flexible to make changes, extremely cost effective to purchase and maintain, while providing a very flexible way to manage the devices and the applications that were deployed on them.

With the advent of the move to Android or iOS, shift managers and warehouse managers alike began to get concerned about how their tried and true workflows would move over. The fact is that the standard TE works on newer OS devices as well. Voice picking also works well on these new TE products for Android. The TE companies are providing tools to move the applications over effectively and cleanly. All the companies in the TE ruggedized device market provide these migration tools and also a pathway for a more attractive Graphic User interface, if that is what the customer is inclined to want.

The question each manager must ask is if looking at the screen more, with object buttons, and larger pull-down menus is as streamlined and effective as the flow using the green screen. This takes time to gauge, plus the more graphic the interface, the higher the cost of the software product, its production and deployment.

Looking at Android and voice, should I review or consider a new WMS?

Companies that have put off upgrading or finally taking the plunge and investing in a Warehouse management system are in the majority since Covid-19 hit the supply chain. Whether these companies are still paper driven, tied to an older system or just out growing their current WMS' capabilities, this is the time to take the hard look at how a new or upgraded WMS will assist in keeping up with rocketing demands (as we have just experienced and will again), and provide new and improved workflows for the company's needs now and in the future. One thing everyone has learned through the last few months is that a flexible WMS platform is critical for powerful demand growth, workflow agility and fast, new user training on the floor.

By understanding the benefits of a WMS that fits the needs of your organization, the move to Android devices and new mobile workflow applications becomes an effort that can be done all at the same time. The ability to visualize how this all can interact as a homogeneous system provides benefits today and farther down the road. By implementing voice picking on these new Android devices simultaneously to WMS upgrades/changes, all workers get trained up on everything all at once, for just a single interruptive experience instead of breaking it up in two or three phases. This also gives very usable feedback from frontline workers as to the efficacy of the applications, how to make the voice pick workflow more effective and discover other mobile applications on the warehouse floor that can also benefit from a voice interface.

The Cloud

Just as Microsoft was making their big announcement moving away from supporting ruggedized mobile devices, cloud computing for WMS really started to take off as a viable alternative. Cloud based WMS began proving benefits respective to user and management acceptance, multi-site or multi-application proliferation and offering ease of scalability and deployment for large and small businesses, 3PLs and logistics providers.

The benefits of having a cloud-based WMS are attractive. It allows for consistent processes to be utilized throughout an organization, removes on premise requirements for servers and their maintenance, provides an easy upgrade path for changes to the applications and can be an overall cost savings. One of the challenges evolving to a cloud-based model was the integration of traditional voice picking technologies. This is now not the case, as there are voice solutions that thrive in this environment.

As companies review their current WMS (or looking at their first) for workflow process improvements and data capture efficacy, cloud-based solutions can be a viable alternative to a more traditional, on premise solution. With the advent of automation technology (voice and robotic) and big data analysis becoming very important for extrapolating spectrum wide scenarios for high demand, process improvement and many other variables, the option of having a cloud based WMS partner can help accelerate migration into newer process experimentation and take advantage of best practices that other companies have learned using the same cloud based WMS.

Upgrading Supply Chain Technology

Supply chains worldwide have never received the kind of scrutiny that exists right now. With the Microsoft mobility sun setting, and the need for more impactful and productive workflows, companies are now laser focused on anything that can mitigate the challenges they currently face. The good news is that there are plenty of technology solutions that can fit every size, budget and workflow. WMS solutions, application development and voice picking have all become very agile technologies that can grow and adapt with everchanging landscapes. All the data point to a major upgrading of the supply chain's technology, with every company looking for the right combination of products that can raise productivity, increase worker safety, train new workers up quickly and efficiently, and provide voice on these new, powerful Android devices to continuously improve workflows and accurate data capture.

About AccuSpeechMobile

AccuSpeechMobile's unique, completely device-based solution voice enables and automates Supply Chain operations, including warehouse (WMS, ERP), distribution, field service and EAM applications (mobile inspection, maintenance and repair). AccuSpeechMobile extends the useful life of existing investments and connects to any warehouse management or backend system, allowing clients to rapidly achieve double-digit improvements in workforce productivity, increased accuracy, workforce safety and operational efficiency.

Supply chain, distribution, field services, enterprise asset management, logistics, retail and transportation operations benefit from AccuSpeechMobile's device-based approach, often deploying the voice interface within weeks and demonstrating productivity gains immediately. Leading organizations in industries such as Aerospace, Apparel, Automotive, Consumer Goods, Publishing, Retail, Sporting Goods, Manufacturing, Wholesale and more have voice automated multiple applications, demonstrating positive ROI in under 12 months. The AccuSpeechMobile software solution works with Android, iOS, Windows, TE and Web-based mobile devices. Voice Picking is a common first application for AccuSpeechMobile and additional applications such as packing, cycle count, put away, shipping and receiving are popular candidates for voice interfaces, extending the productivity enhancements across the distribution center.