



'Show me the money'

The return on investment from
wireless job dispatch and management

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Introduction

The benefits of mobile business solutions for field service are many and wide reaching. Business drivers such as worker productivity, customer service and cost reduction are all positively influenced and the results flow directly to the bottom line profitability of the business. But wireless mobility comes at a cost and the investment required realizing these benefits can be considerable. Intuitively, a case can easily be made for a wireless investment but the days of technology for technology's sake are over. In today's competitive marketplace a clear return on investment (ROI) must be shown – in short the numbers have got to stack up!

In developing a case for a mobile solution in field service, this white paper discusses the business areas positively influenced by wireless job dispatch applications and the ROI developed. It identifies areas where changes may be required within a company implementing wireless applications to ensure a positive outcome.

Mobility Background

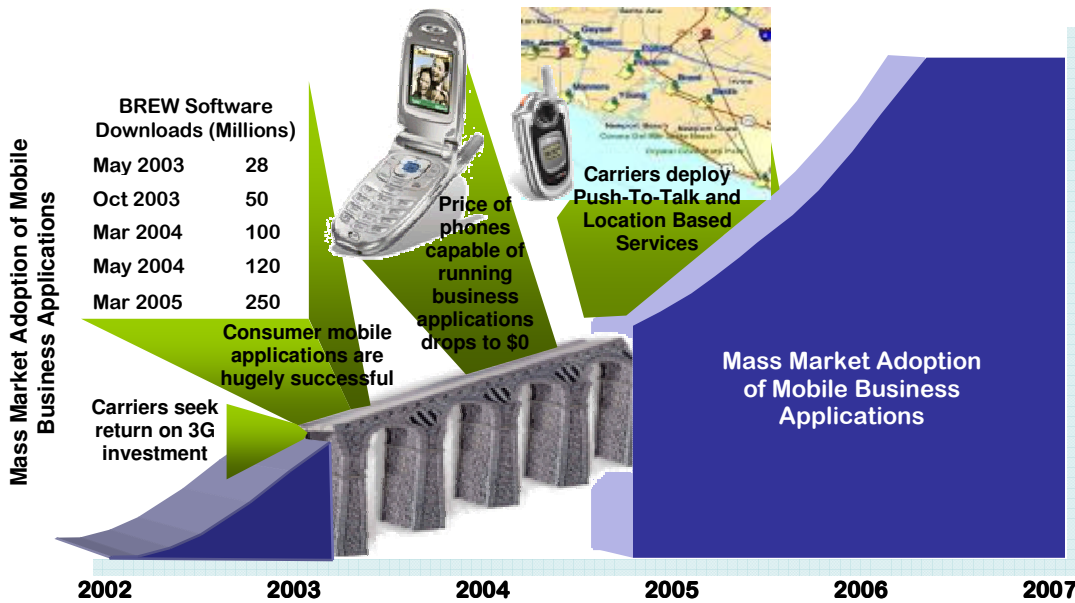
According to a recent study by Accenture, mobile business solutions can dramatically improve a company's operations by bridging a growing gap between on-site employees and remote employees, assets and inventories. Traditional on-site employees enjoy real-time access to enterprise data, which leads to higher productivity, greater efficiency, and improved agility. However, companies are increasingly becoming less traditional. More than ever, employees, assets and inventories are located in remote locations, disconnected from the main office's people and systems. Between them sits the gap that wireless mobility can help close and, in the process, generate measurable business benefits. This trend is fuelling dramatic growth in the uptake of mobile business solutions. Predictions for the US market alone indicate that... 'Over 2 million field service workers will use software solutions that combine wireless data capabilities by 2008.'¹

In the past mobile business solutions have been the domain of the large corporates and have simply been too expensive small to medium sized businesses (SMB). Not any longer. Access Markets International (AMI) Partners, Inc. reports the SMB fraction is expected to lead the market in the near term rising to nearly 16.3 million users in 2006, amounting to a compound annual growth rate of 44%. Robust adoption is projected among SMB's due to the lack of internal implementation bureaucracy, the availability of more turnkey solutions, and increasing recognition of high return on investment, efficiencies and competitive advantage from the deployment of mobile business solutions.

Driving these growth projections are wireless carriers who have made huge investments in wireless data networks. Key factors include:

¹ Mobilizing Field Service – Yankee Group 2002

- Improvements in network coverage, reliability and technology e.g. 3G, Push to Talk, Location Based Services (LBS);
- Device prices and suitability:
 - 2002 - Suitable device for business Application - \$900 PDA,
 - 2004 - Cell phones capable of running business applications – Free with a call plan; and
- Wireless data applications are seen as a way to drive data revenues.



Business Benefits of Mobility

Deploying a mobile business solution is a powerful way for a company to gain competitive advantage. Many of yesterday’s early adopters have become today’s feared market leaders, as they use mobility to build capabilities that further separate themselves from those that have been slow to the game. In addition, changes in the wireless market are converging to promote wireless technologies adoption rates. Key factors include:

- Desire to make mobile workers more accountable,
- Recognition of current inefficiencies,
- Importance of customer service,
- Comfort with use of cell phones, and
- Drive to improve bottom line.

Field Service Issues

Within field service industries a number of attributes make them prime candidates to benefit from a mobile business solution such as wireless job dispatch and

management. Central to this is the fact that managing field service is often difficult to say the least. Poor response times, errors, lost paperwork, time wastage and customer service issues are just a few of the challenges faced. Specifically problems can be identified in the following areas:

- Communicating with and managing mobile workers;
- Data entry and the errors that result from paper-based job management and time/attendance systems;
- Large time gap between work completion and invoicing;
- Managing service level agreements;
- Vehicle costs, cell phone and other communication costs; and
- Maintaining or improving customer service standards.

These issues affect the business in various ways, however they all have one thing in common – they hit where it hurts most – the bottom line!

OK – ‘Show me the Money’

In exploring the ROI available from wireless job dispatch and management, some assumptions have been made with respect to the staff employed and the management of work and field service teams. These assumptions are based on over 20 years of experience in deploying field force solutions and draw heavily on feedback and case studies of customers using the ECONZ Wireless **EService** application.²

An ROI calculator employing financial management tools is used to provide a clear picture of the areas influenced and the return to the business. Areas explored include activity levels, staffing, current expenses and average job charges and costs.

Below is a list of the areas addressed with stated assumptions of the returns used in the ROI Calculator:

- **Productivity** - Worker productivity improvement is the number 1 benefit in terms of ROI. Improvements result from:
 - **Elimination of timesheets and job paperwork** - Client details, time, parts & materials, equipment info and data forms are all completed electronically. Calculated as function of the time saving, average job duration and average job margin.
 - **Infield Productivity** - 5% improvement in productivity of mobile worker. Less time between jobs, fewer returns to base. EService walks worker through the job providing greater consistency, enforcing business rules and improving customer service. Calculated as no. of additional jobs x average gross profit per job. Greater worker visibility allowing the scheduling of additional work.

² www.eservice.econz.com

- **Lower Costs:**
 - **Dispatcher** - 10% reduction in Dispatchers time. EService allows for rapid and efficient assignment of orders to the right mobile worker at the right time. The work flow status of the mobile worker is available to the dispatcher at all times. Savings in job administration, communication costs and rework caused by error and omissions.
 - **Data Entry** - 33% saving of Data Entry person. System reduces requirement for data entry. Errors and duplications are virtually eliminated. Customer and mobile worker queries are quickly and easily handled through up to date information from the system.
 - **Vehicle Expenses** - 10% saving. Eliminated unnecessary returns to base. Optimized dispatch routing.
 - **Inventory Management** – Elimination of 80% of inventory loss (shrinkage) through accurate recording and tracking of inventory consumption.
 - **Non Monetary Returns** – The emphasis of the ROI discussion has been on productivity improvement and cost reduction benefits. A number of other worthy benefits have been ignored due to difficulties in quantifying their financial return to your business. These factors include:
 - **Management decision-making** – strengthened through improved job information, visibility of mobile workers and reporting. More time for strategic, revenue/profit building activities.
 - **Lifestyle for SMB Managers** – improved through reduced time required for worker management, administration and paperwork.
 - **Customer service** – improved through systemized work flow, faster response times and better customer information available both in office and also to the field worker.
 - **Cashflow** - increased through the ability to invoice immediately a job is completed. Job sheets awaiting data entry and invoicing represent cash to a business. Speeding this process up is a significant benefit.

Return on Investment

EService will often produce a very high ROI result. This result is due to two major factors:

- Managing mobile service businesses is difficult and inefficient. EService is designed specifically to address the largest issues facing these businesses. In doing this, EService has the potential to return large productivity and cost saving benefits.
- The hosted, web access model on which EService is offered means that SMBs can enjoy the benefits of wireless job dispatch and management at a small fraction of the costs paid by larger enterprise level companies. The 'no upfront' charges, monthly access fee payment model means users enjoy returns immediately they start to use the application rather than waiting for months or years to recoup their investment.

ROI Example

As an example we have taken a food equipment service company with ten field workers and two back office staff handling; job enquires, job dispatch, data entry and customer billing.

The field service team average 4 jobs per day, 22 days per month and are paid \$25 per hour for a 40 hour week. The average job is billed at \$352.00 and direct costs are \$211.00 giving a gross margin of \$141.00.

Each field worker spends on average 30 minutes per day on job paperwork and timesheets.

Productivity Calculation

Productivity ROI Calculator

This productivity based ROI calculator determines the return that can be achieved with EService considering only worker productivity improvements. Significant cost savings such as data entry and dispatch improvements are ignored. The return is calculated based on:

1. 5% improvement in productivity of mobile worker. Less time between jobs, fewer returns to base. EService walks worker through the job providing greater consistency, enforcing business rules and improving customer service. Calculated as no. of additional jobs x average gross profit per job.
2. Elimination of timesheets and job paperwork. Calculated as a function of the time saving, average job duration and average job margin. Job ticket and timesheet information including client details, time, parts & materials, equipment info and data forms are all completed electronically.

Enter Company Data in yellow cells

Job Information	
On average, how many days do your mobile service team work per month?	20
On average, how many jobs does your mobile service team complete per month?	880
What is your average revenue per job?	\$ 352
What is your average direct cost per job (including direct labor and materials)?	\$ 211
On average, how many non-billable hours are spent per day per mobile worker on items such as job sheets, time sheets, paperwork error resolution etc.?	0.50
Staff Information	
How many mobile service workers do you have?	10
What is their hourly rate of pay?	\$ 25
EService Solution Information	
Verizon Wireless Phone Purchase Cost per unit (\$0 - \$149/phone subject to selection)	\$ 99
EService Application cost per month per worker	\$ 19
VCAST Data Plan	\$ 15
SMS Package	\$ 5
Ongoing cost/worker/month	\$ 39

EService Productivity Improvement Report

Post EService Implementation

Ongoing monthly cost	\$ 390
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Productivity Based Additional Revenue:

Mobile Worker Productivity:	
Infield Improvement	\$ 6,204
Office time/Paperwork Additional Revenue opportunity	\$ 7,755
Total	\$13,959

EService Investment Summary

Per Month

Savings gained	\$13,959
Ongoing monthly net return on investment	\$13,569
% return ongoing	3580%
IRR	3477%

The Internal Rate of Return (IRR) is the return where the present value of the savings equals the present value of the costs associated with the EService implementation. IRR accounts for the 'time-value' of money. That is, \$1 next year is not worth as much as \$1 today.

What Now?

The ROI is there but how do you make sure that you get it? The answer to this question is the same every time... the companies that get the greatest ROI are always the companies that:

- Review their work processes to ensure that they are using best practice job dispatch and management principles'
- Devote senior management time and effort during implementation'
- Appoint a product champion responsible for 'selling' the application internally'
- Make field workers part of the process – help them to understand why the company is doing this and how it will benefit them, and
- Share the return – consider implementing a 'productivity bonus' to reward revenue growth.

About ECONZ Wireless

For more than three decades ECONZ Wireless has maintained its position as a leading developer of innovative and pragmatic wireless solutions. The company specializes in hosted wireless solutions for the SMB market in industries including: field service, construction and professional services. ECONZ Wireless solutions connect mobile workers with their office using simple web interfaces and cell phone based in-field applications. In this way ECONZ Wireless applications are low-cost, accessible, simple to use and easy to set up – in short, ideal for the SMB market. www.econz.com

Products

EService

www.eservice.econz.com

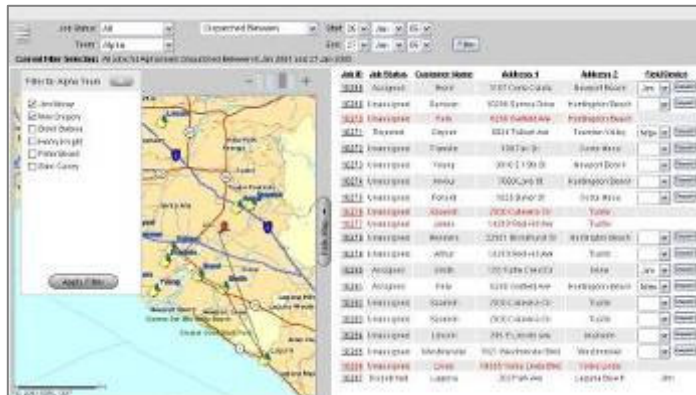
\$18.99/handset/month



EService is a wireless job dispatch and management application for field service companies in industries such as food equipment service, heating and air-conditioning, office equipment maintenance, glass repair, locksmiths, plumbing and IT Services and electrical maintenance. The application consists of a password protected job dispatch and management website that communicates with an ‘in-field’ application running on the mobile worker’s cell-phone.

Key Benefits

- Improves worker productivity;
- Increases customer service through improved response times and better access to job/ customer information;
- Improves cash flow through more timely invoicing;
- Enhances costing and inventory control through accurate recording of parts and labor;
- Reduces administration, data entry and paperwork errors; and
- Improves management decision-making by providing real- time, accurate job information.



Timecard

www.timecard.econz.com

\$9.49/handset/month



Many time and attendance applications rely on access to computers and the internet... fine if you are in the office but what about employees who are mobile? With **Timecard**, employees and mobile professionals can; clock in, clock out, record break times and job categories all directly on their Verizon Wireless phones. No paperwork and no requirement for internet access. All past and present timesheet information is immediately transmitted wirelessly and can be accessed in the office eliminating the need for paperwork and data entry. Managers can view the status of their employees at any time for accurate budgeting and customer service responses.

Key Benefits

- Real time wireless time and attendance tracking;
- Increased productivity by eliminating timesheets and data entry;
- Fewer errors and duplication; and
- More and better information between office and field.



About the Author

Steve Davis is the Chief Marketing Officer for ECONZ Wireless. He specializes in strategic business planning, marketing and sales.

Prior to joining ECONZ Wireless in 2002, Steve was Manager, Marketing and Strategy for Achaeus Ltd in Brisbane, Australia. In this position he assisted over 130 high growth companies to develop strategies for local and global expansion including capital raising.

Steve holds a Masters Degree in Business Administration (MBA) ‘with Distinction’ from Griffith University, Queensland, Australia and a Bachelors Degree in Mechanical Engineering from the University of Auckland, New Zealand.

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