**Walkabout – Functional Specification**

**Overview**

Walkabout is a web-based app for managing leafleting, canvassing and surveying campaigns. It can be used by any commercial, voluntary or public organisation that needs to deliver doorstep literature (e.g. leaflets, flyers, booklets, newsletters, etc), canvass people directly to sell ideas, services or goods (e.g. political parties, commercial companies, local councils, etc) or conduct surveys of any kind.

**Glossary of Terms**

The app will use an entity hierarchy of Users, Organisations, Campaigns, Rounds, Streets and Addresses as below:

* Users – These are the users of the system. The different types are explained further below.
* Organisation – this is the customers’ organisation that has subscribed to the app. The customer will have the facility create more than one organisation but there must be only one *parent* organisation. The rest will function as sub-organisations
* Campaign - this refers to the leafleting, canvassing and surveying activities that occur across an electoral area, carried out within a given period of time. A Campaign is made up of a set of Rounds.
* Round - A group of streets within a geographical area.
* Street - A Street is a generic term for any place where residential households, businesses or other types of premises are situated, and includes paths, roads, lanes, avenues, cul-de-sacs, courts, etc.
* Addresses – An Address is an individual property or tenancy where people live or work.

**The App**

Responsiveness

The app will be responsive so that it can be used easily on a variety of devices such as mobile phones, tablets, laptops and desktop computers. The app will be used primarily on mobile phones out in the field, so that the app’s pages need to be laid out in such a way that they are easy to read and use, while remaining as visually compact as possible to minimise human interaction.

User Types

The app will have five types of users, as follows:

* Superusers
* Administrators
* Agents
* Guest
* Anonymous Users

**A Superuser** is the owner of the app, and/or the owner’s employees or representatives. They will have access to all data on the system. A Superuser can also act as a customer Administrator, if intervention is required to correct problems in a customer’s system such as diagnosing a data corruption, faulty page or whatever.

**An Administrator** is a customer who has subscribed to use the app. They will have access to all data that pertains to their organisation.

**An Agent** is a person in the field who does the leaflet deliveries, canvassing or surveying. They have access to data that pertains to the particular campaigns to which they have been assigned. An Administrator can also act as an Agent of the same organisation.

**An Guest User** is someone who is registered and signed in to the app. They will not be able access any campaign data until they either subscribe to a product, or login with the appropriate Agent or Administrator permissions already set up for them by the organisation they belong to.

**An Anonymous User** is someone who is not registered or signed in to the app. These will only be able to see the app’s landing page, product page, cart page, information pages, etc.

**Core Functionality**

**Products**:

These will be the subscription products provided by the owner of the app, which customers pay for in order to use the app. The ability to create, update and delete products will also be provided, but will only be accessible by Superusers. All user types, including Anonymous, will be able to view and select products.

**Cart**:

This is where products selected by customers will be placed prior to making payments. All user types, including Anonymous, will be able to view the Cart.

**Checkout**:

This is where products are purchased by customers with either a credit or debit card. Only signed-in users will be able to use the Checkout for product payments. Superusers will also be able to use the Checkout, but only with test card details, for the purposes of diagnosing any payment problems occurring in the live system. Payment processing will be handled by a third-party company.

**Subscriptions:**

Once a customer has made a subscription, an acknowledgement email will be sent out to their registered email address, with all relevant details. If this is their first subscription, then the registered account they subscribed with, will be given Administrator status. Subscription details will be stored in the database for each customer. A page will be provided in the app so the customer can view their own subscription data.

**Users**:

The customer Administrator account will have the facility to create other Administrators and Agents but not Superusers. It will be the responsibility of the customer to create all the accounts they need.

**Data Entry**:

This will include all the functions necessary to perform Create, Read, Update and Delete (CRUD) operations for all User, Organisation, Campaign, Round, Street and Address records. Address records can be built quickly by just creating a Street and providing the start and end door numbers. These functions will be accessible by Superusers and Administrators only.

**Address Data**:

For small organisations with a small catchment area e.g. a self-employed tradesperson wishing to leaflet their local area, it may be feasible for them to create their own address data to link to their campaigns. However, for campaigns covering large geographical areas, this may be too time-consuming. Therefore, data products covering addresses in various multiples of local authorities, or the whole of the United Kingdom, will also be offered for purchase. In reality, these would have to be pre-supplied by the Royal Mail or some other organisation selling address data.

**Dashboard**:

This will be the ‘control centre’ where Agents can view the tasks assigned to them in terms of the campaigns, rounds, streets and addresses they will cover.

Where required by the customer, the Dashboard will be flexible enough to allow Agents to decide for themselves how the rounds, streets and addresses within a particular campaign are to be divided without resort to an Administrator. Agents will also be able to assign and unassign themselves from campaigns, though they will not be able to do this for other Agents. For example, if two Agents wish to swap campaigns then they can do it by mutual consent. If a customer prefers the assignment of tasks to be controlled by Administrators only, then the system will also be able to enforce such a policy.

**Security:**

All subscription users will be required to register with the app and sign-in to use it. Strong passwords will be required by the system, which will be encrypted before storing in the database. Resetting of passwords will be automated. Users will be sent an email with a link to be able to reset their password. Data security will be achieved by overnight backups of the database. Because the app will be used by many different customers, a new database schema will automatically be created on the customer’s first subscription. This is to ensure each customer’s data remains separate from everyone else’s.

**Maps:**

Maps and direction software will be provided with the app, so that Agents can find their way to a round, as well as work out the routes they will take to complete the round, once they are there.