

Enabling “Mobile First” Futures with SharePoint

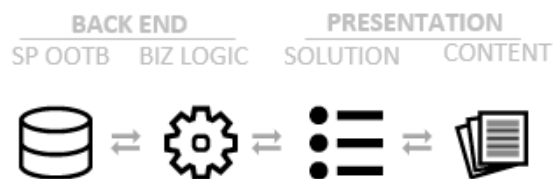
The advent of smart phones and tablets with their functionality, ease of use and ubiquity means that organisations have new opportunities to “make work better”.

This paper outlines our take on the options and what a “Mobile First Solutions Framework” might look like.

SharePoint for mobile: the key dilemma

Content managed on SharePoint server is acted on by business logic built into SharePoint (e.g version control, approval workflow, security).

This then gets expressed in “solutions” – page, list, library views that then expose the content itself to the user:



For ‘mobile first’, in anything smaller than a reasonable laptop, out of the box (OOTB) presentation is unsatisfactory for enterprise use. Therefore we need to use alternate tactics to get what we need from SharePoint.

SharePoint’s Back End: The range of functionality and the integration potential of SharePoint for ECM is unparalleled. Other systems may be better on some aspects but the sheer range, scope and depth of SharePoint gives enterprises a full range of opportunities to embrace a digital future.

SharePoint’s Presentation: The look and feel of SharePoint, designed primarily for PC size screens and mouse interaction, leaves a lot to be desired if you are not using these primary devices. This is a problem because of the widespread use of phones and tablets. Staff now have expectations of how they should be able to easily to interact with key systems.

the Mobile Email Workflow Cloud Roadshow

Many organisations have moved to or enhanced their digital workplaces this year.

This roadshow will showcase new solutions and pragmatic approaches that “make work better”. Come and be inspired!

CHC: 10th Nov, 2-4pm
WLG: 11th Nov, 2-4pm
AKL: 12th Nov, 9-11am

Reserve your seat now
Email kaye@informationleadership.com



The four tactics you can use

| TACTIC | DESCRIPTION & EXAMPLES | STRENGTHS & WEAKNESSES |
|----------------|---|---|
| OOTB | Stay with out of the box, and accepting “you get what you get and you don’t get upset” | <ul style="list-style-type: none"> + Reliability + Easy to upgrade + Uniformity + A good fit for “back end” needs - Unsuitable for practical use on screens smaller than a reasonable laptop - At times even for PC screens poor usability & fit to business needs - Unlikely to get user adoption - Lost opportunities and enterprises don’t gain the momentum as the culture never gets any further than tolerating “my father’s intranet” style of clunkiness |
| TUNED | <p>Enhancing the functionality or ease of use, at a page level through scripts, CSS etc. Potentially one off back end changes as well.</p> <p>For mobile this can include fluid UI frameworks like Twitter Bootstrap that make certain SharePoint pages responsive. See www.spsdemo.com as an example of this, by adjusting your window width</p> | <ul style="list-style-type: none"> + Reasonably easy to do on one off pages + provides cost effective and internal empowerment + delivers responsive pages or pages that are rendered based on the screen size - Extensive use creates a legacy nightmare, especially at SharePoint version upgrade time - Difficult but not impossible to standardise and manage these as they are at a page level |
| TOOLS | <p>Software that integrates into the SharePoint environment as “features” that can be turned on or off as needed. Examples are the various iWorkplace tools, Bamboo etc</p> <p>This also includes software run on PCs /smart devices that provide the interface between the user and the SharePoint backend. Examples include: Harmonie and Colligo apps for smart devices that expose lists and libraries on and offline; Nintex forms that are exposed via browsers</p> | <ul style="list-style-type: none"> + Empowers BA’s and users to get more from SharePoint through configuration without reference back to software development + This then brings innovation into BAU for a team, with low costs of making change - Reliability and fit with SharePoint can create issues - Usually extra licence fees to pay, some of them per user or per device |
| BESPOKE | <p>Software that often replaces SharePoint look and feel as well as native functionality. This could include an HR “app” that takes data to/from an HR system and SharePoint, or a solution that turns SharePoint into a functioning ERP system.</p> <p>It also includes one off apps that are simple but provide a high level of ease of use and look/feel. An example is the coffee app that messages a Koru member as they enter a lounge</p> | <ul style="list-style-type: none"> + Close to the current business need as the requirements can be fully defined and then adhered to in the development process + Excellent for one off complex processes - Expensive, risky and time consuming to develop - Locks the organisation into the “best practice” at time of requirements. However as needs change it can be hard and expensive to get changes needed, especially if the vendor has commercialised it into a product they now sell others - Makes it harder for business improvement to be a BAU activity, as the solution is effectively locked down |

Creating your “Mobile First Solution” Framework

The preceding table shows there is no one right answer here. What does work in practice is a mix of the above, with straightforward rules used within the enterprise to figure out which approach is applicable to a particular need.

This can be built into solution “design patterns” to standardise and simplify the design, build, training and BAU support of solutions.

As an example, let’s consider how we might record and track cleaning related non-compliance in commercial buildings. The need is to allow staff to photograph and record narrative about something they have found including key metadata (e.g. building, floor, work area, problem type etc) and to then record this in SharePoint for views, alerts, reporting and analysis...

| TACTIC | DESCRIPTION & EXAMPLES | STRENGTHS & WEAKNESSES |
|----------------|--|--|
| OOTB | <p>Setup an email address (e.g cleaningproblems@xxx.co.nz) that SharePoint will ingest into a document library as a record. Staff take the photo or video on their smart phone, then send the email with the subject having # and @ tags for key metadata (e.g #spill @28Queen L5)</p> <p>The library is monitored and admin person allocates/updates metadata and action as needed OR Nintex or iWorkplace Records Manager type logic can automate next steps...</p> | <p>+ Really easy on staff recording it + Records location automatically via photo GPS + Can leverage existing in-house tools like Nintex or iWorkplace Records Manager - Metadata unstructured so some potential QA issues - As described, it creates an admin job</p> |
| TUNED | <p>Option 1: As above but with event handlers that take the subject metadata and convert it through rules into standard metadata, with exceptions only being alerted to admin resource. Option 2: Provide a liquid UI webpage tuned for small screens that staff use for entry</p> | <p>+ gets structured metadata + less admin to do after - higher overhead for staff as formal metadata entry - it’s a one off, also needed to be set up for all such recordings of other incident types</p> |
| TOOLS | <p>Option 1: Use Harmon.ie loaded onto the smart device, to bring up an incident form. Can be entered offline and could also provide an interface to see previous or same day incidents. Option 2 : Nintex form onto mobile browser and a similar process</p> | <p>+ Once you have the app, it’s easy for BAs to set up new solutions, and for staff to use + All formal metadata + Potential for conditional metadata + Offline use—so time saving & reliable for staff - Cost of the app per user, but can be spread over many solutions they may use</p> |
| BESPOKE | <p>A complete end to end “cleaning incident” or more generally “contractor monitoring” solution could be commissioned. This could have its own look/feel and customised forms, as well as analytics on contractor performance.</p> | <p>+ Would fit the greater need very well + Could be very slick for recording - Potentially expensive, risky and time consuming to develop - Locks the organisation into the “best practice” at time of requirements. - Offline? Add this in as well – starts to look like a lot of duplication of readily available solutions</p> |

So, which is best? Well, it depends doesn't it?

Bespoke starts to appeal when it's a mission critical component of the business that gives competitive advantage or shores up a key risk then.

Tools looks better if staff are used to entering forms for this and other needs and its just one of those activities we have to do reasonably well.


























Tuned looks a little dodgy at an enterprise scale, but may be ok if key design patterns can be identified and built for – it's certainly a low cost option.

OOTB is great for its flexibility to capture pretty well anything by anyone (imagine for your "Business Improvement idea of the week", where people all over the enterprise email in photos, videos, with narrative and context of things they saw that could be improved). However this is not so good if there is a lot of metadata or variants in the metadata needed depending on what has been found.





Decision Matrix to the rescue

The sort of logic above can be used to test which option is appropriate for a specific solution. We use the decision matrix approach like below for all sorts of information architecture choices with SharePoint. For instance for HR Recruitment, what is a site, library, folder or metadata used for – is one library for all recruitments or per department or per subactivity of recruitment or per job?. For Mobile First solutions you would determine the key criteria and then assess how well each approach provides for it...

MOBILE FIRST DECISION MATRIX

| | OOTB | TUNED | Harmonie <TOOLS> | Nintex | BESPOKE |
|---------------|---|---|---|---|---|
| Criteria #1 ? |  |  |  |  |  |
| Criteria #2 ? |  |  |  |  |  |
| Criteria #3 ? |  |  |  |  |  |
| Criteria #4 ? |  |  |  |  |  |
| Criteria #5 ? |  |  |  |  |  |

ASSESSMENT

 GREAT
  GOOD
  SOME PROBLEMS
  SHOW STOPPER

Content Presentation on Mobile devices

In most enterprises, reference and BAU content is in pdf, Word or other Office formats. Office Web Apps is a game changer in being able to show these formats on smart devices, as well as in web parts of normal PC sized SharePoint pages. This technology is developing further as well.

Other mature technologies can be used to present content in HTML format – either designed from scratch or rendered on the fly.

At the recent NZ Digital Workplace Conference the audience was shown new technologies such as [Sway](#) that Microsoft is working on that gives staff very usable tools to natively create their content in responsive mobile ready formats. This and other developments of commoditising what was the domain of web designers is likely to be part of our digital future. The danger is will a solution like Sway last beyond its “coolness” use-by date?

Summary

So the short answer to “how to we move to Mobile First” is to create and use a framework of tactics that are deemed legitimate to use (e.g Harmon.ie; Email to library; Nintex forms for mobile; liquid UI patterns). This is then like your own internal “solution” store that business managers and BA’s can peruse for what is possible for the business needs or improvements they wish to make.

The tactic actually used on a specific solution or a design pattern is then determined by assessing which tactic is the best fit using the decision matrix. In an enterprise that encourages learning and innovation, the bias is usually towards the “Tools” approach, as it gives those in the business the ability to configure and apply changes in an iterative way without having to necessarily involve third parties.

The amount of innovation and the speed of change in this space is exciting but quite daunting. Our view is to not lock yourself into one tactic or specific solution type that you can’t ready change out of or have the control to configure

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