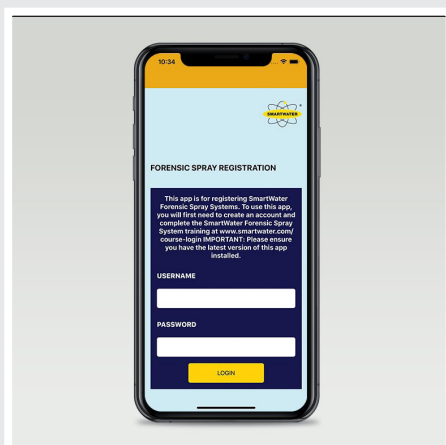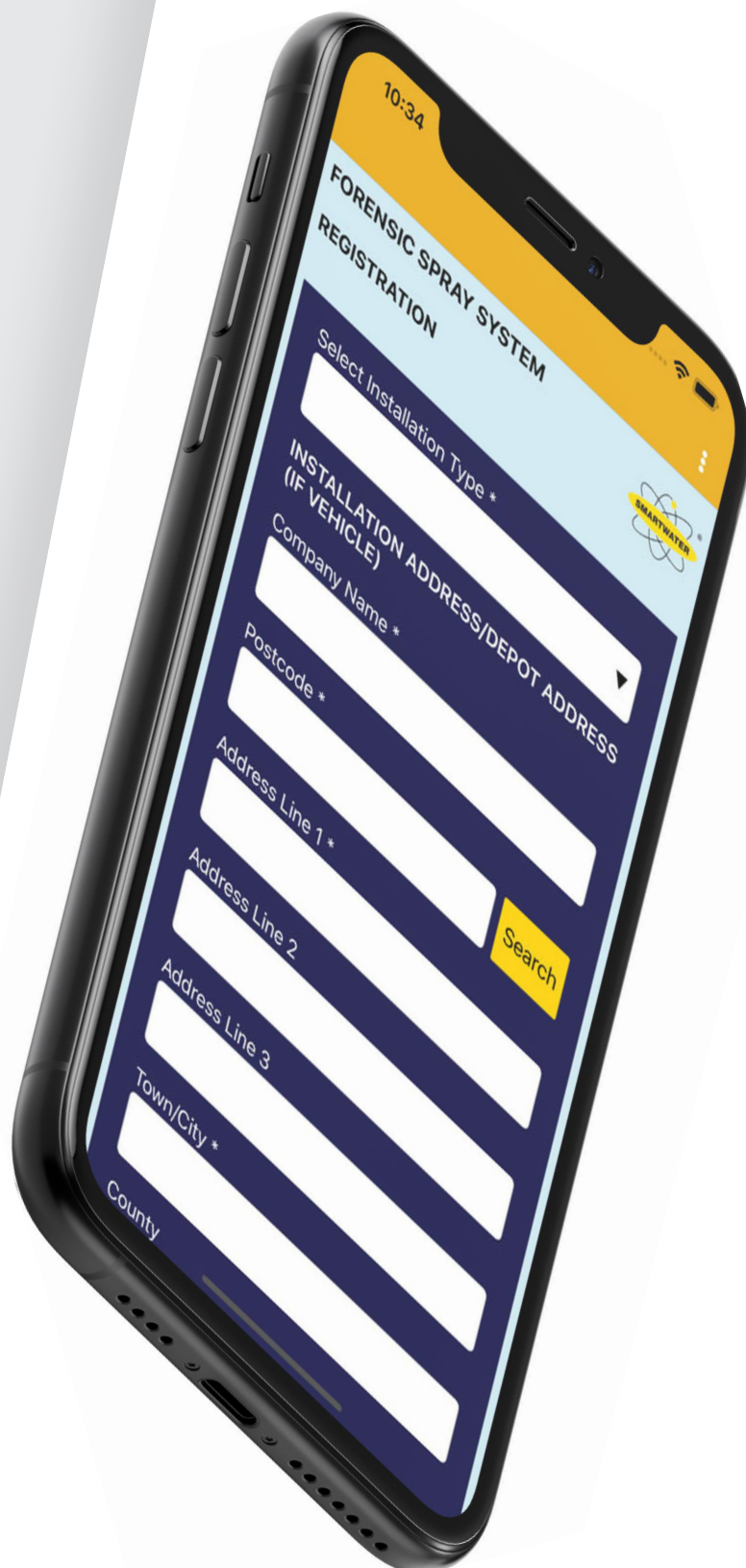# Smartwater
*Extended Case Study*

SmartWater Technology Ltd provides security products and services based upon the company's traceable liquid products. SmartWater partners with agencies, for example police forces, who introduce SmartWater's crime reduction solution to households and businesses. End users are required to register their details to enable marked stolen items to be associated to owners. Originally this was a paper-based system with data manually entered into a database, however a partner asked SmartWater to provide an app to enhance data capture.
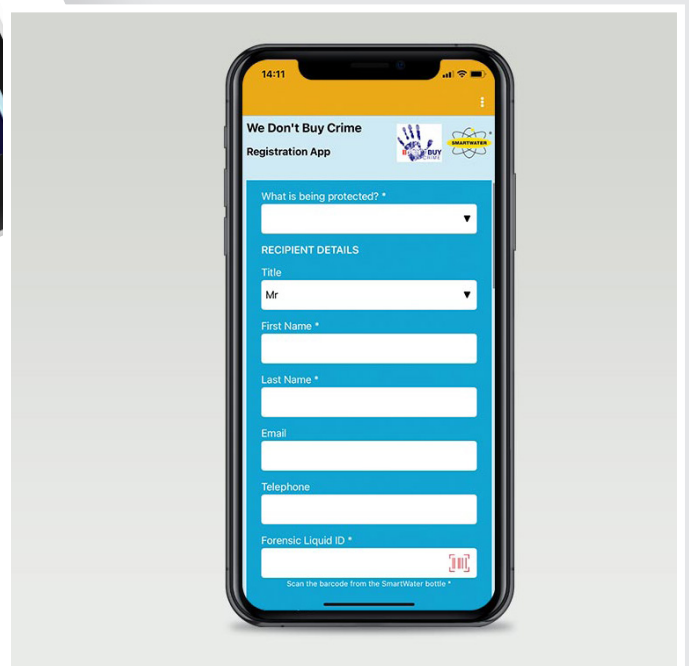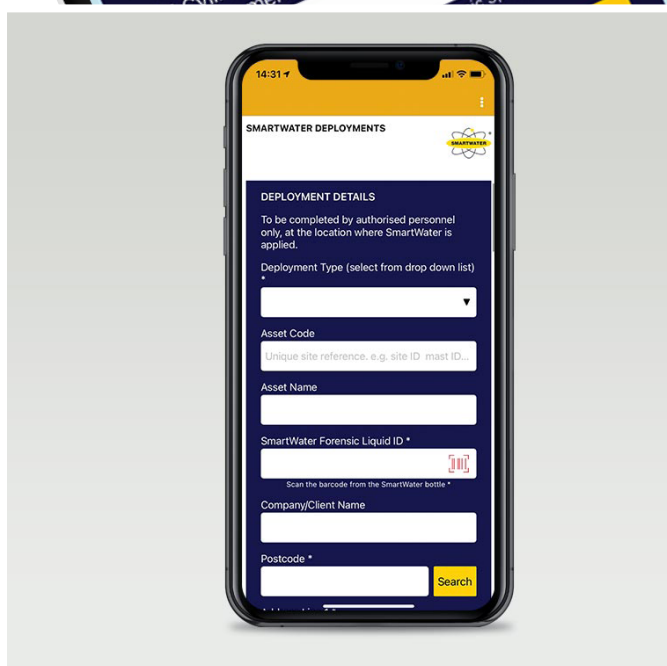
**exploding phone**

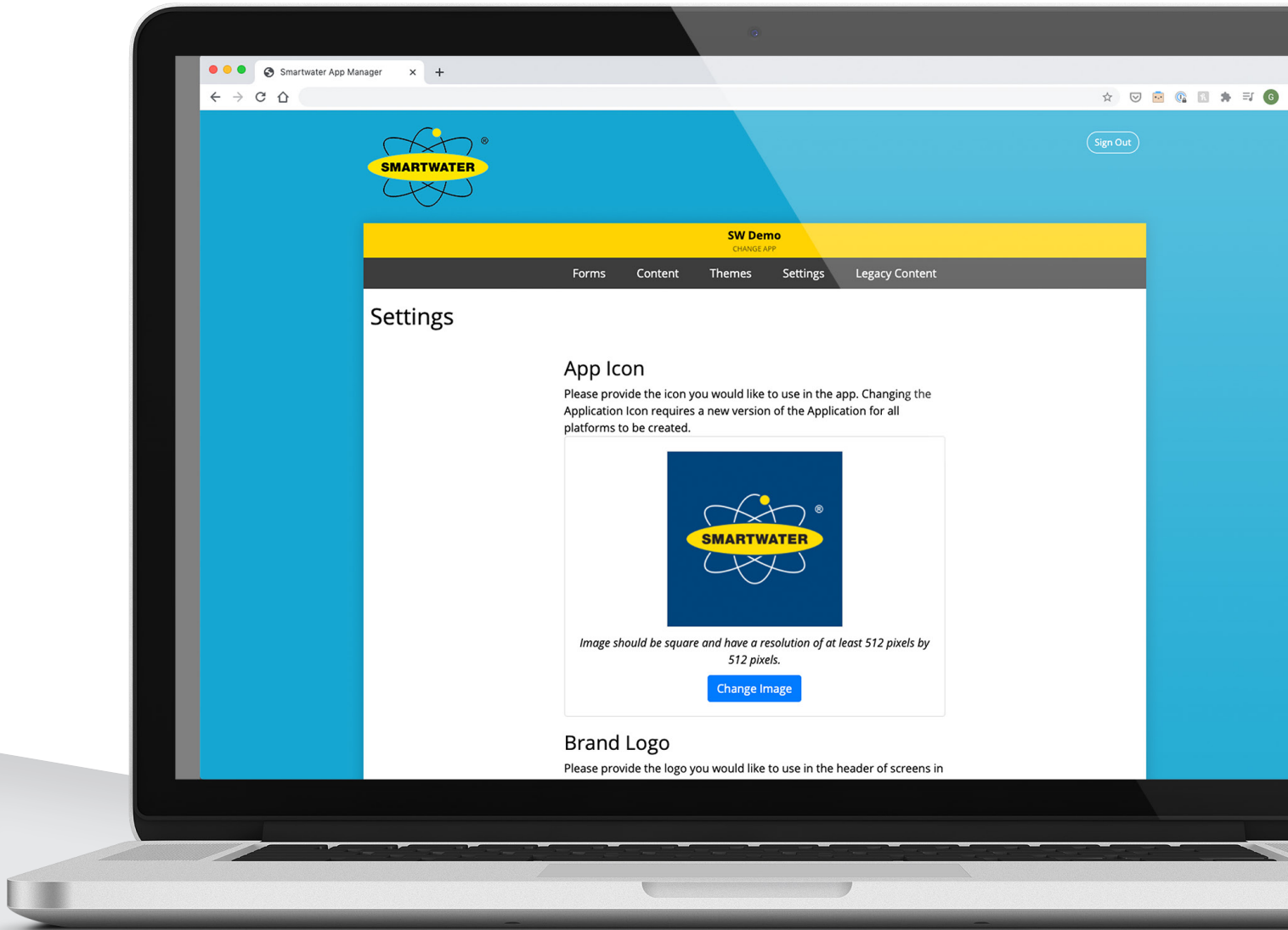Browse or search for the required establishment

After due diligence SmartWater commissioned Exploding Phone to design and build an Android app. However SmartWater determined that app based registration was attractive to other partners. SmartWater considered commissioning a series of apps, with similar functionality, but with minor adaptions for each partner. Exploding Phone proposed a platform approach, whereby SmartWater commissions a 'parent' app which can be adapted and published as a series of 'child' apps. Child apps are configured and branded via a sophisticated App Management System.

The smartwater app can be configured and deployed with different branding layouts and identities along with minor alterations to the functionality to suit the client.

As new app features are added SmartWater has the ability to deploy these features to other child apps. Upgrades include access a device's camera to scan a QR code on bottles with the system then displaying information about the bottle. The platform has also been extended with additional security checks, for example, identifying where a third-party has attempted to modify data between app submission and receipt on the server.

Further Platform advantages include efficiencies and resilience in manging a single code base, Smartwater's opportunity to update of apps bypassing the need to refer back to Exploding Phone for updates.

The platform approach incurred a higher up-front investment but total cost versus multiple apps broke-even apps upon publication of the fourth child app resulting in a significantly lower total cost of development and ownership.