

Point Of Sale Integration

Functional Overview Document

POCKETvouchers Integration

1.1 Introduction

POCKETvouchers is a trackable mobile voucher platform which sends uniquely coded text messages that can be verified in real-time via TCP/IP through direct Point of Sale integration.

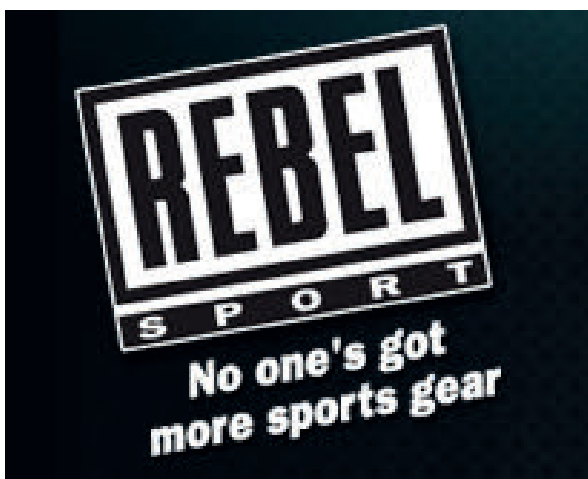
This allows mobile vouchers to be instantly cancelled and all redemption information to be recorded, from the time of delivery through to the place and time of redemption which is hugely powerful for marketers and retailers alike. Retailers who have integrated with POCKETvouchers platform include Liquorland, Rebel Sport, Superliquor and 650 bars and restaurants around New Zealand.

For retail situations where speed of service is paramount such as petrol stations, grocery stores and fast food outlets POCKETvouchers has upgraded its platform to allow direct integration with Point of Sale Software via TCP/IP which delivers a much improved process at the Point of Sale

1.2 Purpose

This functional overview aims to give an overview of the POCKETvouchers platform. It is designed to assist the audience in identifying the purpose and key outcomes of the project and is not a full technical specification

It contains background information on POCKETvouchers and focuses on some usage examples, basic information around technology requirements, and example data and the content specifications although is all subject to what is most suitable for the end Point of Sale Vendor.



2 POCKETvouchers Background

2.1 The POCKETvouchers Platform

The POCKETvouchers platform is a comprehensive mobile marketing solution which uses the power of mobile phones, emails and paper vouchers to drive foot-traffic and sales whilst delivering hugely powerful campaign reporting. It encompasses a number of proprietary solutions and can be integrated with 3rd party applications to add a trackable mobile voucher element to mainstream advertising, sales promotions, product sampling, websites, social networks and more.

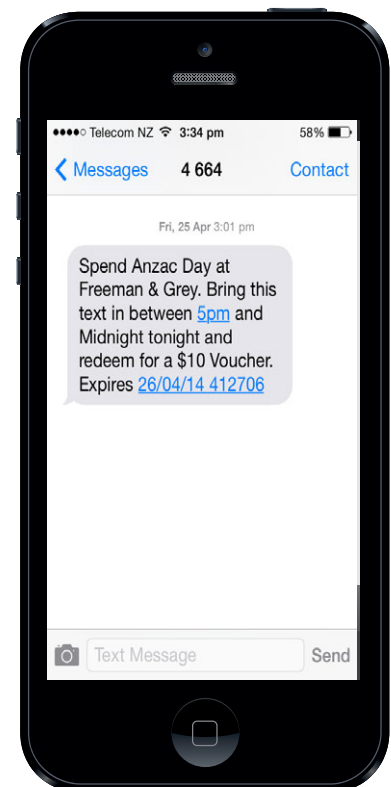
The technical platform is supported by a team of experienced new media marketers to assist clients implement mobile voucher applications to suit their objectives and has delivered activity for major New Zealand companies such as Coca-Cola, DB Breweries, Sanitarium, Liquorland and Rebel Sport.

2.2 What is a POCKETvoucher?

POCKETvouchers are uniquely coded numbers which can be received via mobile phones, emails and paper vouchers. Due to issues surrounding sending barcodes to these platforms and scanning barcodes off them unique codes are the most effective way of sending uniquely trackable mobile vouchers.

Consumers can receive a POCKETvoucher to their mobile phones, emails or in paper form. When the text message, email or paper voucher is presented at the retail store the unique code is entered into the POS System where it is sent to the POCKETvouchers host to be instantly redeemed (canceled) and all elements associated with the voucher tracked.

POCKETvouchers can also be sent from 3rd party applications such as web banners and are sent as a standard text message (max 160 characters) so can be received on any mobile phone.



2.3 POCKETvouchers Reporting

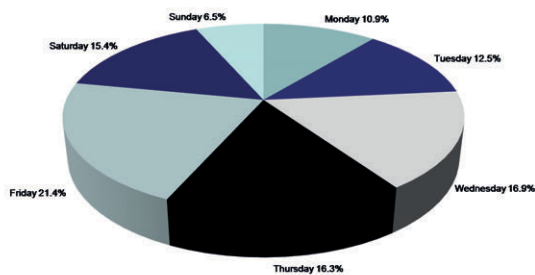
The POCKETvouchers platform records all information associated with a vouchers sending and redemption, from the exact time it is sent or requested, through to the exact time and location of redemption. This is used by the campaign originator to measure campaign success to calculate Return on Investment and to record consumer behavior information to continually improve activity.

If Point of Sale Software is being used all redemptions are usually processed against a new Tender Type (with same functionality as Credit Card) to separate transactions for reporting purposes. Transactions are also recorded separately through the EFTPOS network as a separate Card Type so can be differentiated from standard EFTPOS and Credit Card payments on all EFTPOS reconciliations

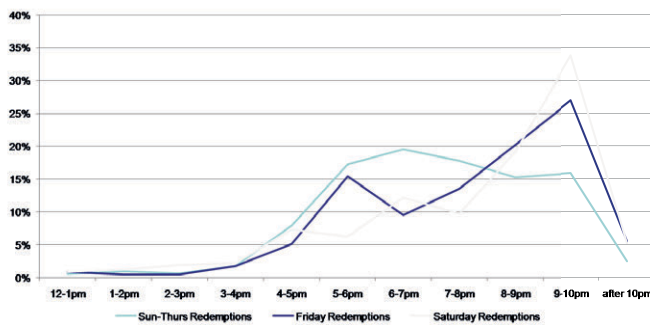
If Direct Point of Sale System integration is used more advanced reporting can be implemented including measuring incremental purchases and basket data, this is explained further below in 3.1

2.4 Example POCKETvoucher Reports

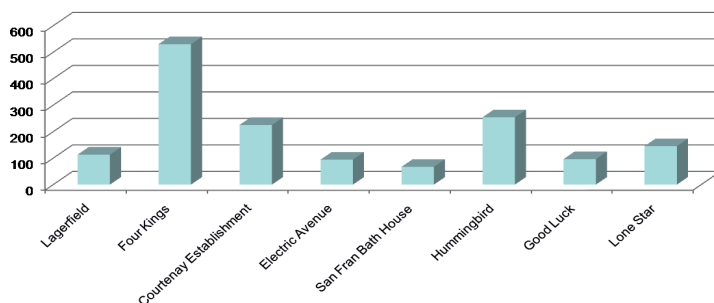
2.4.1 Redemption By Day



2.4.2 Redemption By Time



2.4.3 Redemption By Outlet



3 Direct Point Of Sale System Integration

3.1 *Direct POS Integration Overview*

The POCKETvouchers platform functionality is improved through integrating directly with Point of Sale Systems to allow transaction information to be communicated via TCP/IP (the internet). This will require each Point of Sale terminal to have the ability to communicate via https whether this is through an internet connection, LAN or VPN. The platform has been designed to be flexible so we can work with clients to satisfy internal information security control requirements such as IP restriction and various data encryption methods.

Direct integration greatly reduces the processing time for the retailer through the unique code length (4-9 digits).

In addition to the reduced transaction time direct Point of Sale Integration allows greater flexibility and additional functionality for taking advantage of the POCKETvouchers platform. An example of this is adding additional transaction information to communications of the value of the voucher and purchase basket to allow the reporting to record this information against redemptions

The following example specifications are designed to assist Point of Sale vendors in evaluating options to integrate with POCKETvouchers directly. The POCKETvouchers platform has been developed to allow flexibility to integrate with a wide range of applications so the following should be taken as a guide only and Point of Sale Vendors are welcome to recommend a solution that would work best for them.

3.2 *Objectives:*

- Develop functionality allowing Point of Sale Software to communicate directly with the POCKETvouchers host via TCP/IP to verify POCKETvouchers in real-time
- Deliver the simplest and quickest transaction time at the Point of Sale possible
- Add additional transaction data to the POCKETvouchers transaction flow to allow increased levels of reporting
- Provide an industry standards based interface to the services delivered by the POCKETvouchers back office.

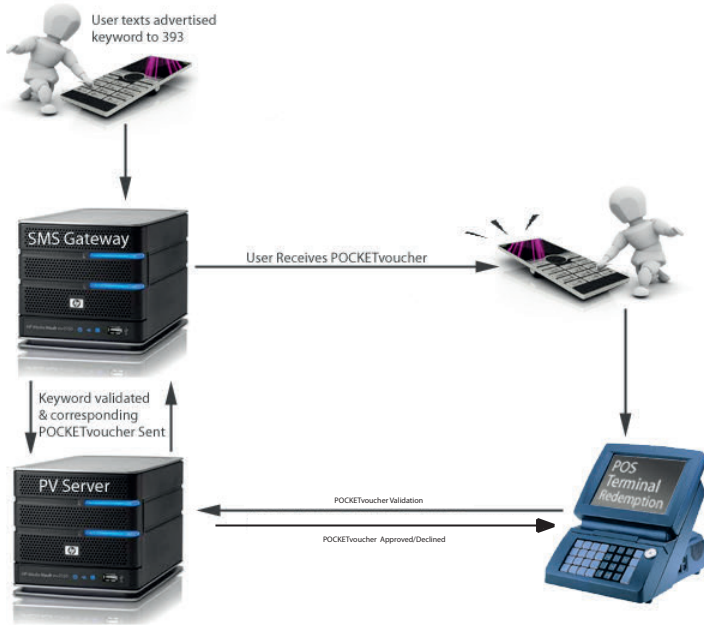
3.3 *Requirements:*

- Develop Point of Sale Software interface to support a unique code being manually entered as part of the purchase process
- Set-up communications for sending transaction information to the POCKETvouchers host to allow real-time verification. Including but not limited to:

The POCKETvoucher Unique code

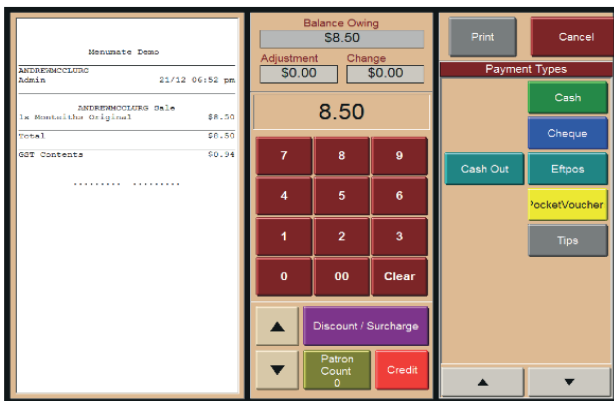
- o Merchant number
- o Terminal number
- o Value of the transaction
- o Amount to draw down on the PocketVoucher

3.4 POCKETvouchers Communications Process Diagram



3.5 POCKETvouchers Process at Point of Sale (example)

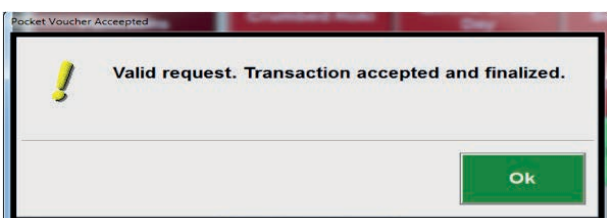
1 'Ring on' items as per normal then select the item(s) you wish to 'ring off' to POCKETvouchers. Now press the **Tender** button and select the **POCKETvouchers** tender type.



2 Enter the POCKETvoucher code from a text message, paper or email voucher and then press **OK**.



3 After POCKETvouchers runs all the checks it will send a bounce back 'Transaction Accepted' message.



4.1 POCKETvouchers Communications Process

Point of Sale Systems can trigger a POCKETvoucher redemption by calling the Redemption Service. This is a Microsoft.Net Windows Communication Foundation (WCF) service hosted in the cloud (Windows Azure) which presents itself as a Basic profile Web Service with an HTTPS endpoint.

The Web Services Description Language (WSDL) specification for the interface is available from the following URL

(<http://pocketvouchers.cloudapp.net/RedemptionService.svc?wsdl>)

Most software development environments provide the ability to generate clients which consume Web Services either graphically or via command line tools.

The redemption interface complies with the OASIS security standard as specified in the document referenced below:

(<http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-soap-message-security-1.0.pdf>)

A username and password will be provided as part of the enrolment process.

The interface currently has four core operations

4.1.1 Redeem

Draws voucher count down by one

4.1.2 RedeemWithTransactionValue

Draws voucher count down by one recording the Transaction Value

4.1.3 RedeemWithVoucherValue

Draws down voucher value

4.1.4 RedeemWithVoucherValueAndTransactionValue

Draws down voucher value recording the Transaction Value

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These methods accept the following parameters:

redemptionReference – An reference code generated by the PocketVouchers backoffice which uniquely identifies a successful transaction. (OUT)

messageText – Free form text message containing additional information about the outcome of the transaction generated by the PocketVouchers backoffice (OUT)

voucherCode – POCKETvoucher code from customer's mobile phone text message. This is a unique number determined in the send phase of the project (up to 19 characters long)

voucherValue – The amount to deduct from the Voucher's current balance.

transactionValue – The total value of the transaction including payments via other means (cash, EFTPOS) etc

merchantId – A unique code for the Merchant provided in the PocketVouchers enrolment process.

merchantReference – A reference code generated by the POS terminal which identifies the transaction

terminalId – A unique code for the Terminal provided in the PocketVouchers enrolment process.

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<http://www.pocketvouchers.com>

*/

```
using System.Runtime.Serialization;
```

```
namespace PocketVouchers.Services.Voucher.Redemption
```

```
{
```

```
    [DataContract]
```

```
    public enum RedeemResult
```

```
    {
```

```
        [EnumMember]
```

```
        Undefined = 0,
```

```
        [EnumMember]
```

```
        Success,
```

```
        [EnumMember]
```

```
        Error,
```

```
        // Guard condition failures
```

```
        [EnumMember]
```

```
        VoucherCodeFormatInvalid,
```

```
        [EnumMember]
```

```
        VoucherAmountTooSmall,
```

```
        [EnumMember]
```

```
        VoucherAmountTooLarge,
```

```
        [EnumMember]
```

```
        TransactionAmountTooSmall,
```

```
        [EnumMember]
```

```
        TransactionAmountTooLarge,
```

```
        [EnumMember]
```

```
        MerchantIdFormatInvalid,
```

```
        [EnumMember]
```

```
        MerchantReferenceFormatInvalid,
```

```
        [EnumMember]
```

```
        TerminalIdFormatInvalid,
```

```
        // Configuration logic failures
```

```
        [EnumMember]
```

```
        MerchantIdUserNameMismatch,
```

```
        [EnumMember]
```

```
        MerchantIdUnknown,
```

```
        [EnumMember]
```

```
        MerchantDeactivated,
```

```
        [EnumMember]
```

```
        MerchantIdTerminalIdCombinationUnknown,
```

```
        [EnumMember]
```

```
        TerminalDeactivated,
```

```
        [EnumMember]
```

```
        ConsumerDeactivated,
```

```
        [EnumMember]
```

```
        VoucherBatchDeactivated,
```

```
        [EnumMember]
```

```
        VoucherProviderDeactivated,
```

```
        [EnumMember]
```

```
        MerchantTimezonePeriodNotConfigured,
```

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```
// Business Rule errors
[EnumMember]
MerchantTransactionLimitExceeded,
[EnumMember]
VoucherUnknown,
[EnumMember]
VoucherNotAllocatedToConsumer,
[EnumMember]
VoucherRedemptionOperationNotSupportedForVoucherType,
[EnumMember]
MerchantNotAMemberOfAnActiveMerchantGroupThatCanRedeemThisVoucher,

// Time related errors
[EnumMember]
VoucherRedemptionNotStarted,
[EnumMember]
VoucherRedemptionFinished,
[EnumMember]
VoucherExpired,
[EnumMember]
VoucherRedemptionNotEnabledForDayOfWeek,

// Balance related errors
[EnumMember]
VoucherInsufficientBalance,
[EnumMember]
VoucherInsufficientBalanceAvailable,

// RedemptionCode batch insertion errors
[EnumMember]
RedemptionCodeBatchExhausted,
[EnumMember]
RedemptionMessageFormatInvalid
}
}
```