rTown report

Workpackage 5 —
eCommerce & other single Business Entity tactics

2020-08-25

Author: Chris Reed (Proxismart Ltd.)

rTown is Project No. 971397 in the Innovate UK SBRI competition "Re-Imagining the High Street" and is contracted for delivery by:

AMS Consulting,	Telephone: +44 (0)1989 763 120
Ashcote, Walford Road,	E-mail: Admin@AMS-Consulting.co.uk
Ross-on-Wye, Herefordshire,	Web: www.AMS-Consulting.co.uk
England.	Partners: MI Reynolds and JE Reynolds
HR9 5PQ	VAT Registration No: GB 681 7260 23

Document Location: *rTown* project materials are available at: www.rTown.org.uk
Validity: *To be assigned*.
File name: *rTown_WP5_eCommerce_20150121_final*.docx
                or derived *.pdf

Document History:

Author - Chris Reed, ProxiSmart Ltd.		
Date	**Version**	**Notes**
02-Sep-2014	1.00	Initial version of the document – creation of summary report headings
04-Sep-2014	1.01	Modification of report content to reflect summary status of the project
11-Dec-2014	1.01.1	Pulling together of further research and development ideas and conclusions. Conversion to ProxiSmart ownership
05-Jan-2015	1.01.2	Split of report into two relating to WP4 & WP5
06-Jan-2015	1.01.3	Completion of rTown Solution Mix and Business Model sections
07-Jan-2015	1.02	Addition of Appendix II – Project Gantt Chart Addition of Appendix I - Costs
21-Jan-2015	1.03	Transposed to rTown template
21-Jan-2015	final	Final version for limited publication

Please request further information from:

Melvin Reynolds   rTown Project Lead   melvin@rtown.org.uk
AMS Consulting, Ashcote, Walford Road,
Ross-on-Wye, Herefordshire, England. HR9 5PQ

Confidentiality

Disclaimer

Warning

Contents

Introduction

Scope

The scope of this document is to provide a progress report on the work completed by ProxiSmart Ltd in relation to the rTown project as part of the TSB SBRI 'Re-imagining the High Street' remit. This document will evolve and grow over time and will be the basis for any structured submissions to the TSB using their templates for any work carried out by ProxiSmart Ltd ("the Company"). It is a document which is meant to reflect research, findings, recommendations and conclusions at the time of a given submitted version. Careful note should therefore be made of the strict version control summary shown on Page 2 and of the named version number of the document.

The objective of this document is to be primarily used by AMS Consulting (but also by any other participating protagonists) in the formulation of their interim and final report submissions to the TSB.

This document is intended for use by the management / staff of ProxiSmart Ltd, AMS Consulting its associated resources and any organisations or individuals deemed by the Company to have a vested interest in the project. Please note the confidentiality and disclaimer notices on Page 2.

Background

The remit for ProxiSmart Ltd – Work Packages 4 & 5

ProxiSmart Ltd has been employed by AMS Consulting to provide research, ideas, recommendations and conclusions on two key areas of the rTown project as follows…

The use of incentives and rewards generally to increase footfall to a given Locality[1] and more specifically how these incentives can be linked to car parking in and around that Locality.

The introduction of standard Retail tactics used in e-commerce and m-commerce to market the Locality as a 'single business entity', thereby drawing on the strengths and diversity of a co-operative branding and approach . More specifically to look at the feasibility, benefits and opportunities associated with 'click and collect' and other related services.

These two areas have been split neatly into Work Packages 4 and 5 respectively for the rTown project submission.

ProxiSmart Ltd has been heavily involved in research and development of solutions linked to these specific topics and in particular has been looking at addressing the specific objectives of the rTown project using the latest technologies available to the market. It is this alignment that brings ProxiSmart Ltd to the rTown project and the specific Work Packages identified.

---

[1]A Locality is defined broadly as an area where there is a collection of different Retailers and other businesses within a 'reasonable' walking distance for a consumer. In the context of the SBRI Project, this is a Market Town or High Street.
In the context of the rTown pilot project this is the market town of Ross on Wye but which has commercial context and opportunities associated with the other 1200 or so similar Localities across the UK
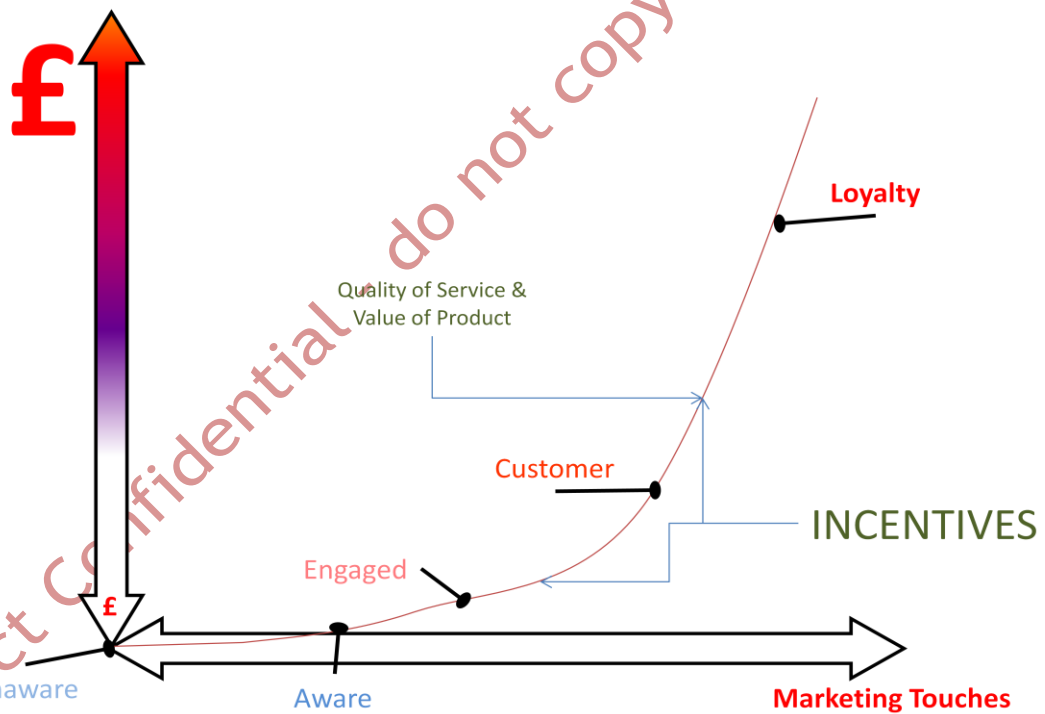
Incentives

Incentives are a long established technique within Retail and Service based businesses to drive additional revenues. They can take many forms from the use of Vouchers through to Sales, Promotions, Offers, Deals, Loyalty Programs and more. It is important to note the context of incentives within the overall marketing strategy for a given business. Many different marketing channels are available ranging from the more traditional (using the Shop Front of, and within, a Retail Store, Printed Advertising, Direct Mail, etc) to the more modern (Digital Signage, website, App, Email and Social Media) and each have their merits, advantages and disadvantages to different types of businesses. How incentives are used across different marketing channels is therefore also an important consideration. Larger retail businesses dedicate significant resources to their marketing strategies and importantly are able to measure the return on their investment in the use of incentives across different marketing channels.

Incentives are normally used within the context of a number of marketing 'touches' with the target consumer.

Figure 1 below provides a graphic which summarises the role of incentives

Figure 1: The Role of Incentives

The x axis represents the number of marketing 'touches' used by the business across multiple marketing channels. The y axis represents the revenue value to the business of a given consumer. The curved line represents the status of the consumers engagement with the business ranging from 'unaware', through to an 'awareness' based upon being exposed to the marketing touches, moving to a status of 'engagement', then becoming a customer and finally converting into a loyal customer. At any point, a consumer can 'fall off' the line of this graphic based upon a number of possible elements or events such as poor marketing, bad PR, a bad customer experience, pricing / value or a low quality product or service.
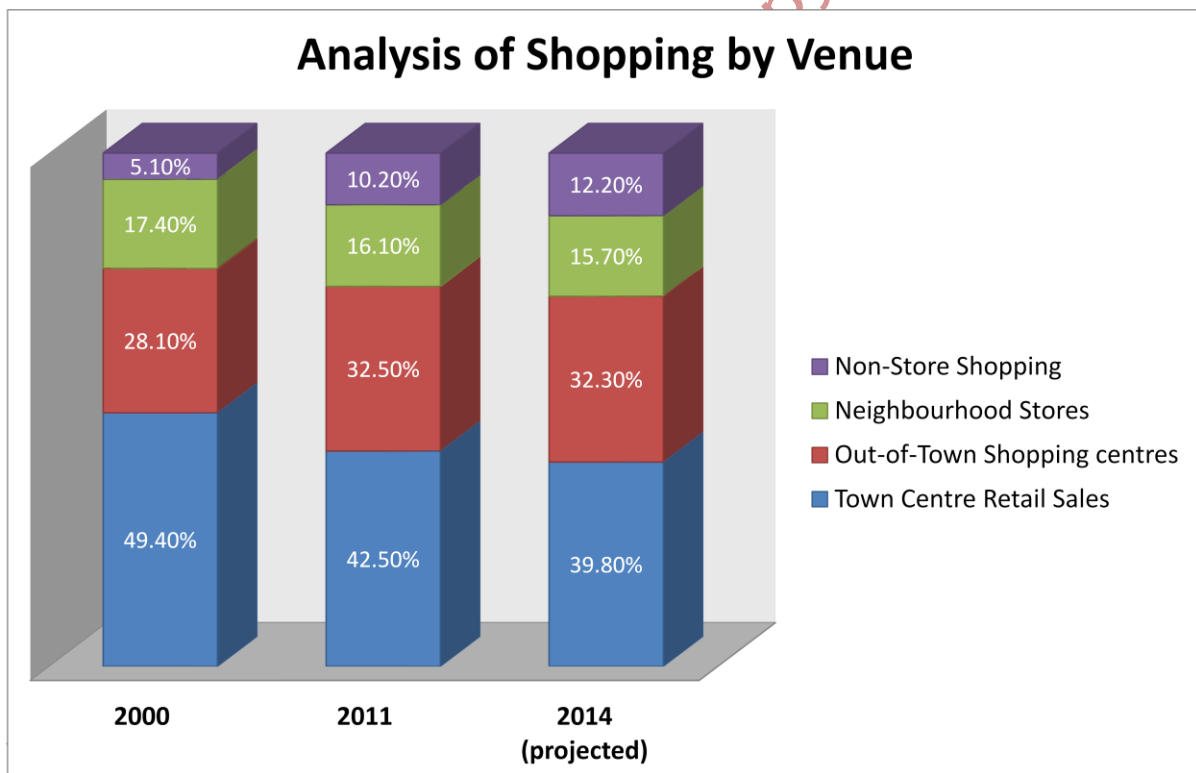
The graphic shows that incentives are generally used at two key points in the consumer journey -

> To convert an 'Engaged Consumer' into a 'Customer'
> To convert a 'Customer' into a 'Loyal Customer'

The value to the business of these 2 stages of engagement can be very significant and gives context to the 'cost' of using incentives across different marketing channels to achieve the conversion mentioned above. A loyal customer is worth significantly more to a business than a customer who is worth a lot more to a business than an engaged consumer.

Car parking

Car parking in and around Town Centres and High Streets has long been viewed as a key barrier to generating growth for a given Locality. The initial base line data collection that has been carried out for the rTown project as part of the other Work Packages certainly adds weight to this argument and although often an emotive and political subject (due to the involvement of Local Authority management and administration of car parking facilities) is something that can be evidenced as replicated across the country. It is a barrier that does not exist for out of town shopping and possibly more important e-commerce which has seen significant growth to the detriment of the High Street over recent years. Figure 2 below confirms this trend.

Analysis of Shopping by Venue

	2000	2011	2014 (projected)
Non-Store Shopping	5.10%	10.20%	12.20%
Neighbourhood Stores	17.40%	16.10%	15.70%
Out-of-Town Shopping centres	28.10%	32.50%	32.30%
Town Centre Retail Sales	49.40%	42.50%	39.80%

Sources: Experian Marketing Research & Centre for Retail Research.
Note: CRR estimates 13.2% for Non Store Shopping 2012

Figure 2 : How the Retail Cake is cut

Removing this as a barrier therefore has significant impact on the commercial viability of the rTown project for the longer term (i.e., if a successful solution can be delivered under the remit of the SBRI project to the Ross on Wye pilot and it can be demonstrated that this is a replicable solution across other Localities then there is added commercial value to the rTown brand).

Introducing 'incentives' to park and therefore drive footfall to a given Locality is not a new idea. Indeed the out of town 'free parking' shopping model actively uses this as a marketing tool. There is a cost associated with the provision of car parking and in the case of Local Authorities an opportunity cost of lost revenues to any introduction of 'free parking'. However, by using the latest technologies it can be possible to convert car parking revenues into a form of 'currency' that can be used in 'trading' between consumers, retailers and Local Authorities in a seamless manner.

eCommerce and the adoption of other 'Single Business Entity' tactics

Convenience is a catch all term that is used to promote a number of features of e-commerce, the largest growing form of retail. The question therefore becomes about whether a Locality can adopt some of these techniques in order to become more competitive with e-commerce and thereby achieve the objectives of greater footfall, higher revenues and *convenience* to the consumer.

> **"There is a need** for a Town to establish its identity and **for the Town to act as a separate Business entity in order to** become competitive and **be able to react** to the different pressures facing the 'high street' **and prosper"**
>
> *A key conclusion from the*
> *"The Portas Review – an independent review into the future of our High Streets"*

By adopting an approach of treating a Locality as a single business entity, which can be marketed as such, provides a stronger proposition for the individual constituent parts of that Locality under a cooperative branding. Services such as 'click and collect' under the branded umbrella of a Locality could have a greater appeal than if they were available on a disparate basis among individual retailers. This is the basis of the rTown project Work Package 5 and the development of ideas and solutions in this context.

Many smaller, independent Retailers are unable to provide 'convenience' services such as click and collect, delivery services, extended opening hours or a virtual retail offering via e-commerce that the larger players are able to resource. Again using new technologies as a platform, rTown is looking to the possibility of addressing these barriers and to get a Locality on more of an even keel with its direct and indirect competition.

'Click & Collect' and other eCommerce based tactics

Demand

Initial analysis of the baseline survey data indicates an appetite among consumers (the majority among those surveyed) towards the services identified in WP6 but to a lesser extent a desire from member businesses. However if this core interest is converted into value added services for participating businesses then it is expected that demand for the services would increase. Suitably resourced marketing and PR would maximise the impact of the initiatives proposed in this report

WP6 provides analysis of the survey outcome data to support the conclusions on the range of WP6 services provision

A technology solution that supports Town Team Services

The remit of WP5 was to try and exploit the tactics currently used by larger retailers in the context of their e-commerce offering but to provide this across the multi Retailer nature of a given Location (rTown). This was to include such facilities as a 'click and collect' service with a dedicated 'LockerPoint' and to support a 'Town Trolley' service (please see WP6). The 'LockerPoint' element was originally a heavily technological solution that involved self service, automated vending from a dedicated venue (that would

need significant refurbishment to house the facility). Following on from the outcome analysis of the survey results, a 'lighter' touch was decided as the best way forward. The principles of such a service would be the same, but the rTown offering would involve a less technological development in order to deploy a workable solution.

Other elements of the proposed Town Team services (WP6) would also require an element of technological development in order to address the multi Retailer nature of the services involved, and to provide a single rTown banner under which these services would be available to consumers and retailers alike. Integration, where required, with the Solution Mix elements of WP4 is also an objective for this work package.

The proposed rTown Solution Mix for WP5 will deliver on the service objectives of the services identified as part of WP6 and are summarised below.

'Click & Collect' with a dedicated LockerPoint facility

DeliverySmart System

The bespoke click-to-deliver solution

DeliverySmart is a bespoke software solution involving the usage of web portals and SmartPhones to provide a seamless link between the retailer and their consumer.

For e-commerce enabled businesses the bespoke solution would provide a plug-in to be used on the retailer's website so that the consumer can opt for a Town Team Hub based delivery as part of the checkout process. This would involve the consumer selecting which 'hub location' they would prefer to use or whether they would opt for home delivery (if available).

For non e-commerce enabled businesses the bespoke solution would have a web based interface that could be used by the Retailers themselves or by the Town Team Hub staff on behalf of consumers in order to create a 'delivery / collection' request activity record that is linked to a particular purchase order.

The *DeliverySmart* system would then manage the logistics of these requests / online orders to provide the Community Service personnel with optimised delivery / collection schedules. The system would also feature a fully closed loop audit trail on the completion of schedules, incorporating the use of Bar Codes and signature collection functionality.

How does it work?

The rTown portal will allow retailer organisations to register for this service and download a "plug-in" to be used on their website.

The bespoke DeliverySmart "plug-in" can be used in any website / ecommerce application where applicable. The core of the functionality would be exposed to the website / ecommerce application by way of "Web Services". These web services could be consumed by the developers maintaining these websites on any platform (PHP, Java, .NET etc). An installable plug-in would also be made available for platforms like Joomla, Drupal, Wordpress etc.

The aforesaid plug-in would essentially be a part of a web based application that would be used by the DeliverySmart portal available to the Community Services company. This web based application would gather all of the relevant information from all of the websites that use the plug-in. Based on this data, an inbuilt control procedure would intelligently decide the routes of pick-up / drop based on the user preferences and various system settings (such as Locations available etc)

Once the "plug-in" is added to a retailer's website, the consumer would be able to use this feature and see the delivery / collection options available as part of the checkout stage of their purchase and schedule the activity on the dates / at the Locations convenient to them.

The plug-in would also support 'telephone based orders' where retailers process purchases via their in-house systems (subject to the platform of the in-house system allowing a web services based interface) on behalf of consumers.

Finally the Town Team Hub personnel could also process delivery / collection requests via a bespoke User Interface. This would result in smart messaging being sent to retailers / logistics personnel at the various stages of the transaction to validate and confirm delivery / collection requests

Consumers would be informed about the delivery pickup time, and estimated drop time by *smart* messages or *Smart* emails or both. Upon (un)successful delivery / collection drop off (validated by signature collection), updates would also be sent via *Smart* messaging (including time and location details) to the retailer and the consumer.

The Community Services company Interface

Personnel responsible for managing delivery / collection activity will have access to a web based portal that optimizes requests as they are created / scheduled. A neat, intuitive and informative dashboard on the *DeliverySmart* portal would allow these staff to move deliveries around based on the changing requests of the consumers and additions of the new pickup requests from retailers. The system will be updated in real time based upon confirmed delivery / collection activity.

The nature of a dedicated 'LockerPoint' location is no longer a technical issue but will rely upon allocation and management by the relevant entity. Previously, the LockerPoint facility was a tech savvy proposal featuring optimised / automatic storage control for parcels and a carousel based mechanical vending installation for self service parcel collection. This has been abandoned in favour of a manually operated facility in given locations in and around the town. For the purposes of the DeliverySmart system the only consideration will be the set up of a Location as an option for deliveries / collections and the relevant system 'settings' for that Location which will drive what types and levels of activity the location will support.

Town Trolley service

The proposed 'Town Trolley' service to facilitate the porting of goods between different retailers / locations is simply an extension of the DeliverySmart system. Bespoke activity requests which identify to and from locations as well as the products to be ported will simply become part of the optimised schedule for identified resources (whether that be by van, electrical vehicle, pedicab, or individual). Therefore it is envisaged that no additional functionality specific to the Town Trolley Service will be required over and above the specification requirements of the core DeliverySmart system, however, a provisional variance has been made in the costs in case of any 'development creep' commissioned during Phase II.

Integrating with the town loyalty platform

The DeliverySmart system will facilitate integration with the LocalitySmart CMS. The nature of the integration will be in the content push of promotions content and in particular maintaining activity based data to support the town wide Loyalty Platform. Rewards to consumers who use the Town Team Hub Services such as click and collect on a regular basis will be feasible. Retailers will be able to identify, analyse and reward targeted consumers based upon their activity history.

This will be achieved through the use of the aforementioned (WP4) e-consumer record which will be part of the data captured for a given delivery / collection record.

Consumers will be able to see their loyalty program progress via a dedicated portal which will cover their engagement with all member businesses across the different activities / services available through rTown such as shopping, deliveries, car parking and more.

Summary of progress to date and risk mitigation

The initial system specification has been created and agreed in summary format only. This was with a view to be able to estimate costs and delivery timescales. No user interface design work has yet been undertaken.

Whilst progress appear to be non apparent, the risk mitigating factor is that the proposed solution development is a bespoke development project using standard platform / coding languages that could be resourced from the software development market through open tender. The preferred supplier has the advantage of having researched, developed and part tested a number of the elements relating to WP4 and the integration of this system would be more seamless if developed under the same project management and coding resources. Further the project manager and development team have specific and significant experience in this field having designed, developed and delivered an equivalent delivery logistics system in the public sector to over 60 local authority / NHS trust partnerships around the UK. The system in question supported the Community Equipment Services sector which is responsible for the delivery and collection of aids to independent living. The contractor will therefore be leaning heavily on this experience to deliver on the remit of this bespoke application.

Commercial business model

The bespoke nature of the DeliverySmart system's initial development does not negate the opportunity to bundle this system as part of the rTown solution mix. The core question is whether subsequent locations would be looking to offer the range of Town Team Services as identified in WP6 including the Click & Collect, LockerPoint and Town Trolley elements.

The 'plug-in' that will be developed for Retailer e-commerce sites could provide a data feed to alternative logistics management systems (other than the DeliverySmart system) and therefore there is an opportunity to license this individual element of the development under the rTown branding / commercialisation opportunities identified.

For the day to day service provision, a transactional fee / tariff would seem the natural methodology in terms of monetising the service provision. Each delivery / collection would attract a charge which could be met either by the consumer or retailer or both which could be based upon the nature of the activity and the location chosen.

A data feed of confirmed activity could provide the transactional basis of a payments system whether that be an automated direct debit based platform, a simple invoicing system or a statement against pre paid service level agreements. Payment collection arrangements would need to be deployed and managed between the retailers / consumers and the Town Team Hub / Collections Company.

The ability for interfacing with 3rd party systems in the context of payments / transactional data would be a feature of the solution.

Additional work is required as part of Phase II of the project to research and develop an appropriate Business Model that would form a major part of the commercialisation of the system. This would include detailed cost / benefits modelling and investigating price tipping points in terms of prospective Retailer and Location based Client take up.

As part of the Phase II deployment of the system in a live sense at Ross on Wye, resources will be needed to drive the successful take up of the system among potential member businesses. This 'Marketing and PR' work has been allocated a budget as part of the costs submitted.   There will also be elements of other support resources required such as helpdesk, hosting etc. Monitoring these costs and the actual levels of work required from these resources as part of the pilot deployment at Ross on Wye of the rTown project will contribute significantly to the modelling and development of the Business Model.

Annex 1: Costs

ALL COSTS ARE SHOWN EXCLUSIVE OF VAT

Please refer to Annex 2 of the WP4 final report for details of Tariffs etc

DeliverySmart development costs

Module No	Module	Software Engineer Standard	Rate	Cost	Software Development Team Leader	Rate	Cost	Executive Project Management	Rate	Cost	Cost
1	Retailer Portal including registration, analytics, administration, dashboard and e-commerce plug-in	60	£110.00	£6,600.00	16	£150.00	£2,400.00		£320.00	£0.00	**£9,000.00**
2	Consumer Portal	10	£110.00	£1,100.00	2	£150.00	£300.00		£320.00	£0.00	**£1,400.00**
3	Inventory, Transport and Scheduling Management / Optimisation	85	£110.00	£9,350.00	22	£150.00	£3,300.00		£320.00	£0.00	**£12,650.00**
4	Delivery Tracking and Barcode integration	30	£110.00	£3,300.00	8	£150.00	£1,200.00		£320.00	£0.00	**£4,500.00**
5	Smart Message Notifications & App based Delivery Confirmation	40	£110.00	£4,400.00	10	£150.00	£1,500.00		£320.00	£0.00	**£5,900.00**
6	Logistics Company Portal and Administration	65	£110.00	£7,150.00	17	£150.00	£2,550.00		£320.00	£0.00	**£9,700.00**
99	Project Management		£110.00	£0.00		£150.00	£0.00	26	£320.00	£8,320.00	**£8,320.00**
	TOTALS	**290**		**£31,900.00**	**75**		**£11,250.00**	**26**		**£8,320.00**	**£51,470.00**

An approximate 5% provision (£2,500) should be made for any 'development creep' associated with the project. This is where the specification requirements are changed during the development lifecycle and these changes are incorporated into the software subject to approval from the rTown management team.

DeliverySmart implementation and support costs

One off Implementation Costs

Element	Resource	Units	Rate	Cost
System Installation and Hosting Configuration	Helpdesk Technician	2	£120.00	£240.00
Site based implementation support and training	Consultant	4	£240.00	£960.00
	Accommodation	5	£95.00	£475.00
	Subsistence	5	£15.00	£75.00
	Mileage	540	£0.55	£297.00
TOTAL				**£2,047.00**

Annual support costs

Element	Units	Rate	Cost
Annual Maintenance under SLA	1	12.5% of development costs	£6,433.75
Hosting under SLA	12	£75.00	£900.00
TOTAL			**£7,333,75**

Annex 2: Phase 2 Gantt Chart

Module No	Module	Man Days	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
1	Retailer Portal including registration, analytics, administration, dashboard and e-commerce plug-in	76	▓	▓				
2	Consumer Portal	12		▓	▓			
3	Inventory, Transport and Scheduling Management / Optimisation	107			▓	▓	▓	
4	Delivery Tracking and Barcode integration	38				▓	▓	▓
5	Smart Message Notifications & App based Delivery Confirmation	50			▓	▓		
6	Logistics Company Portal and Administration	82	▓	▓	▓	▓	▓	▓
99	Executive Project Management	26	▓	▓	▓	▓	▓	▓

TOTAL MAN DAYS   391

Note that the development team are able to work on different modules concurrently and engineers are added and removed flexibly throughout the project