simPRO
SOFTWARE

White Paper

Mobility in the Service Industry

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What is mobility? Mobile vs Portable

Mobility has evolved rapidly in a very short period of time. While many of us have only become aware of the technology after surfacing in movies since 1968, such as Stanley Kubrick's 2001: A Space Odyssey, we are sometimes surprised to be reminded that the first iPads were only released for sale in 2010.

Much has happened in these few short years with smartphones (and tablets) being adopted by not just office based workforce but also the field. With market analysts forecasting that tablet sales will soon surpass PC sales, it's certainly one of the fastest changes technology has had on the business community.

Mobility could be simply defined as "using technology whilst on the move". This is not the same 'portable' but not 'mobile' technology laptops had previously offered, which meant that once stationary they would need to be powered up and an application would need to capture offline data. As the workforce has been pressured to improve communication and reduce administration, truly mobile platforms are now available to ensure the mobile workforce is constantly in tune with the business and its customers.

Other types of mobility we may be familiar with include wireless technology. These are typically not considered mobile as the range of mobility is restricted to very small areas such as a 30 metre radius for wireless ethernet (WiFi) and a 10 metre radius for a bluetooth platform (Personal Area Network)

Who does this apply to?

Initially we have seen the mobile technology used in the logistics industry with freight, transport and similar verticals, followed by the service industry with basic industry solutions or highly bespoke solutions only available for significant investment values.

As hardware, data and software options have improved it has lowered the difficulty to utilise this technology and provided options for virtually all commercial industries.

Why and when invest in mobility?

There are many reasons to consider implementing a level of mobility in business. In a B2B arena, the main drivers could include:

- Improving Efficiency - do more work with less admin time.
- Improving Accuracy - less mistakes.
- Improving Employee Satisfaction - doing documentation only once.
- Happier Customers - better informed field staff and better levels of information. available to them with vastly reduced delay.
- Better Routing of staff to locations based on their progress throughout the day.
- Analysis of labour and materials used for every job to produce 'real field' data.

Timing for this is important to consider in accordance with the overall business priorities. If the business has a high portion of revenue as a result of field services or if these services are strategically important to the overall business, it should increase the priority for the key business stakeholders to conduct due diligence into mobility and analyse return on investment models. It also makes sense to look at examples of others in your industry to help gauge the best approach for your business.

How are businesses embracing mobility?

Based on the strategic priority it has within the organisation there are a number of factors that can influence the mobility rollout.

Some of the many factors can include:

- Complexity of workflow - will my solution comprehensively meet my current and future needs?
- Does my solution fully integrate with field AND office staff platforms? If not, how much additional administration is required by my staff?
- Are there multiple hardware options available for my field staff? Given that some staff will be more effective on certain variations is this possible or must I choose a best fit option for all?
- Can I offer a BYOD options for staff? BYOD (Bring your own device) has proven to be a viable option for large and small field service organisations with certain conditions. It's important to consider the management of how my software would interact with this option.
- How much training will staff need?
- How will my staff be supported?
- Will my solution work when there is no data connection? As this happens more often that you might think, and often at times when the data needs to be collected most, it's important to remove these inhibitors to ensure staff satisfaction and productivity levels remain high at all times.
- IT Literacy Levels - As mobility operating systems and hardware are becoming far more familiar to field workers with platforms such as iOS, Android and Windows essentially making it it ubiquitous, it is becoming a lower concern. It is however, always helpful to consider that not all staff may view field technology with the same excitement levels.
- If there are multiple divisions in the business, who needs it most or first?
- Should we deploy mobility for our service/maintenance team first and project team later or should we select a pilot sample team from one or more divisions prior to a full rollout for all staff?

What hardware form factor? Phones vs Tablets vs 'Phablets'

As mentioned above there is value in choosing a solution that supports multiple platforms and sizes of screens (form factors).

Smart Phones

Some of the advantages of using the phone style mobility solution is that the applications software and the mobile phone are in a single 'pocket sized' device providing ultimate portability.

Tablets

It's important to consider that some staff will need larger screens to replace A4 sized field paperwork with larger screens near the 10 inch size being far better suited to this.

Phablets

this is a newer term for devices that are essentially large smartphones.

Ideally if your solution can support multiple platforms you can optimise what is best for your service, maintenance and project style workflows, ensuring all staff are sticking to your company's best practice processes.

Rugged Vs Non Rugged?

There are also options for choosing a 'rugged' device. These options are generally available on the Android platform and can include many configurations including an additional mode of data collection such as Barcode scanners and other readers. There is merit in considering the additional investment of a rugged style device. There are also options to protect the hardware by investing in a protective case. In the event a fully rugged solton isn't viable, it's is generally a very good idea to invest the small sum to buy a rugged case.

What software platform? (Operating System)

By a considerable margin the most popular platforms are Android and iOS (Apple), with the Microsoft Mobility Platform Windows 8.0 also gaining good traction.

While there are pros and cons for these three, they all have good options for Mobile Device Management (MDM) and good application support for business use.

While iOS (The Apple platform) is generally considered easier to use, it's slightly restrictive with options and usually more expensive, however the hardware quality is generally considered to be consistently high. It also has the highest number of application options. This could be a good choice for those new to mobility who don't have requirements to stray far from normal use.

Google's Platform, Android, has grown in popularity and is offered by multiple hardware vendors (such as Samsung, Sony, Motorola and many others) which vary in quality features and longevity. Whilst the applications offered may not be as large, all business applications are designed to be available on iOS and Android.

Windows 8.1 works just like your PC and this certainly has some benefits, however that must also be considered as part of your offline strategy and how the mobile software will integrate with the office software. Like android, there are multiple vendors using this platform and you will get what you pay for in terms of speed and quality.

How does it work with simPRO?

Mobility solutions and simPRO have been evolving for the best part of 10 years and is currently used by tens of thousands of users. There has been extensive development done as a result of direct design from Contractors in AU, NZ, UK, USA and other sources.

simPRO Currently offers Multiple Products which support the iOS and Android Platforms.

simPRO Connect is a comprehensive application that works with simPRO Enterprise (the back office component) to provide many functions for field technicians such as job cards, geostamping, parts, safety, photos, notes, ordering, invoicing, in app payment processing and collection, quotes, activities etc

simPRO eForms is used standalone or coupled with simPRO Enterprise, simPRO eForms lets you digitise your existing paper forms for use on tablet devices. Completed forms are submitted electronically to the eForms portal where they are stored securely in the cloud for easy access, anytime. It is a platform that enables the digitisation of paper based forms to be completed on your tablet. The system supports iOS and Android tablets.

Data collection Considerations

It's important to consider what data is collected and how accuracy can be impacted.

When should data be collected?

In terms of timing, industry best practice promotes data collection at the point of origin and entered once only. This ensures that staff do not have the burden of being compelled to 'recall' what happened and then enter the data into the system. Utilising a system that works offline is vital to achieving this as many technicians operate in areas that data is not available thus forcing adoption of additional manual systems to collect this information at the point of origin.

Other workflow impacts to consider with field data being captured at the data source:

1. Speed of invoicing
2. Accuracy of timesheets
3. Accuracy of material and labour costs of jobs
4. Capturing full details for safety in accordance with standards
5. Proof of delivery
6. Adherence to standards & best practice

What data should be collected?

This should be governed by your required workflow and customer requirements however some of the available options to consider could be:

- Travel Details - including time on site and timesheet details
- Services Performed - what happened whilst on site?
- Safety Information - Safe Work Method Statements, Job Safety Assessments, Quality Assurance Checklists or any other standards checklist that needs to be documented.
- Material Management - What costs were incurred? These can be parts used, labour, purchase orders, and adjustment of mobile or other storage device inventory levels.
- Asset Maintenance - if your customer has assets, what did your technician do with them?

How important is it to track stock in the field?

With most service and maintenance companies management of stock can play a big role in the efficiency and profitability of the business. For the longer project style workflows this area can be overlooked as lower priority but it usually still accounts for a large portion of the volatile aspects of the job.

Consider the question: "Am I in the business of buying materials and selling materials?"

Is it worth reviewing the time and motion elements including the cost of inaccurate stock and additional logistics with additional time spent looking for stock that has been misplaced, stolen or inaccurately estimated for?

The appropriate mobility solution should meet your strategic objectives with:

- ensuring costs are correct on jobs
- materials used on jobs are tracked for auditing purposes
- levels of shrinkage are acceptable
- feedback to estimators to constantly refine quoting processes
- Maintenance of most levels of stock in a 'just in time' manner
- Ease of use for field and admin staff

Benefits to your staff with the right Mobility Solution

Humans have been trained on using various forms of writing implements for thousands of years so it's worth considering why there may be some resistance from field staff when considering a digital replacement of the faithful manual system.

Time

It takes less time when using a mobile solution. Yes it may take time to become familiar with a new software package however once it's entered, thats it. It doesn't need to be written again in a summary sheet for the day and or week. We must also consider the time to transport this information: an enterprise grade mobility solution sends the data when in coverage and store when it isn't to send later. This begs the question "why do I need to have the field staff come to the office anymore?"

Job Satisfaction

A few thoughts:

Which of your field staff enjoy being called at the end of the day to communicate all of the job data?

Which of them like to call the office at the end of each job to seek further instructions?

How do your customers feel about your staff taking and making calls while on site 'on the job'?

With a mobility system that communicates regularly phone calls should be an exceptional activity. This typically empowers the field technician to operate throughout the day in a more 'self managed' mode as regulated by the parameters of the system. Naturally office staff are also fed updates throughout the day bypassing the dreaded end of day or worst still 'end of week' timesheets and job cards being deposited on the desk for immediate processing in time for payroll tomorrow.

A mobility solution enables the documentation side of the job to get done as the job unfolds, providing constant feedback to project managers, accounts staff and when required, your customers.

This introduces more options to recognise the efforts of field staff who perform above what is expected. As their individual contribution to the bottom line of the job and your business becomes transparent you can confidently take steps to retrain or reward as appropriate.

Productivity

This varies considerably for most organisations and is dependant on how previous manual systems were, degree that the new system is implemented, and overall effectiveness of the solution itself.

There are many case studies on this aspect and multiple seminars where this aspect is taught and illustrated. In the case of considering a mobility solution for your business it's worth considering what it means for your business right now.

If you add up the time spent with duplicate processes, look at the impact on customer perception given that customers expect lower service level businesses to offer their prices at lower points. What would this mean for your business right now? Then add more staff and customers to the multiplier. Then add more admin with the ever increasing expectation for safety and transparency. How does this picture look for your business? Is this worth a one hour meeting with your accountant and service manager to ballpark rough numbers?

What type of Applications should I use?

Is it important to be able to work offline? Do I need an app or just use the cloud?

For many organisations, we can take a reliable connection to the internet for granted. Of course during those rare moments when it's not working we certainly know about it. For the readers who are in the office most of the time, imagine if your computer was unable to connect several times per day for various periods of time. This is what is can be like for some mobile solutions.

Cloud connections Vs Mobile Applications

If your field staff are in a position where they are unable to predict internet access it's important to understand the difference between entry level mobile solutions and mobile applications that hold local database information.

Many cloud based applications now offer a limited amount of offline capability but for some it's very little or not functional at all. With a full mobile application, the benefit is not just being able to work offline but also the speed at which the information can be managed. As the information is not fed to the device constantly and sometimes at very slow speeds, the technician can operate at the speed of the local device and with the app periodically connecting to the cloud to maintain global data integrity.

How to moderate applications and security?

For many organisations, the use of mobile devices is moving from a personal to a commercial topic and most mobile operating systems offer a vast array of nonwork related options for staff to consider.

This is where the term Mobile Device Management or MDM has been recently introduced to offer a layer of IT administration that can control this aspect. Some of these can control what apps can be used and also what

apps can be updated. There are also options for controlling access to the device in the event of theft or loss to further increase security.

Virtually all mobile solutions now require a secure login however there should be care taken on device security as many applications will remain 'open' once logged in and devices can be set to 'lock' after a period of inactivity to reduce risk of unauthorised use.

Data Usage

For many organisations this cost should be estimated at the time of considering mobility and a company fair use policy should be introduced.

As mentioned earlier some MDM tools can communicate and regulate data usage, however it's common to see spikes in normal usage due to variance in data hungry aspects such as forms and pictures taken on site. For this reason, it's worth considering data pooling from your telco provider. This will assign a pool of data for all users and helps to balance out the heavy users with the light users. However all plans have their limits and for this reason it's worth communicating fair useage expectations to avoid bill shock. Mobile solutions that rely constantly on connected internet can tend to have higher data usage than their application counterparts.