Going Mobile... Mobile Solutions

STAYING LEAN WITH INFORMATION ‘ON THE GO’

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What’s driving the pace of change today?

Continuous cloud services

Consumer-driven experiences
Social mobility

Mobile apps were downloaded in 2012

91% of organizations spent money on mobile devices in 2012

In 2012, mobile devices outpaced PCs by more than 2:1 and generated more revenue than PCs for the first time

85 BILLION mobile apps were downloaded in 2012

Data security concerns

Social

Social networking now follows not just people but also appliances, devices and products

1/2 of companies used internal social network apps in 2012

Cloud

>80% of new apps in 2012 were distributed/deployed on clouds

The strategic focus in the cloud shifted in 2012

from infrastructure to application platforms

Big data

49% of CIOs rank BI as the top project priority for 2012

Total digital content grew 48% from 2011

2.7 zettabytes in 2012

2/3 of mobile apps developed in 2012 integrated with analytics offerings

32% of businesses were likely to invest in BI and analytics in 2012

34% of CIOs say technology as a service (cloud) will have the most profound effect on the CIO role in the future

Technology megatrends
Going Mobile - Agenda

• Getting the Right Information to Right Person
• Mobile Revolution
• Applications for Mobile…
  • #1 Reporting – SmartGlance
  • #2 Workforce Management – IntelaTrac
  • #3 Workflow – Mobile Workflow Client
  • #4 Process Visualization – HMI on an iPad
  • #5 Real-time Alarms – Mobile 911
  • #6 GIS on your iOS (or Droid) – Mobile GIS
• . . . And wait, there’s more! Fun Applications – for Work!
We All Need Information to Do our Jobs
How do you provide mobile workers with the right information at the right time?
Facts...

75% of business users impacted by mobility

1/5 of tablets used in business in 2013

147.2 Million Tablets in business in 2015 – 50%

11,000 iPads used by United / Continental Airlines pilots on board

Tablet Sales grew 78% in 2012

Sources: Gartner, ABI Research, Forrester, Frost & Sullivan, Others
So Let’s...
Mobile Applications

Mobile Applications Provide:
The **Right Information**
At the **Right Time**
To the **Right Person**
MOBILE APPLICATION #1

Mobile Reporting and Notification

SMARTGLANCE
Mobile Reporting

✓ Historians
✓ Alarm DB
✓ HMI
✓ MES
✓ CEM
✓ CMMS
✓ IntelaTrac
✓ Well Field
✓ ‘Your Database’

Mobile Reporting Connector
Send real time data from various products to SmartGlance

SmartGlance
Real Time Mobile Dashboards
Real-time access to critical KPIs and process data via smartphones and tablets.
**Key Features**

**Reports** – Critical Data at Your Fingertips - Real time and historical

**Automatic Data Updates**... Data always up-to-date

**Powerful Analysis Tools:** Line Charts, Bar Charts, Pie Charts

**Compare** time frames, factories, stores, machines, areas, teams

**Zoom, Pinpoint, and Analyze:**

**Share** findings with your team

**Drill down** to pinpoint a problem

**Sort, Filter & Freeze** options for excel like analytics
Supports All Smart Phones Platforms

**Apple Devices**
- iPhone
- iPod Touch - all versions
- iPad
- Multiple language support – English, French, Spanish, German, Italian, Chinese & Japanese

**BlackBerry Devices**
- Supports both Touch and Non Touch models
- Multiple language support – BlackBerry Playbook English, French, Spanish, German & Italian

**Android Phones**

**Windows Phone Devices**
Security:
Similar to online banks and HR/Payroll systems

• **Authentication:**
  - Access only to registered and authenticated users
  - Each communication message has built-in authentication

• **Authorization:**
  - Mobile level: login and password to start the app
  - Report level: data available only to the users authorized within the report

• **Encryption:**
  - Full encryption of data
  - HTTPS communication in and out of hosted server
  - Verisign Thawte Certified
New Data Notifications

Receive a banner or an alert notification when a new report or data is updated.

It is a great reminder to know when new data or report comes up.

Allows to open the SmartGlance app with just a touch on the alert.
Build your own alerts

‘My Alerts’

- You can generate your own Alerts
- You can share your Alerts with another user
- Subscribe to new Alerts
Try it for yourself. . .for free!

✔️ Download and Install Free SmartGlance Phone App
✔️ Connect to ‘Demo Reports’
✔️ Show it off 😊
MOBILE APPLICATION #2

Workforce Management

INTELATRAC
Field Operators

Fewer and fewer

Wearing more hats

Turnover, experience levels

Need tools to drive higher effectiveness
IntelaTrac – A Tool for Improving Operator Effectiveness

- Operator Rounds – Data Collection
- Equipment Inspections
- Health, Safety and Environmental (HSE) Rounds
- Security Rounds
- Built-in Contingency Actions
- Projects & Turnarounds – status tracking & procedure enforcement
- Quality Assurance – Manual data sampling
IntelaTrac

System Administration
- User Administration, Device Management
- System & Data Center Management

Super Users
- Procedures Versioning Scheduling

Mobile Workers
- Operator Rounds Data Collection
- Work Requests

Management
- Minutes not hours, equipment saved
- Exception Reports
- Process/Performance KPI’s
- Email Notifications

Supervisors
- Round/Route Approval Performance
- Monitoring Exception Management
- Shift Handover/Logs

Enterprise Integration
- CMMS / Reliability
- WW, OSI PI, AspenTech
- Avantis, Maximo, Hansen

Operations Management
IntelaTrac
Drives Operational Consistency
• Rounds & Dynamic Procedures
• Capture and spread operational knowledge
Gain Better Insights on All Assets
• Data Collection on “Stranded” Assets
• Immediate Feedback (data history)
Leverage Operators in Reliability Efforts
Helps Managers Manage Better (w/ data)
    Helps us manage ourselves better!
Helps Ensure Regulatory Compliance
Decisions on the Go

MOBILE WORKFLOW

MOBILE APPLICATION #3
**WORK TASKS** App, *Workflow on the Go*

**Most Plant Workers are Mobile**
- Operators, Managers, Engineers, Technicians, Maintenance Workers, Lab Workers

**Work Tasks** mobile app (iPhone & iPad)
- Monitor & Execute assigned work tasks
- Great tool for managers (meetings, travel, home)
- Keeps workflows moving. Not waiting for anyone.
- Reduces delays, particularly management approvals.
Work Tasks - Key Capabilities

- View and Act on work items from your iPhone or iPad, anywhere
- Search for specific work items
- View work items based on categories
- Flag work items based on importance
- View work items even in offline mode
- Number of pending tasks pushed to mobile devices and displayed on Work Tasks icon
Work Tasks – Key Advantages

Helps Accelerate Workflows
• Less waiting for someone to approve a task

Keep Track of Critical Workflows
• List of workflows on your phone

Helps You Manage Better
• Helps you identify workflow bottlenecks
MOBILE APPLICATION #4

Mobile Real-Time HMI
HMI on Mobile Hardware Platforms

- Keep mobile operators fully informed of ongoing processes
- Allows remote or mobile intervention
  - Full functionality
  - Secure access
- Runs on any mobile device that supports Microsoft Remote Desktop Services (aka Terminal Services)
- Access Anywhere with HTML5 RDP Client (Any device with a browser)
- Consumes a Terminal Services Session License
Operator Use Case

- The Field Operator can see the state of an equipment then operate it using his SCADA HMI on a Tablet
- He can enter information from where he is without having to move to a different place (better reliability of data)
- He can get access to the **right information in real-time** even when he is close to the machine (like a downtime reason or an alarm)
How does it work

- Connectivity achieved through Remote Desktop Sessions
- Secure access using VPN
- Access through WiFi and or 3G/4G
- Reduces the need for multiple panels in warehouse, packaging, bottling or in geographically dispersed facilities in Water, Oil & Gas, Power
MOBILE APPLICATION #5

Real Time Alarms

• Ties into your SCADA system

• Brings alarms right to your Phone or Tablet where they can be acknowledged.

• Can use in Conjunction with a PanelView also!

• www.specterinstruments.com
MOBILE APPLICATION #6

Mobile GIS (Global Information Systems)

- Extend the reach of your GIS Systems
- Increase productivity and accuracy by updating your GIS in the field
- Most GIS Vendors support most devices
What is your Water Footprint?

‘WaterPrint’

• Calculate your daily Water Usage
• How much water does it take to ___?___
• iPhone Only
• www.waterprint.net
MOBILE (fun) APPLICATION

Fingers hurt because of all of those Apps?

‘AcheBreak’

• Repetitive Strain Injury (RSI) App
• Cartoon characters help relieve sore muscles
• Take a Break!
• www.achebreak.com
Water versus ‘Apps’

According to a 2013 Mobile App Behavior study by Apigee, 85% of the respondents said they would rather go without Water than going without their Mobile Apps.

Wow, Really?
Summary

• Mobile Technology is Here to Stay
  • Smartphones, tablets, rugged handheld computers
• The market delivers a host of mature, mobile solutions
  • Mobile Reporting
  • Mobile Workforce
  • Mobile HMI & Alarms
  • Mobile GIS
  • Mobile ‘everything’!
• The Right Information to the Right Person at the Right Time

• Questions? Joe.Finn@WonderwareMidwest.com
More on SCADA

Security

- $$$Millions$$ being spent to keep SCADA Safe
  - But, must stay quiet on all being done
- 3rd Party Companies being paid to hack into ‘our’ software
- ICS-CERT – Emergency Response Teams
More on SCADA

PLC Training

• ‘PLC Guide’ (Others available)
• Basic concepts of PLC Programming
• FREE
More on SCADA

SCADA-Aware

- Alarm Notification – Guaranteed Delivery
- Can deliver to person ‘closest to alarm’
- You’ll pay more, but... Guaranteed delivery!
- All Phones
Demonstration

SmartGlance

WaterPrint
Gone Mobile