

# "Turn every employee into the eyes and ears of the Revenue Protection Department"

SARPA Conference 2012



### Content

Various initiatives in place to address Revenue Protection,

but sometimes it's **simple ideas** that have a significant effect.

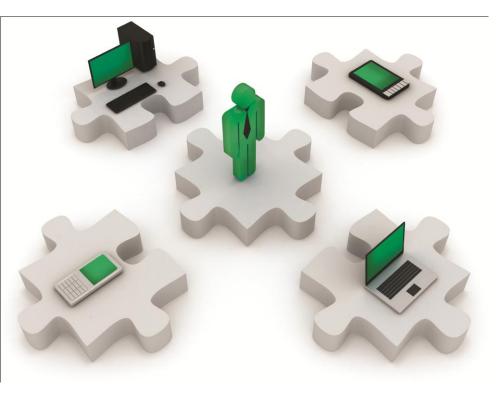
- Workforce management trends
- Implementing WFM systems
- Mobile trends and landscape
- Key aspects to consider for WFM solutions
- An example of a real-time theft detection solution





### **Mobile Workforce Management Trends**

- Client server replaced by web based architecture
  - Cheaper
  - Easier to support
- Choice of hardware/mobile devices
  - Cell phones
  - PDA's
  - Tablets
  - Laptops/net books
- Bring-your-own-device
- Hardware flexibility

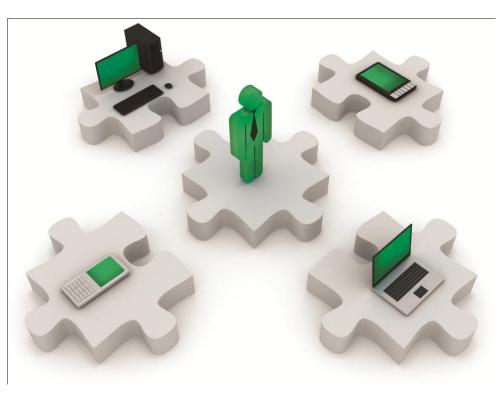




### **Mobile Workforce Management Trends**

- Decreasing costs
  - Hardware
  - Software
  - Connectivity
- Paper based to electronic processes
- Job functions changing due to technology advancements

This means every employee can be a future mobile user...





### **Implementation of WFM Systems**

- "By 2014, close to 90 percent of corporations will implement workforce management systems with mobile device integration. "
- "By 2016, the only wire required for employee work spaces will be the power connector."



**Gartner forecast** 



### **Mobile Trends**

**Global Stats for 2011** 

Total mobile subscriptions

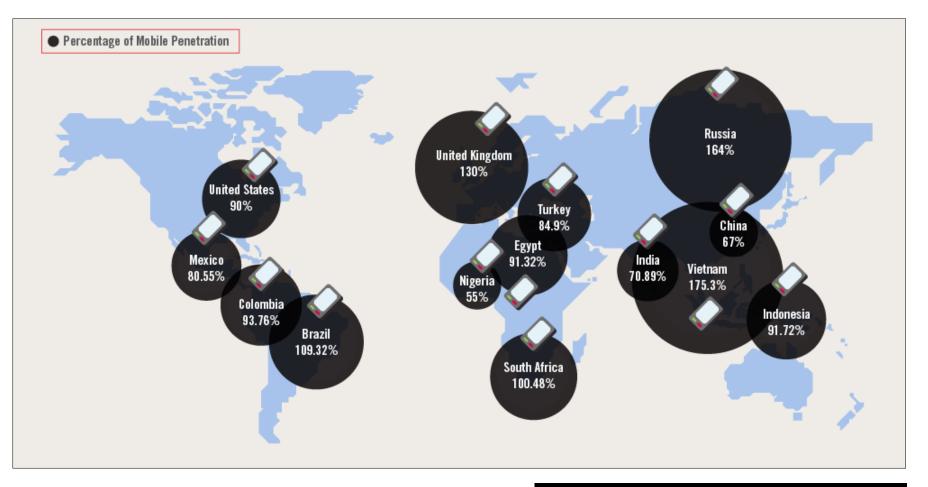
- 6 billion: 87% of population (RSA +-105%)



Source: IDC (Feb 2012), IDU (Nov 2011)



### **Mobile Penetration**



SOURCES: THE ECONOMIST, OECD, EMARKETER, INTERNET WORLD STATS, ITU, ACISION



### **Mobile Trends**

#### **Global Stats for 2011**

#### **Total mobile subscriptions**

- 6 billion: 87% of population (RSA +-105%)

#### Total mobile web users

- 1.2 billion

#### Mobile broadband

- exceeds fixed lines by 2:1



Source: IDC (Feb 2012), IDU (Nov 2011)



### **Mobile Device Sales**

**Global Sales for 2011** 

Smartphone's vs feature phones

- Feature phones: 1,055m
- Smart phones 491m
- = for every customer who bought aSmartphone, 2 bought a feature phone
- In South Africa feature phones account for closer to 85%

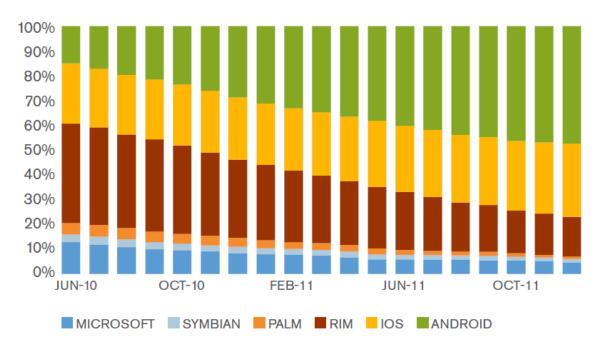


Source: IDC (Feb 2012), IDU (Nov 2011)



### **Mobile Landscape**

U.S. Smartphone market share by OS



Source: comScore MobiLens 2011



### What is this and other research telling us?

- 1. Your staff are already connected with mobile technology
- 2. Beware of the Smartphone / App hype
  - = feature phones dominate and are here to stay

Gartner predicts "Through 2014, fewer than 15% of enterprises will develop employee-facing native mobile applications on Apple iOS or Android."

Mobile workforce management strategies needs to take the above into account





### **Key Aspects to consider with WFM Tools**

#### Define your high level strategy

- Function to perform
- Expected output
- Funding model
  - SAAS hosting or license fees
  - Bespoke development





### **Key Aspects to consider with WFM Tools**

### Define your high level strategy

- Hardware
  - Servers
  - Mobile devices
    - Company owned
    - User owned
    - Usage environment
- Other cost considerations
  - Data connectivity
  - Reimburse for personal devices





### **Key Aspects to consider with WFM Tools**

#### Define your high level strategy

- Speed and flexibility
  - Set-up
  - Maintain/changes
- Device limitations
- Connectivity/coverage





### **Applications for WFM Solutions in Utilities**

- Real-time alerts / theft detection
- Meter installation audits
- Meter audits / meter reads
- Asset management
- Work orders
- Seal lifecycle management





### **Real-Time Alerts**

- Employees become the eyes and ears of the RP dept.
- Send web link to staff phones, no Apps to download
- Report suspicions of theft/tampering and collect evidence
- Real-time alerts to investigation teams
- Reporting dashboards to monitor ongoing status
- Look at incentives to get buy-in

-		
	NOKIA	E52
Demo Question	Types	
Home   Update   Rev	éew i Help i Exit	
Question - Y/N		
Yes     No		
Question - Multiple a	inswer	
Coption 1 Coption 2 Coption 3 Coption 4		
Question - Rating sc	ales	
Very Poor     Poor     Average     Good     Very Good		
Question - Multiple of	hoice	
- Select - m		
Question - Upload p		
CONSIDER FIRE 140 THE	e chosen	
Tones and showing a	and the second second	
_		
6 曲		
		<u> </u>
1 🗤	2 авс	DEF 3
4 бні	] 5 JKL ]	MN0 6
7 pars	<b>8</b> TUV	wxyz 9
* + *	ت ــــ	# & 4



## **Real-Time Alerts**

#### **Benefits:**

- Mechanism for all staff to report suspicions of theft / tampering
- Works on all web enabled mobile platforms
- Dramatically increase the number of field reports
- Collect evidence before it can be destroyed
- Reduce your losses, maximise revenue
- Simple deployment and management
- Cost effective, immediate ROI

	NOKIA	E52
Demo Question	Types	
Home i Update i Rev	iew   Help   Exil	
Question - Y/N • Yes		
<ul> <li>No</li> <li>Question - Multiple a</li> </ul>	nswer	
Option 1     Option 2     Option 3     Option 4		
Question - Rating sc	ales	
Very Poor  Poor  Average  Good  Very Good		
Question - Multiple of	hoice	
- Select -  Question - Upload pl	Address of solid stress directs	
Choose File No file		
		_
		_
命 曲		
-		
مە 1	2 авс	DEF 3
4 сні	] 5 JKL ]	MNO 6
7 PQRS	<b>8</b> TUV	WXYZ 9
* + *	ت ا	+ & 4

		0	
* <b>:</b> * B	lackBerry		
	AT&T	3G 🞜 T11	
Utiviti Theft Detecto	<b>r</b>		
<u> Home   Capture   Update</u>	<u>Review</u>   <u>Help</u>   <u>E</u>	<u>xit</u>	
Capturing as: Surveyor 1			
Report Type • Select Energy Theft Meter Tamper Meter Bypass Faulty Meter Other Address •			
Customer Name			
Meter Type			
Select	V		

=== B(	lackBerry	
	AT&T	3G 🗲 T11
Meter No		
Seal No		
Meter Reading		
Description		
(Describe why you suspe	ect tampering/theft)	
	2	
Photo 1 (2 MB Max Size)		
Choose File No file chos	en	
Photo Comment 1		



### Web portal backend

	Logged in as Touc	hwork SA (Utiviti -	Audits & Field Reports	;) CSV Import	User Assig	n Companie	es Profile	Logout
Jtiviti	Smart Produc	tivity Solutions						?
ASHBOARD	FORMS	BRANDS	JRVEYORS	ATIONS	RIBUTES	ROUTINGS	ADMIN	
tiviti Theft Detector	•				(Da	ta Unfiltered) 🕇	01/10/201	1 to 20/10/2011 🕇
	e New Duplicate	Delete	bile Reporting OR:			Q.		
		ne reportingi <u>ubizooni</u> [ mi						
Form View	Reports Manag	e Distribute Lin	ks Capture Feedba	ack Delete Res	ponses As	sign Dashboards		
Survey Respor	ses	Add	Remove Dashbo	ards		Expand All	Collapse All	wo Columns
Data Captur	ed							
Show 25	▼ entries					Search:		
Captureo	l Surveyor ≎ Det. PD	F Report Typ	Address Custome N	er Meter Met Type No		eter ad Descriptio	Photo Photo 1 Comm	Photo 2
2011-10-19 15:15:11 GMT+2	Surveyor 1 🔍 🦹	Meter Domestic Tamper Formal	10 Main Road JP Smith Rondebosch	Three phae prepayment 2256476	5 3578961 232	42 Description of tamper	Comments of photo	



### Web portal backend

- Client customized set-up
- Real-time reporting
- Customised dashboards
- Full access management & control

<ul> <li>Providence (and an extension)</li> </ul>			pa .	🗤 🗶 🌆 Garghe		
ete 💡 Suvey Thune						
Logger in as Ton	Alterna Station Station	de bevred	CHI Seport User Au	Apr Companies	Partie	Logast
						0
Itiviti Smart Proc	ductivity Solution	15				
			ATTEND ATTEND	T BOUTHER	ADDIN	
Guestor Types				(Data Unfilterit) +	81/81/0911 to 11	/01/2011
Ann (Same tex.) Survey	Jamia D					
Astrony View Description Married	gn Debitane Seite	Captorerfe	talball Delete Ecopore	<ul> <li>Annual Decklorer#</li> </ul>		
And and a second second	er Debilistellerer		ultati Drieto Esquero			
And and a second second	Contract in contract of the local division of the		nifacă Drieto Erspon		ame AB. [Single Cale	ann)
And and a second second	Contract in contract of the local division of the		Erepone Interval Musiker			
4. Teneng S	Add Renne					-
A. Tenenge ja Karleet Responses	) Add Aerona		Proposes Interval Musilier	(Agend All) (Cell	apan AK) (Single Cala	
4. Teneng S	) Add Aerona		Property Internal Munifer Temporen received within Surveyor	(Agand Al) (Cal	apan AK) (Single Cala	
4. Terrings 3 Rached Responses Contract Learning 2010 - 0. 19 (2011) - Terring 2010 - 0. 19 (2011) - Terring	Search Returns 1 Returns 1		Propose Interval Musiker Interval minimum Interval Show 21 - entities	[Agand Al] [Cal Delautes of one anythe Search	que Al (Segle Colo	-
4. Tenneg	Searchi Federate L		Response Internal Massher Importer marined will de Jacomper Shaw (2) (2) estifies (2) accepted (2) and (2)	(Aqueni Ali) ( Call Children of one profile Search Despit ( Action ( ) ) ( Ac	eper Al) (Single Colo 	
4. Tenneg	Search Marcon Frances 1 Persons 1 Persons 2		Propose Interval Musiker Interval minimum Interval Show 21 - entities	[Agand Al] [Cal Delautes of one anythe Search	eper Al) (Single Colo 	
A Tennya a Daftest Enganson 200 de 10 1021 k 100 de 10 k	Search Search Frances ( Passare ( Passare ) Passare (		Response Internal Massher Importer marined will de Jacomper Shaw (2) (2) estifies (2) accepted (2) and (2)	(Aquend Ad) Call (E-silvates of one another Sourch (Sourch (Sourch Sourch ) In (Sourch Sourch ) In	apar AB (Single Cale	
A Tanaga g Extent Engeneral Constant (Constant) (Constant) (Const	Search Marcon Frances 1 Persons 1 Persons 2		Requests Internal Musiker Pagences internal Musiker Storager Storage Contemport	(Aquend Ad) (Call D-silvarius of use avoide Scoreth Innes C. Lanc I. I. Ange C. Lanc I. I. Ange C. Lanc I. I.	apar AB (Single Cale	
A Tenergy	Search Marcon Frances 1 Persons 1 Persons 2		Engenes Interval Masher Tesperan restard a Bail Jacopter Sterry 21 - entire Sterry 21 - Cole - 1 Facurate - 1 State	(Aquend Ad) (Call D-silvarius of use avoide Scoreth Innes C. Lanc I. I. Ange C. Lanc I. I. Ange C. Lanc I. I.	ngane A.S.   Single Cala often a single nga 2 1 kes 2 1 kci	

welles 💡 SaveyThur	O Logged In at Sanchamark SA (Dirau N	Contraction of the Second States of Contraction	pastal Partin	Lapert
Utiviti	Smart Productivity Solut	Doos		e
	O Survey Wizard		(i) and	
ara Guesse Ygen Lans - Comen son	Step 5 - Manage Quer		1,25	HI & 11/95/2011 4
Sarroy Slow. 0	Caltered an advant on	letter -		
Manage Survey	The constraints of the Rest of the Work R	Keting Question Question - Roting Lubio		rould click
on the Previou Butto	Contra Tring (1.0X) Contra Law (2.X) Contra Law (2.X)	Verber, Nei Annye, Inst. Verber 20 1-1-1-1 Inst. Nor Annye Ger Hel Ger Nei Annye Hen Nei Annye Hen Nei Annye Hen		
Provide Survey	Contraction of the second seco	Are list the provide process from the second second second the process of the second second second second before an interaction transmission and second the process from the second second second second the process from the second second second second the process from the second second second second second the process from the second second second second second the process from the second second second second second second the process from the second second second second second second second second the process from the second s		
Citer Provide Tetra	Contractor (M. OX	test of a set of a set of a		
Clear Manual Data	Constant Maringan (@ M		18	
Charlentherh		CT1123		



	anythants care/port///ve-		マック×  値の	
ites 💡 Survey Thus				
	Logged in an Touchmork 3		Cité Serger El Blace Ausign Compos	ins Partie Lugar
			and the second sec	Service Services
tiviti				
CIVILI	Smart Productiv	ity Solutions		
			ALL	
POARS SUIT	175 BRANDS	INTERVITORS 1.00	ATENA APTRIE/IES BOUTINES	ADMIN
Concession of the local division of the loca	ALL DOCUMENTS	ADDRESS ADDRES		
density log . Aut.	Activity Log CSV Impor		Manage Craffs	
			the second s	
impact activity on San	- Bernet			
soldher reasons on one.	ayonate			
mar 100 2 anteine				Search
Tourselasap			Minteger (	Record 1 IP 1
			Account Seven Want Lootal fanoles-	
012-01-3215524:55	Teatweetsk	Manage Sorvey	campaign sound wept phy	196.215.113.179
12-10-1015/2102	Tauchwork58	Manage Survey	Accessed Survey Water   generating egen Accessed Survey Water   generating egen- campager visant step2 phg	194,215113,179
013-03-10:1524-03 012-01-10:1523-03 012-01-10:1523-00			sampaign assard shiplight Accessed Sanity Weard ( (postal flancybor- rampaign oriant) ship2 phy Londot Question Databy	
12-10-1015/2102	Tauchwork58	Manage Survey	comparison sound integration Accessed Survey Visual ( portal fangetion comparison or only physical constant Quantice Data(s) Accessed Survey Visual ( portal fangetion comparison or owned integration fangetion)	196,235313.377
NI 40 40 40 10 15 21 11 NI 40 40 10 15 20 00 NI 40 40 10 15 20 50 NI 40 40 40 15 30 54	Touchwork5& Touchwork5&	Naroge Sorvey Question Law? Outwik	sampaign oliveri vleplight Accessed Sundy Witskil (gotalifangteo- campaign oliveri vlep2 phy Levelet Quarter Deals) Accessed Sundy Witskil (gotalifangteo-	194.25113277 194.25113275 194.25113275 194.255123279
NI-41-1815/2111 NI-46-1915/2648 NI-41-1815/2658 NI-41-1815/2658 NI-41-1815/3658 NI-41-1815/3058	Touchwold58 Teuchwold58 Touchwold58	Manage Sorvey Quadran Land Ontario Manage Survey	Learning and even shared state Account Science (Science) Science and Lowing Quertier Daniel Lowing Quertier Daniel Account Science (Wash   Quertier Daniel Lowing County (Wash   Quertie	194,215,113,179 196,215,113,179 196,215,113,179
NI -0-19 15 2111 NI -0-19 15 2019 NI -0-19 15 209 NI -0-19 15 200 NI -0-19 15	Toychwold58 Towhwold58 Toychwold58 Toychwold58 Toychwold58 Toychweld58	Nange Sovey Quarties Land Outsile Nange Sovey Mange Sovey Lagen Lagen	semper neuron keyd yn Accosod Saney (Nosel (polaf Neu Doo Carsend Saney (Nosel (polaf Neu Doo Carsend Control Const (polaf Neuron Const Accosod Saney (Nosel (polaf Neu Doo Carsend Saney (Sane) (polaf Neu Saney (Saney (Sane) (polaf Neu Saney (Saney (Sane) (polaf Neu Saney (Saney (Sane) (polaf Neu Saney (Saney (San	194,235,113,179 196,235,113,179 196,235,113,179 196,235,113,179 196,235,113,179 41,325,103,09
NO -01 -10 15 (21.0) NO -01 -10 15 (20.0) NO -01 -10 15 (20.0) NO -01 -10 15 (20.0) NO -01 -10 15 (20.0) NO -01 (20.0) NO -01 (20.0) NO -01 (20.0) NO -01 (20.0	Tojchwolifski Teichwolifski Toschwolifski Teichwolifski Teichwolifski Teichwolifski	Nanoga Survey Quantizes Land Outside Managa Survey Managa Survey Larges	szenegin solari kejel jele Account Saviny (Kasal) (postal Kingsbo- remagen solari kejel jele Saving (Saving Kings) (postal Kingsbo- remagen solari kejel jele Account (saving Kings) (postal Kingsbo- changen solari kejel jele Account (saving Kingsbo- changen solari kejel jele Saving (kingsbo- kangel solari kejel jele Saving (kingsbor King) (	196.05311137 196.05311137 196.05311317 196.05311317 196.05311117 196.053103177
NO -01 -10 15 2010 NO -01 -10 15 2040 NO -01 -10 15 2040 NO -01 -10 15 2045 NO -01 -10 15 2045 NO -01 -10 15 2045 NO -01 -10 20 2045 NO -01 -10 -10 2045 NO -01 -10 -10 2045 NO -01 -10 -10 -10 -10 -10 -10 -10 -10 -10	Toychwold58 Towhwold58 Toychwold58 Toychwold58 Toychwold58 Toychweld58	Nange Sovey Quarties Land Outsile Nange Sovey Mange Sovey Lagen Lagen	semper neuron keyd yn Accosod Saney Wasel (polaf Neu Doo Accosod Saney Wasel (polaf Neu Doo Lawer (Dontine Dawin) Accosod Saney Wasel (polaf Neu Doo Accosod Saney Wasel) Accosod Saney Wasel Accosod Saney Marel (polaf Neu Doo Accosod Saney Marel (polaf Neu Doo Care of Neuron Saney Saney Sanewaldy Ingel An	194.235123377 194.235213377 194.235213377 194.255213377 194.2552337 45.255230 65.25223030 65.25223030
NO -01 -10 15 2010 NO -01 -10 15 2040 NO -01 -10 15 2040 NO -01 -10 15 2045 NO -01 -10 15 2045 NO -01 -10 15 2045 NO -01 -10 20 2045 NO -01 -10 -10 2045 NO -01 -10 -10 2045 NO -01 -10 -10 -10 -10 -10 -10 -10 -10 -10	Tojchwolifski Teichwolifski Toschwolifski Teichwolifski Teichwolifski Teichwolifski	Naroge Sorrey Question Land Ottack Naroge Sorrey Legen Legen Question Land Ottack Question Land Ottack	szenegin solari kejel jele Account Saviny (Kasal) (postal Kingsbo- remagen solari kejel jele Saving (Saving Kings) (postal Kingsbo- remagen solari kejel jele Account (saving Kings) (postal Kingsbo- changen solari kejel jele Account (saving Kingsbo- changen solari kejel jele Saving (kingsbo- kangel solari kejel jele Saving (kingsbor King) (	194,255,113,377 196,255,113,375 196,255,113,375 196,255,113,375 196,255,255,08 6,257,255,08 6,257,255,08
NI -0 -10 15 2143 NI -0 -10 15 2040 NI -0 -10 15 2059 NI -0 -10 15 2059 NI -0 -10 15 15 00 NI -0 -10 15 15 00 NI -0 -10 15 05 05 NI -0 -10 15 05 05 NI -0 -10 05 AL	Topchwold58 Textbuold58 Toxchwold58 Textbuold58 Textbuold58 Textbuold58 Textbuold58	Manage Survey Quarters Land Denils Manage Survey Manage Survey Largen Largen Quarters Lood Datable Quarters Lood Datable	semanyo wani kelujah Access Saviy Yasal ( postifikojobi- empere variet kejo jak Access Saviy Yasal) ( postifikojobi- empere variet kejo jak Access Saviy Yasal) ( postifikojobi- empere variet kojo jak Access Kaviy Yikar) ( postifikojobi- empere kajo jakojo jakojobi Access Kavija Yikar) ( postifikojobi- remenjar vatici kojo jak Access Kavija Japol na Ladel ( postori kaji ) Ladel ( postori kaji )	194.235123377 194.235213377 194.235213377 194.255213377 194.2552337 45.255230 65.25223030 65.25223030
91-91-10152111 81-91-1015218	Taychood53 Taychood54 Taychood54 Taychood54 Taychood54 Taychood54 Taychood54 Taychood54 Taychood54 Taychood54 Taychood54 Taychood54	Manage Survey Question Last Databa Manage Survey Manage Survey Legnol Question Lost Databa Question Lost Databa Question Lost Databa	Exemption sound head phe According Sawly (Savet) (a postelling be- exemption - sound head phe According Savety (Savet) (appendix Recycles- consequences) (Savety (Savet) (appendix Recycles- consequences) (Savety (Savet) (appendix Recycles- consequences) (Savety (Savet) (Savets Recycles- consequences) (Savety (Savet) (Savets Recycles- consequences) (Savety (Savets)) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Savets) (Save	194.255111.177 194.255111.379 194.255113.379 194.255113.173 194.255113.173 194.255113.173 194.2522.258 61.2122.258 61.2122.258 61.2122.258
102-01-02-02-02 102-02-02-02-02 102-02-02-02-02 102-02-02-02-02 102-02-02-02-02 102-02-02-02-02 102-02-02-02-02 102-02-02 102-02 102-02-02 102-	Toychoodda Toychoodda Toychoodda Toychoodda Toychoodda Toychoodda Toychoodda Toychoodda Toychoodda Toychoodda Toychodda Toychodda	Mange Survey Quarties Lust Datalie Mange Survey Login Login Quarties Lust Datalie Quarties Lust Datalie Quarties Lust Datalie Quarties Lust Datalie Quarties Lust Datalie	energies name keel aler Accounts Suey Notell (post-finisphile energies name keel aler Lawel Quartie Control Accounts Suey Notell (post-finisphile energies name keel aler Accounts (suey Notel) (post-finisphile energies name keel aler Samound) types fis Lawel Quarties Ontell Lawel Quarties Ontell Lawel Quarties Ontell Lawel Quarties Ontell Lawel Quarties Ontell	194,2351113377 194,235111377 194,235111377 194,235111377 194,235111377 194,235113177 194,235111377 194,23511177 194,2351177 194,23551177 194,23555557 10









### **In Conclusion**

- 1. Technology is constantly changing
- 2. Mobility in the workforce is growing
- 3. New cost effective mobile solutions are offering 'real' benefits

From a RP perspective, the challenge is to bring these elements together in a way that offers maximum ROI with minimum effort and complexity



Thank-you

# **Any Questions?**

john.kabalin@touchwork.com Tel: 021 700 4300

