



Virgin Trains West Coast RFV Design specification

Individual RFV Segmentation Document

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1. Document Management

Version Control			
Version	Date	Author(s)	Sections Changed
0.1	23/07/2018	Steve Forster	Initial draft document
0.2	03/08/2018	Steve Forster	Updated after review
0.3	03/08/2018	Steve Forster	3.1 RFV Segmentation - updated after review with Alex Smith of Virgin Trains

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2. Document Purpose

The purpose of this **Individual RFV Design Document** is to define the scope of how the solution will process data for the RFV segmentation scheme for Prospects.

The list of functional requirements documented in this design are covered below in the scoping section.

The process will be developed as an SSIS package to enable scheduling at different times depending on the scoring requirements.

The RFV calculation will be dependent on the staging for Wi-Fi, Beam and 3rd Party Reseller data to complete without error.

This document should be read in conjunction with the Technical Design document and the Business Requirements documents.

2.1 In Document Scope

The following items are in scope for this document:

- Logic for RFV calculation for Individuals
- Database changes required to implement the design

2.2 Out of Document Scope

The following items are out of scope for this document and will be covered to separate design documents:

- RFV Segmentation for Customers;
- The design to process records through to pre-processing;
- The design to process records through to staging.

3. High Level Overview

3.1. RFV Segmentation

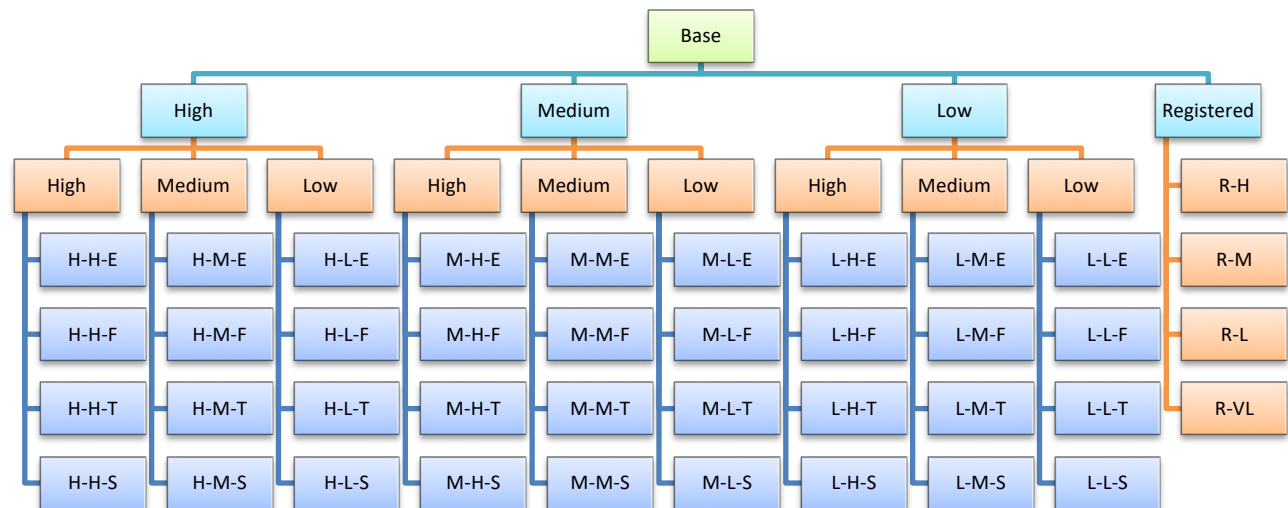
The RFV segmentation will be calculated for all Prospects on a daily basis as part of the **[Production].[Individual_Refresh]** process.

The segmentation will calculate and store 3 component fields **[Recency]**, **[Frequency]** and **[Value]** to allow simpler targeting based on value or frequency.

The RFV score will be concatenated as a single field **[Recency]-[Value]-[Frequency]**
e.g. 'H-M-E'.

Where a prospect no transactions concatenate **[Recency]-[Value]**
e.g. 'R-L'.

- It is anticipated that until 3rd party booking data is available, the majority of prospects will fall into the Registered segmentation.



3.2. Assumptions

Transactions older than 36 months will not be used in the calculation of the RFV segmentation.

RFV segment history for Prospects will not be stored.

3.3. Data

The aggregation columns for Individual will be collated from the processing of WiFi, Beam, Newsletter and in the future 3rd Party Bookings (TTL).

[Individual].[DateRegistered] is the date that the source system passed the prospect details to CRM.

Recency and Value derivations will use the summary columns in **[Production].[Individual]** such as **[DateLastPurchaseAny]** and **[DateLastTravelAny]**.

3.4. Level Splits

RFV is split into 3 components, and each segment will be mutually exclusive, calculated top down. For Prospects we may not have transaction details, but may know when they travelled.

Level 1 - Recency

Level-1 Code	Level-1 Segment	Definition
H	LIVE	Active Transacted/Travelled in the last 12 months
M	LAPS	Lapsed Transacted/Travelled 12-24 months ago
L	INAC	Inactive Transacted/Travelled 24-36 months ago
R	REG	Registered Not Transacted/Travelled (split by live, laps, inac)

Level 2 - Value

Level-2 Code	Level-2 Segment	Definition
H	VHV	Very High Value Purchase value > £1000, purchased in the last 12 months <i>OR</i> Not Transacted/Travelled, and has registered in last 12 months
M	HV	Moderately High Value Purchase value between £250 and £1000, purchased in the last 12 months <i>OR</i> Not Transacted/Travelled, and has registered in last 12-24 months
L	LV	Low Value Purchase value <= £250, purchased in the last 12 months <i>OR</i> Not Transacted/Travelled, and has registered more than 24 months ago
VL	VL	Very Low Value Not transacted, and has registered more 36 months ago

Level 3 - Frequency

Level-3 Code	Level-3 Segment	Definition
E	EST	Established Have made 11+ transactions in the last 12 months
F	FAM	Familiar Have made 5-10 transactions in the last 12 months
T	TEN	Tentative Have made 2-4 transactions in the last 12 months
S	SOL	Solo Have made 1 transaction in the last 12 months
R	REG	Registered Not Transacted/Travelled

3.5. Database Changes

[Production].[Individual]

The Individual table will be extended to include the following

Column	Data Type	Description
SalesTransaction24Mnth	int	Count of transactions in last 24 months
SalesTransaction36Mnth	int	Count of transactions in last 36 months
RFVsegmentRecency	char(1)	Recency (Level-1 Code)
RFVsegmentValue	char(1)	Value (Level-2 Code)
RFVsegmentFrequency	char(1)	Frequency (Level-3 Code)
RFV	varchar(5)	Segmentation Value e.g. 'H-M-E'

[Production].[Individual_RFV_Update]

The stored procedure logic will be updated to use this new segmentation scheme, and populate the [RFV] score on [Production].[Individual].

END