

Goals

[Click here to watch a video overview of the web app and technical solution](#)

As part of a larger web re-development project Seventyeight Digital was engaged by the Ontario Ombudsman to develop a mobile specific version of their primary website. This was a key element in their larger digital strategy given the “anytime from anywhere” nature of the information and communications dialogue they are trying to elicit with the public. In particular was the need to facilitate on-the-spot complaint reporting which is automatically passed through to the clients’ internal complaint management system.

Our recommendation was to develop a web app designed for multi-device compatibility as opposed to separate native apps for each platform (i.e. iPhone, Android, BlackBerry) as this approach has many advantages from initial build-out to ongoing maintenance.

1. **Cost effectiveness** – why build several applications to accommodate multiple devices (iPad, BlackBerry, Android) when you can build and maintain one?
2. **Instant updates** – content and functional updates to the Ombudsman’s website will be instantly available to users. Compare this to dedicated applications, which require a user to receive updates through their app stores.
3. **Bypass App Stores** – Each app store has its own rules and regulations that delay application launch and the launch of future upgrades.
4. **Access** – Users can access the web app just by visiting the Ombudsman’s primary web site.
5. **Easier to Share** – Users can share the web app by simply sending a link to their friends.

Challenges

The mobile web app was developed to overcome key challenges and achieve the following:

- The mobile site must be optimized for today’s smart phones and accommodate mobile constraints including reduced bandwidth, reduced complexity, mobile user behaviour patterns, and best practices.
- The mobile site must be easily navigable and optimized for touch screen.
- Content must be easily managed within the Kentico CMS
- Each content piece must be leveraged and optimized for viewing across all devices (desktop, tablet, mobile)
- Users must be given an quick and simple method for submitting complaints
- Complaint submissions need to be automatically fed into the Office’s Complaint Management System.



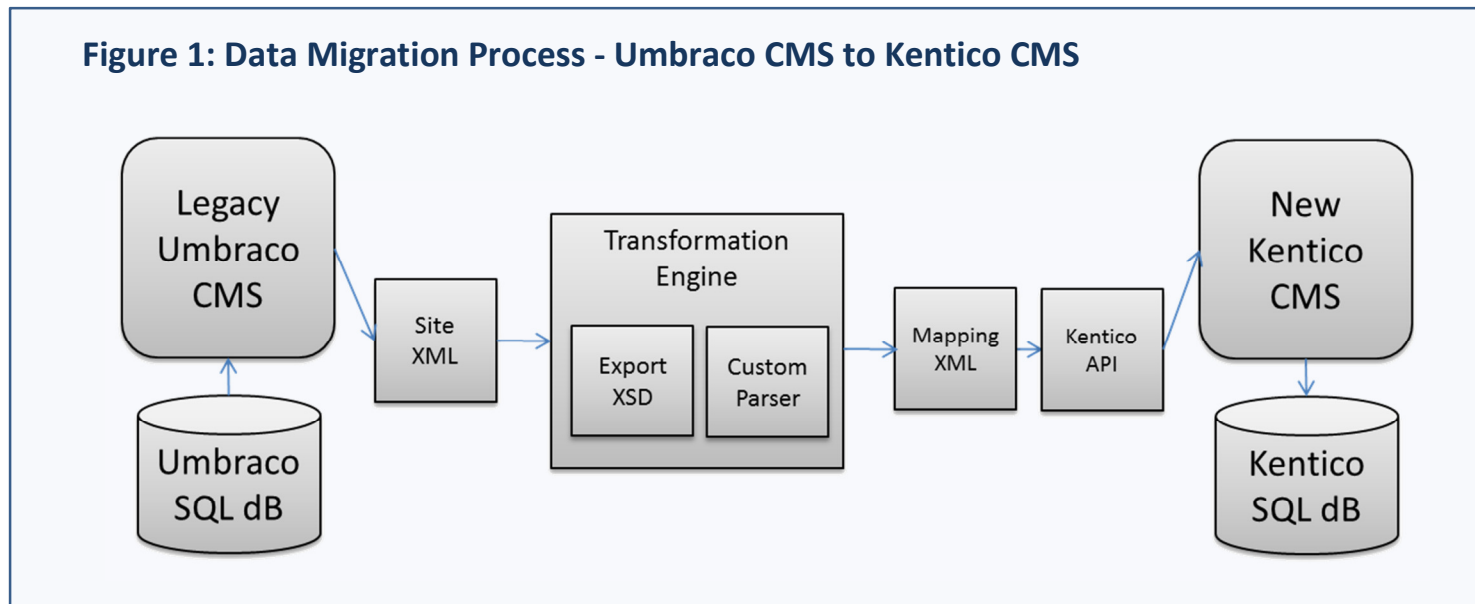
Solution

Producing a modern Mobile Website app optimized required more than merely providing a different style sheet for mobile devices. Optimization of the weight of pages, the type of content to display and a complete rethinking of the IA were deemed necessary for success.

Because of this, a front end jQuery based mobile framework called jQTouch was used for the front end. This provides mobile UI elements and behaviours such as animated page transitions common in high end HTML5 mobile web apps. At the

same time creating a separate website to hold the content was not an option as long term sustainability and ongoing maintenance would be too costly. A compromise was made, through a creative integration strategy, which provides an optimized mobile experience while retaining centralized control of content in Kentico.

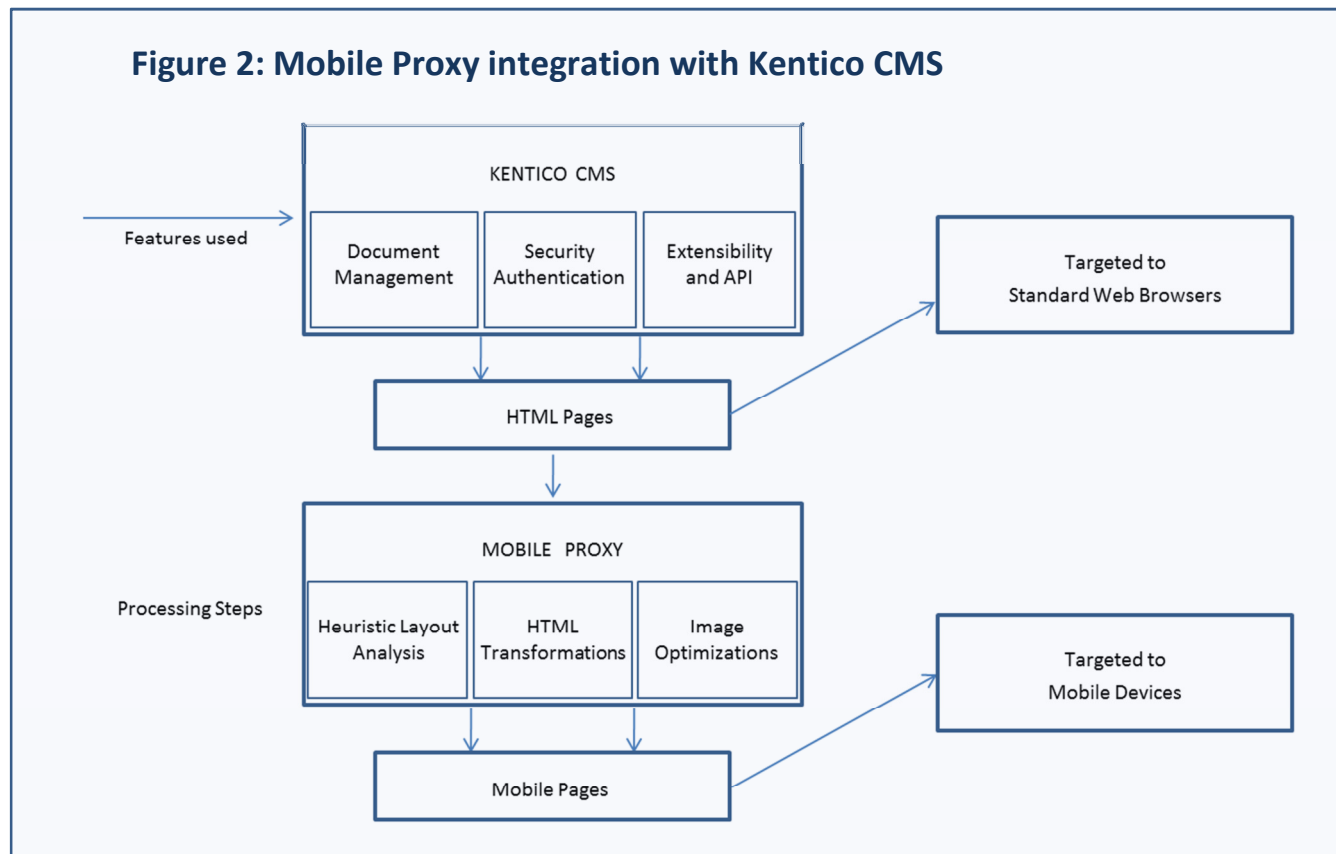
The first step was acquiring all data from the legacy Umbraco CMS system and migrating it into Kentico CMS so that it could be accessed by the mobile web app. The figure below illustrates the process and devices used to facilitate this migration.



Once the content migration was completed we integrated Seventyeight's Mobile Proxy Service with the Kentico CMS API to produce a very sophisticated and optimized HTML5 Mobile Web App. The mobile website utilizes AJAX patterns to retrieve the content of each page. The content is produced through a custom proxy page that queries the Kentico Database returning only the mobile web part's content. The content received via this database call is cached to optimize performance. The proxy returns only the html for the mobile site – no other content (i.e. view state, Kentico generated client files, various JavaScript and css files, or the PortalTemplate.aspx structure itself) is returned. This results in very fast load times (important on mobile) and provides complete control over the look and behaviour of the html.

Amongst several other functions Mobile Proxy automated the following processes:

- Images were resampled and "crunched" to produce the smallest file sizes possible while maintaining on-screen quality.
- All interaction is controlled using Javascript - no plugins required.
- All animations and transitions generated using modern CSS3 methods.
- "Lazy loading" was utilized wherever possible to ensure wait times are always minimized.





CASE STUDY: OMBUDSMAN MOBILE WEB APP

www.ombudsman.on.ca

Key Criteria For Choosing Kentico CMS

Kentico CMS was the obvious choice for this activation given our past experience creating exceptional mobile web apps using Kentico CMS in combination with Seventyeight's Mobile Proxy.

Kentico CMS provides the following key benefits:

1. Ability to easily integrate Seventyeight's Mobile Proxy custom component
2. Ease and flexibility of programmatic customization
3. Ability to handle enterprise requirements related to collaborative access to large data sources
4. Social media integration capabilities
5. Strength and flexibility of workflow configuration
6. Ease of use for non-technical users
7. Powerful data migration tools

About Seventyeight Digital

Seventyeight Digital is a strategic technology development and interactive design firm focused exclusively on the internet space. Our solutions engage and benefit users, generate brand recognition, provide relevant and actionable data, stimulate thought and communication, inspire people to take action, capitalize on business efficiencies, and offer significant ROI.

The Seventyeight team is comprised of highly accomplished and talented folks specializing in digital strategy, data management, technical development, and creative design - providing the competencies, agility and technical bandwidth to manage complex deliverables.

We can offer time to market, competitive rates and a level of responsiveness that traditional firms can't touch. We believe there is an effective solution to meet most budgets and can help you navigate the strategic & technical complexities to achieve your key business objectives.

Seventyeight Digital is a Kentico Gold Certified Partner offering a full range of interactive design, development, hosting and support services. Contact us for a free Kentico CMS consultation at info@78digital.com.

