



I-Beacon 2018

LLANDRINDOD
WELLS



Llandrindod Wells 2018 I-Beacon trial

1 Introduction

The Llandrindod Wells Wi-Fi system was installed in 2016 and comprises 7 Meraki access points across the town. The system was installed to provide free public access Wi-Fi and to collect data using its ability to detect Wi-Fi enabled mobile devices.

Since the system was installed Powys County Council, the owners of the system and its data, have been unable to agree a General Data Protection Regulation (GDPR) compliant way to share the data. Since around spring 2018, the town also benefits from 4G. These two significant factors led us to explore the other capabilities of the system.

2 I-beacon messaging capability



Each of the 7 access points contains an **I-beacon**. These devices use **Bluetooth** nearby technology (BLE) to push a message to a Bluetooth enabled mobile device. That device then requires an app to receive the message.

The town Wi-Fi system landing page** provider provides a free app (called *splash push*) to existing customers for one year which allows pushed notifications (the BLE messages) to be received by Bluetooth enabled mobile devices.

** (landing page = where people logging onto the town Wi-Fi are taken to)

So, we had i-beacons capable of sending messages and the Splash Push free app capable of creating and sending those messages.

3 The purpose of the trial

A To test the theory that sending pushed notifications directly to people's handsets when they were in town would increase their engagement with town centre businesses.

B Bring benefit to businesses in areas of the town not covered by the town Wi-Fi system because the notifications whilst received in the centre of town could promote a business on the industrial estate where the Wi-Fi system had no coverage.

4 Setting up the trial

Duration: 12 weeks from early February to late April 2018.



Publicity: Local press, town website, posters on the town notice boards, posters in shops and on social media. **See appendix 1.**

Messages: Devised by businesses, to convey promotions, offers and information to customers + potential customers. Both Mother's Day and Easter fell within the trial creating additional opportunities for themed offers and promotions.

Communicating with the businesses: We used the Llandrindod Traders closed Face Book group to communicate with town centre businesses and specifically visited out of town centre businesses not covered by the Wi-Fi and / or not part of that FB group.

5 Participating businesses

In total 12 businesses took part in the trial. For a full list, please see **appendix 2.**

The trial was open to all businesses in the town but those who chose to participate were primarily town centre retail businesses. This was probably due to the relationships that had been built already with the Project Officer and the nature of the businesses in the Llandrindod Traders closed Facebook group. To ensure we included a business from outside the Wi-Fi coverage area the Project Officer specifically invited The Marches on the Ddole Road industrial estate to take part.

6 The messages

Whilst the offers and promotions were put into the trial by businesses, the actual art work and up-loading to the Splash Push dashboard was done by the Project Officer. Messages were in 4 categories:

- General information eg shop local (generated by the Project Officer)
- Promotions eg did you know we sell.....
- Time limited offers eg Easter discount
- General offers eg 15% off something

The message graphics used the town banding font and logos and were produced by the Project Officer using Microsoft publisher. Messages were static as the system did not support click throughs. Please see **appendix 3.**

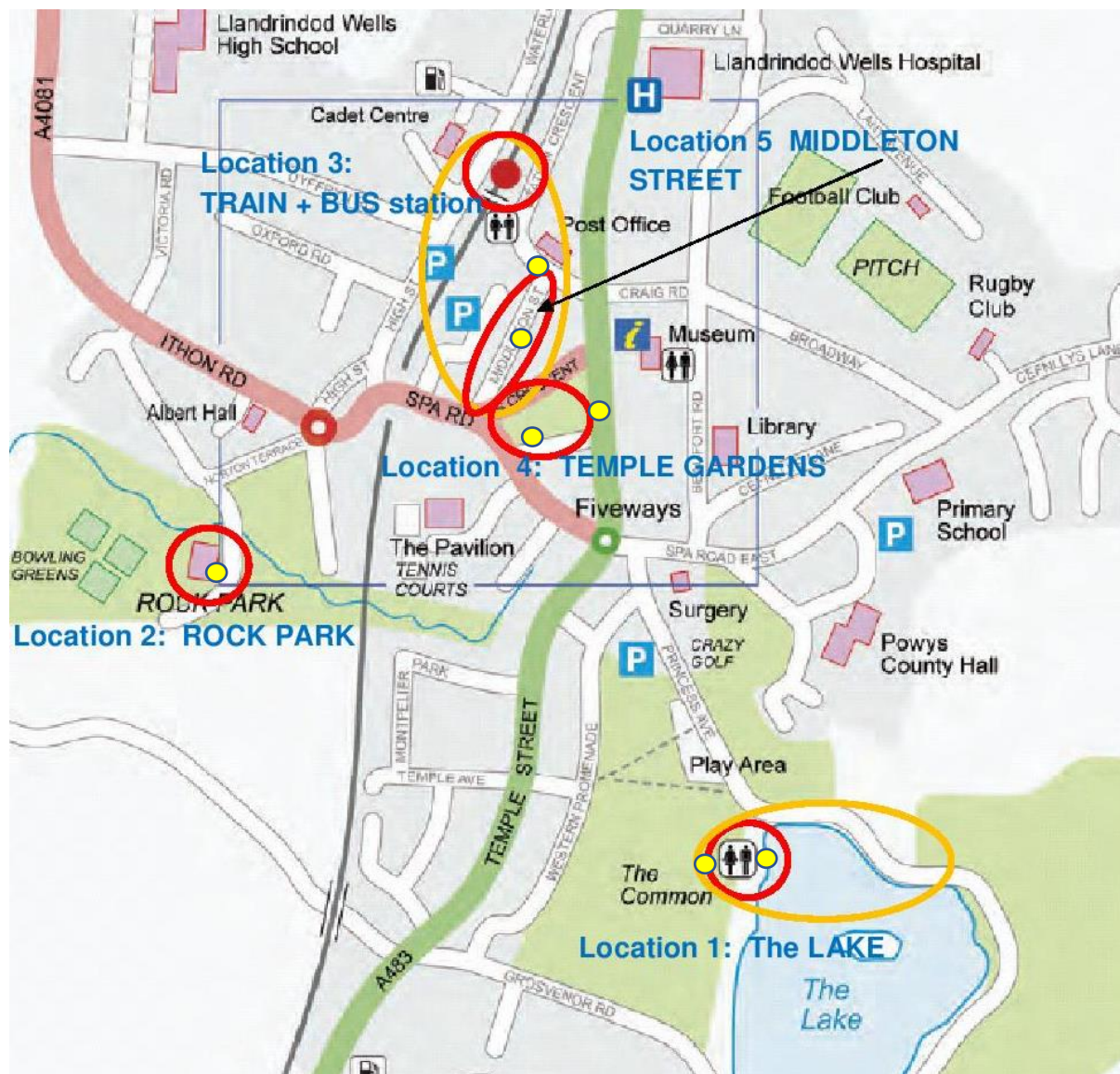
7 Location of the I-Beacons + messages

The i-beacons/ Wi-Fi system access points were located as follows (ranked busy to quiet in terms of visitor numbers – ranking changes but generally correct):

- 1 at KDM Local newsagents (busiest)
- 1 at Vans Good Food Shop Middleton Street
- 1 at The Metropole Hotel
- 2 at The Lake side café
- 1 at The Lindens
- 1 at The Rock Park centre (quietest)



The following map shows the location and Wi-Fi coverage of the access points.



Yellow dots indicate location of access points and therefore i-beacons.

Using the Splash Push on-line dashboard, the Project Officer allocated messages to the i-beacons and aimed to change messages or the location of messages on a weekly basis to ensure that all messages got some exposure at the busiest locations.

8 How results were recorded

The Splash Push web-based dashboard collected data on the number of:

- **App downloads**
- **Message activations** - a push notification was triggered ie a person with a Bluetooth enabled mobile had walked past an active i-beacon and received a push notification.

To assess take up of the offers, promotions and information, businesses were asked to make a note of instances of customers showing the message on their mobile screen to access the offers.

Messages simply providing information required businesses to ask customers a question like “how did you hear about our product?” and note those responses.

We collected data from participating businesses through a weekly check in via a closed Face Book group set up specifically for the trial.

9 The trial results in numbers

Business participation	11 town centre	See appendix 2
	1 out of town	
Offers	17 created	See appendix 3
Population of Llandrindod Wells	5,300	
App downloads	129	2.4% of population
Activations	2,252	See appendix 4
Take up	3	
Conversion rate	0.13% of activations	

10 Trial outcomes

The original purpose of the trail and what we learnt:

A Did the pushed notifications increase people’s engagement with town centre businesses?

Evaluating purely on numbers the answer would be no. However, although this trial did not show significant conversion rates of people shopping from receiving messages we saw that there is potential for pushed messages to engage new and existing customers. The most notable example being a Facebook post from a woman who went into the hair dressers to book an appointment directly because she received the push notification with 15% off. Before the message she had no intention of having her hair done.

Influences on results:

- The results in **appendix 4** show a relationship between Facebook messages about the trial (days coloured blue or black) and an increase in app downloads.
- The trial duration was quite short given that in the period people had to hear about and download the app and become accustomed to receiving messages and then go to the business to take action.
- Messages were geographically remote from businesses – this relied on people going to the premises where the offer was.
- The message delivery mechanism needs to be engaging and easy to use. The Splash Push app was free, but was lacklustre, ‘clunky’ to use, not very engaging and the lack of click through was a negative factor.



- We could have benefitted from more visible, large signage in the town advertising that the app was available.
- The messaging platform was not intuitive so there was no way to stop messages coming to devices if the user was not interested in them.
- Businesses were not in control of the messages so were less invested.

There are i-beacon messaging systems available which allow users to enter some simple data about themselves and their preferences. This information allows the system to remember the person and message them when they enter town with a 'hello Dave, look what's on offer today' message. These systems also only message about things the customer might be interested in and they 'learn' about preferences the more the customer uses them. Clearly there is a cost implication to such systems.

B Did the trial benefit businesses not covered by the town Wi-Fi system?

Again, numbers were low but one instance of take up of an offer was someone going to get 7 keys cut at The Marches (despite there being a key cutter in the centre of town) as a result of the pushed message received in the town centre.

11 Conclusion

Whilst numbers of people participating and the conversion rate to sales or new customers was low, the trial did demonstrate that there is potential in such systems.

If the town were to invest in such a system the following recommendations should be noted:

- Messaging systems should be linked to the town Wi-Fi system so that cross referencing of visitor numbers and business activity can take place.
- The system should be intuitive to customers and their preferences.
- Messages need to be mapped out for a season by business owners and be part of a co-ordinated town wide campaign.
- Messages need to be in the ownership and control of business owners – each should have their own log on to the dashboard.
- Different messages for different areas of town are needed. Some to draw people into the town and others in town right next to premises to encourage people inside.
- Creating message graphics should be simplified using a template within the dashboard where you simply choose background graphic, font, colour etc. making message creation a 'nontechnical' activity.

Jude Boutle Llandrindod Wells Wellness and Digital Project Office

Report dated 2018



Appendix 1 I-beacon trial flyer

Llandrindod Wells i-beacon

Help us do something amazing...

We need your help to test ground breaking technology in Llandrindod Wells.

In return you'll get:

Access to EXCLUSIVE information offers and promotions from Llandrindod Wells businesses!

Interested? If you have an Apple or android phone you can help us.

www.llandrindod.co.uk/i-beacons-trial

i-beacon Llandrindod

Helpwch ni i wneud rhywbeth anhygoel...

Mae angen eich help i dreialu technoleg sy'n torri tir newydd yn Llandrindod.

Fel gwerthfawrogiad cewch:

Gyfle i gael mynediad at wybodaeth a chynigion arbennig UNIGRYW gan fusnesau Llandrindod!

Diddordeb? Os oes gennych Apple neu ffôn android gallwch ein helpu trwy gysylltu â

www.llandrindod.co.uk/i-beacons-trial



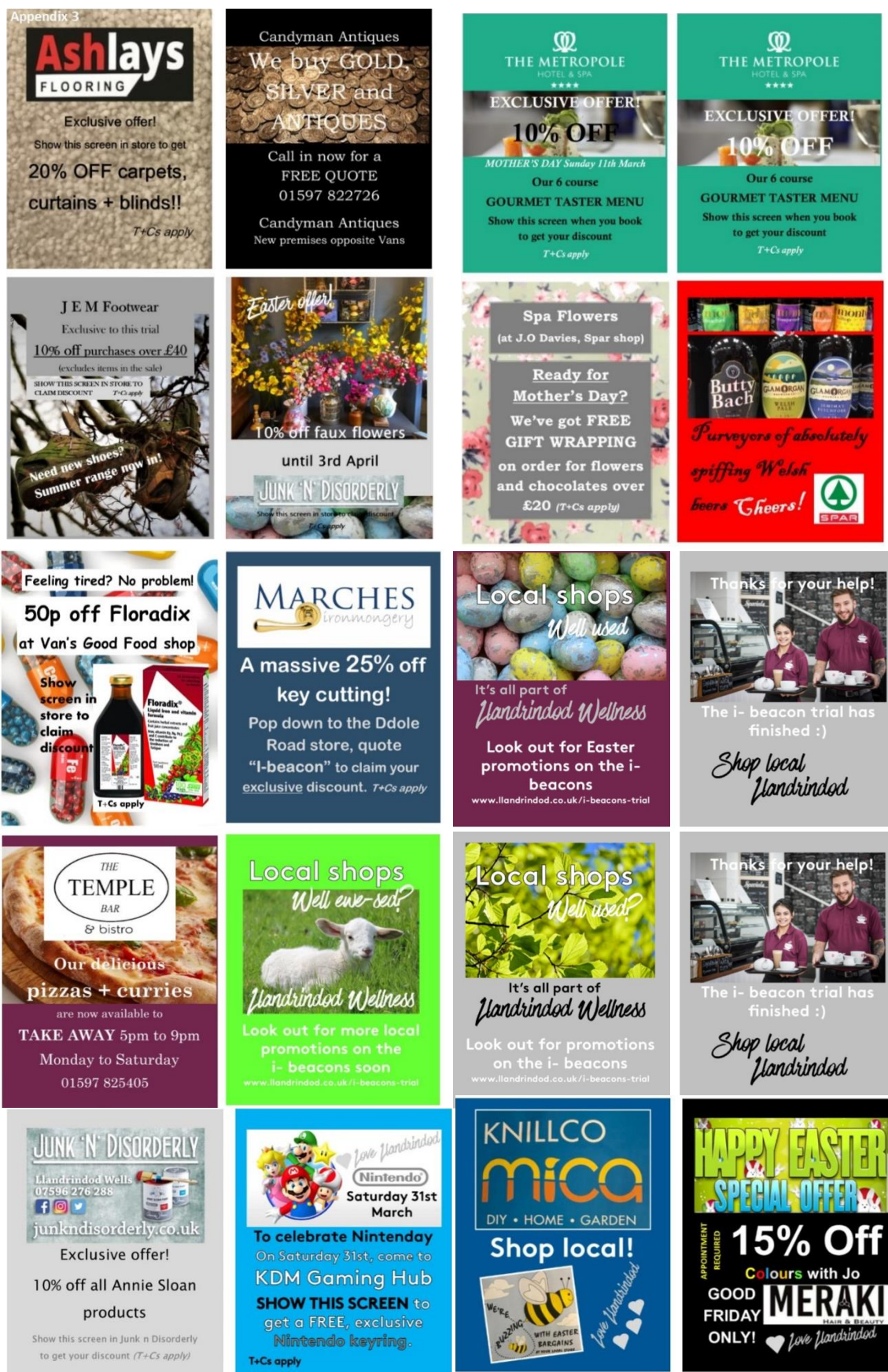


Appendix 2 Businesses participating in the trial

Business name	Type	Promotions	Take up
Ashlays	Carpet + curtains shop	1	0
The Candyman	Antiques and precious metals	1	0
JEM Footware	Shoes	1	1
Junk n Disorderly	Home interiors	2	0
KDM Local	Gaming hub	1	0
Knillco	Hardware	1	0
Meraki	Hair dresser	2	1
Metropole	Hotel, bar, restaurant	2	0
Spar	Corner shop	3	0
Temple Bar	Bar + take away	1	0
Van Good Food Shop	Wholefood	1	0
The Marches	Industrial estate building + hardware	1	1

Appendix 3

The offers + promotions sent by BLE messaging



Appendix 4 Downloads, activations and take up figures (Blue of black days = Facebook messaging about the trial)

	M	T	W	Th	F	Sa	Su	M	T	W	Th	F	Sa	Su
	05-Feb	06-Feb	07-Feb	08-Feb	09-Feb	10-Feb	11-Feb	12-Feb	13-Feb	14-Feb	15-Feb	16-Feb	17-Feb	18-Feb
Downloads	1	1	7	8	1	0	1	1	0	9	5	8	0	0
							19							23
Activations	12	4	76	155	16	21	39	79	118	203	88	24	0	5
							323							517
Take up							3							0

	M	T	W	Th	F	Sat	Sun	M	T	W	Th	Fri	Sat	Sun
	19-Feb	20-Feb	21-Feb	22-Feb	23-Feb	24-Feb	25-Feb	26-Feb	27-Feb	28-Feb	01-Mar	02-Mar	03-Mar	04-Mar
Downloads	4	4	2	0	9	0	0	0	2	0	1	2	4	0
							19							9
Activations	17	54	5	1	79	50	1	22	22	10	19	1	0	6
							207							80
Take up							0							0

	M	T	W	Th	F	Sat	Sun	M	T	W	Th	F	Sat	Sun
	05-Mar	06-Mar	07-Mar	08-Mar	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar	16-Mar	17-Mar	18-Mar
Downloads	1	6	8	3	8	0	3	2	0	0	2	0	0	0
							29							4
Activations	24	27	134	14	25	9	13	21	14	3	35	28	22	0
							246							123
Take up							0							0

M	T	W	Th	F	Sat	Sun	M	T	W	Th	F	Sat	Sun
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Llywodraeth Cymru
Welsh Government

	19-Mar	20-Mar	21-Mar	22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar	29-Mar	30-Mar	31-Mar	01-Apr
Downloads	1	1	1	0	1	0	0	1	7	0	3	0	0	0
							4							11
Activations	11	11	52	67	4	2	4	29	77	33	24	11	17	0
							151							191
Take up							0							0

	M 02-Apr	T 03-Apr	W 04-Apr	Th 05-Apr	F 06-Apr	Sat 07-Apr	Sun 08-Apr	M 09-Apr	T 10-Apr	W 11-Apr	Th 12-Apr	F 13-Apr	Sat 14-Apr	Sun 15-Apr
Downloads	0	3	0	3	0	0	0	0	1	0	0	0	3	0
							6							4
Activations	0	38	86	29	5	7	3	16	31	9	13	22	9	14
							168							114
Take up							0							

	M	T	W	Th	F	Sa	Su	M	T	W	Th	F	Sa	Su
	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr	29-Apr
Downloads	0	0	0	0	0	1	0	0	0	0				
							1							0
Activations	6	3	1	2	0	3	0	5	89	23				
							15							117
Take up							0							
DOWNLOADS		129		ACTIVATIONS			2252	TAKE UP		3				