

## The Paradigm Shift

### Paradigm Analysis

“Perhaps the greatest barrier to a paradigm shift, in some cases, is the reality of paradigm paralysis: the inability or refusal to see beyond the current models of thinking.” *wikipedia*



### Mobile Device Management

As technologies mature over time, the cycle of change can completely alter your perspective and make the approaches of the past look naïve.

To date, Enterprise Mobility has been driven by new technology- handsets, wireless networks, operating systems, specialised applications. Unfortunately this technology drive has left behind the key design principle - user satisfaction.

The result today is complex configurations, deployment and support routines. Enterprise mobility solution require significant technical expertise and dependencies to manage different and complex software together with the need for dedicated resources for testing, maintaining and resolving day to day problems.

Complex project specification, set up and deployment requirements are linked to specialist software, servers and the need for ongoing updates and maintenance and we are just starting to understand the need for remote management, security and integration!

It reminds us of the mid 90's experience with the web and the user frustrations and obligations that were required at that time.

Every operating system and IT mobility vendor is promoting software with add on features and functionality as device hardware delivers more memory and storage capability at an attractive cost.

- Is adding complexity improving the result?
- Why is there a need for so much specialised management?
- Are wireless networks capable of handling these increasing software overheads?
- Why not avoid the causes of poor or unreliable performance from the start?

It is no wonder that user confidence and satisfaction is in jeopardy.



## The Paradigm Shift

### Paradigm Analysis

“Everybody gets so much information all day long that they lose their common sense.”

*Gertrude Stein*



### Why did we get into this situation?

Mobile hardware companies are under constant pressure to build lower cost devices. This pressure results in a wide and changing range of terminal types with different chip sets and drivers. Hardware companies can only test so much and certainly not a full set of software normally deployed in the real world. Hardware companies also out source speciality components in particular communications modules so quality is again limited. Hardware manufacturers struggle with testing applications over the variety of wireless network types and different locations and in a real world mobile situation.

Software companies, on the other hand, are driven by adding functionality. This influence has created a range of specialised, complex applications and in particular the focus on web based development. Web developers are used to significant amounts of resources and fixed networks based upon faster and thicker pipes.

Wireless networks are different and require a different approach. Effective voice use gave a false basis of confidence - transmitting data is a completely different mechanism. Effective mobile use is directly related to less complexity. Users are not technical nor do they work at desks where problems can be observed, captured and repeated.

Most mobile problems also disappear when the user comes in to report them so problems are difficult to diagnose and resolve so we, in turn, add more complexity to get on top of the situation. Studies are determining that ‘mobile usability’ is an oxymoron. Download delays, awkward input, mis-designed software together with poor network signals are impacting user satisfaction. We can not sincerely expect users to perform complex security certificate downloads as a proper way to enable mobile security - can we?

Imagine having to ‘wipe clean’ your PC every time you had a problem? What about needing to have several spare PCs to swap to when yours failed? As a case in point smart phones are now estimated to be 4 times most costly to support than previous generations of phones. This picture is getting pretty scary - add the potential security issues related to mobile web applications and we may have a terrible result.



## The Paradigm Shift

### Paradigm Analysis

"I believe that if you show people the problems and you show them the solutions they will be moved to act." *Bill Gates*

### From user obligation to user empowerment

Building user trust and dependence on effective use of mobile data has a proven business case.

Responding to customer demands with accurate, real time information has intuitive attraction.

But for most companies the resources required for success are out of reach. More and more specialised software scares them away. These are the companies that need to engage in most projects as end to end collaboration and data sharing is required.

The reality is that IT systems can do the data processing, storage, reporting and analysis required to support more effective mobile data usage.

We believe that mobile data volumes will increase with more effective use - smaller amounts of data, more often to support more interaction, knowledge and responsiveness.

This view is why SMS surprised the industry in take up - usability. But of course SMS is inherently unable to transmit more than just 160 characters of text.



## The Paradigm Shift

### Paradigm Analysis

“Why do young people refuse to use email and see it as old fashioned?” *Anon*



### Recommendations

- Avoid the requirement to sync data. - it's directly tied to user obligation and risk
- Avoid having to add layers of software. Complexity adds to cost and maintenance
- Communicate small amounts of data with understanding of IP networks
- Don't get drawn into being good at problem resolution - avoid it

The end game is software that requires no maintenance and is optimised to communicate data on wireless networks with built-in security, authentication and performance management that just works!

Device companies would find it easy and low cost to embed onto ROM. The result would be a breakthrough so logical that people will not believe they dealt with so much complexity as they do today - similar to what we thought in the first years of the web.

As effective and efficient mobile usage will be tied to organisational productivity and performance as well as employee satisfaction, knowledge and decision making, it pays to understand the paradigm shift required.

The mobile maturity model requires a shift from user obligation to user empowerment.

More power to the users - they deserve reliable, dependable experience and will demand it.

Especially the new generation of users that even reject using email!

Their orientation to technology is that it should be useful, used and forgotten.

The system should take care of the rest - why should they take on unnecessary burdens.

This is the Paradigm shift coming and there is no turning back.

