

MI AUTOMATION CASE STUDY



CASE STUDY CLIENT

VEHICLE REMARKETING AUTOMATED MI

Initial Deployment Jul - Nov 2014

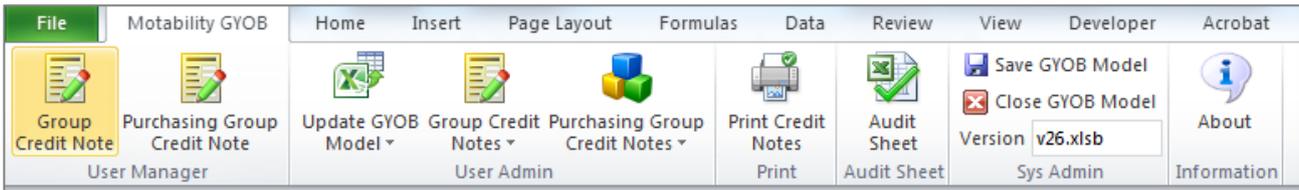
Additional Journal Automation Jan 2018

PROJECT OVERVIEW

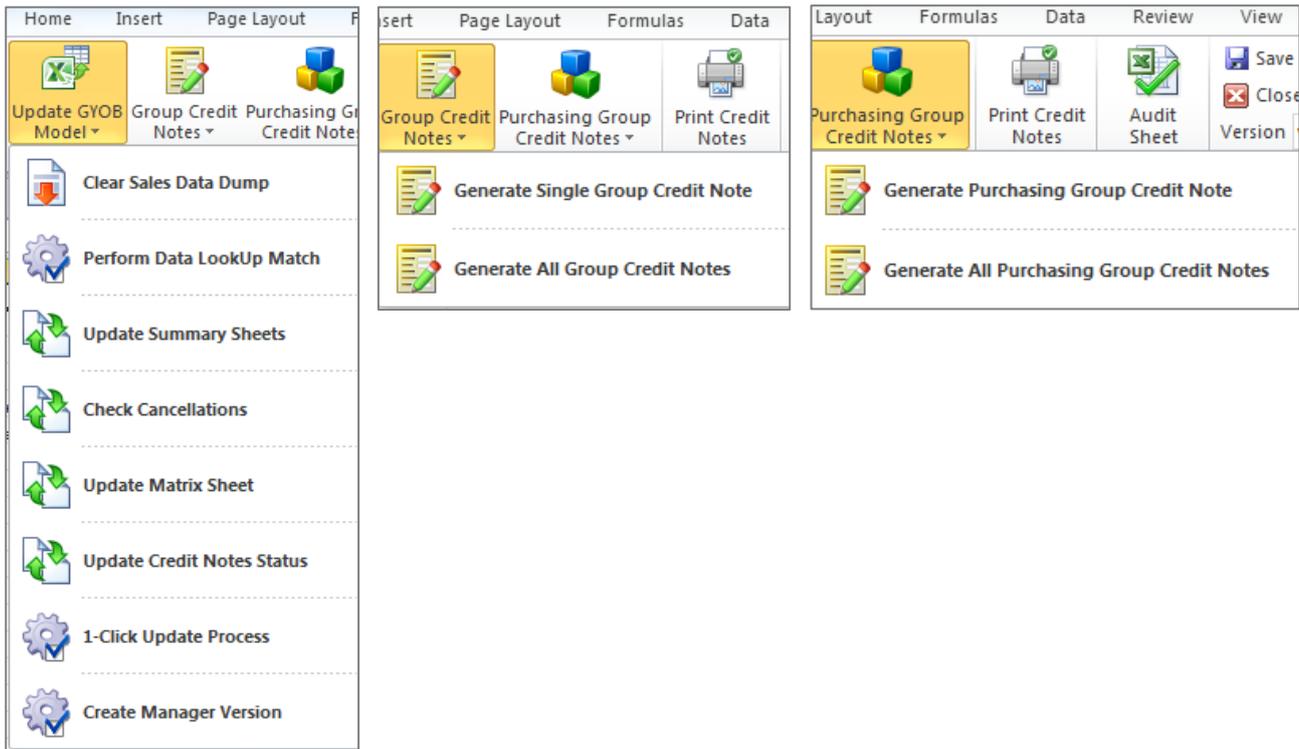
OBJECTIVE	Automation of the reporting, production and reconciliation of Credit Notes issued to their dealer network on a monthly, quarterly and annual basis.
SOLUTION FORMAT	MS Excel driven by VBA (Macros). User navigation via customised ribbon to operate model. Manual copy / paste replaced by simple mouse clicks.
MAIN PROCESSES	<ol style="list-style-type: none">1. Update model on a monthly basis2. Produce all Credit Notes in a single click3. Report on sales breakdown by Dealer Manager4. Automated production of journals for upload into ledger system.
SUCCESES	<ol style="list-style-type: none">1. Reduced processing time from +/- 3 days to < 2 hours2. Elimination of user error in previous manual update process3. Step-by-step update process clearly defined within the customised ribbon, reducing the requirement for detailed / complicated end user process notes4. FTE re-deployment allowing the business to 'do more with less'5. Project paid for itself - previously there was no easy way to detect cancellations. Therefore these were written-off by the business. New functionality allowed cancellations to henceforth be recouped and netted-off against liabilities resulting in a net gain for the business.
PROJECT TIMESCALES	<ol style="list-style-type: none">1. July 2014 – Project Commencement2. August 2014 – Proof-of-Concept delivered3. October 2014 – User Acceptance Testing4. November 2014 – User Sign-Off5. January 2018 – Additional functionality added to automate journal production following new 'One-Ledger' ERP system implementation.

VEHICLE REMARKETING - Model Navigation

1. Customised User Ribbon to drive all functionality



2. Detailed Breakdown of Main Individual Processes



3. Part Screenshot of Front Sheet of Credit Note

Group / Dealer Number:	XXXX
Group / Dealer Name:	XXXXXX
FCS Payment Code:	XXXX
Alfa Dealer Code:	XXXXX

Month	Year	Group Purchases	Rebate £	Group Cancellations	Deduction £	Total £
January	2017	-	-	-	-	-
February	2017	-	-	-	-	-
March	2017	-	-	-	-	-
April	2017	-	-	-	-	-
May	2017	-	-	-	-	-
June	2017	-	-	-	-	-
July	2017	7	£350	-	-	£350
August	2017	1	£150	-	-	£150
September	2017	4	£200	(1)	(£150)	£50
October	2017	-	-	-	-	-
November	2017	-	-	-	-	-
December	2017	-	-	-	-	-
Total		12	£700	(1)	(£150)	£550
GOODS/SERVICES		VAT		TOTAL		
£550		-		£550		

4. Part Screenshot of Dealer Reward Breakdown

Reward Breakdown							
Group/Dealer Number: G131							
Group/Dealer Name: Drive Vauxhall							
Dealer Breakdown							
Total	£550	£700	-	-	-	-	-
Dealer Code	Dealer Name	Total Rebate Earned	GYOB Std (£)				
23103	Drive Vauxhall (Leicester)	£50	£50	-	-	-	-
587	Drive Vauxhall (Bristol North)	£250	£250	-	-	-	-
23096	Drive Vauxhall (Bristol)	(£150)	-	-	-	-	-
23095	Drive Vauxhall (Aldershot)	£150	£150	-	-	-	-
50956	Drive Bristol East	£100	£100	-	-	-	-
23102	Drive Vauxhall (Leamington Spa)	£50	£50	-	-	-	-
23104	Drive Vauxhall (Redcar)	£100	£100	-	-	-	-

5. Part Screenshot of Breakdown by Individual Car Plate Registration

Vehicle Breakdown												
Group/Dealer Number: XXXX		Total volume		Rebate Amount								
Group/Dealer Name: XXXXXXXX		Sales	12	£700								
Payable FCS: XXXXXXXX		Cancellations	(1)	(£150)								
		Net	11	£550								
Reg (no spaces)	Sale / Cancellation	Sold Channel	Sold / Cancel Date	Dealer Number	Dealer Name	Total Rebate Amount	GYOB Standard (£)	GYOB Enhance ment (£)	GYOB WAV/Pre mium (£)	GYOB Premiu m (£)	NI to NI (£)	Vauxhall (£)
XXXXXX	Sale	Forecourt	XXXXXX	23095	XXXXXX	£50	£50	-	-	-	-	-
XXXXXX	Sale	Forecourt	XXXXXX	23103	XXXXXX	£50	£50	-	-	-	-	-
XXXXXX	Sale	Forecourt	XXXXXX	23104	XXXXXX	£50	£50	-	-	-	-	-
XXXXXX	Sale	Forecourt	XXXXXX	23095	XXXXXX	£50	£50	-	-	-	-	-
XXXXXX	Sale	Early Return	XXXXXX	23095	XXXXXX	£50	£50	-	-	-	-	-
XXXXXX	Sale	Forecourt	XXXXXX	23102	XXXXXX	£50	£50	-	-	-	-	-
XXXXXX	Sale	Forecourt	XXXXXX	23104	XXXXXX	£50	£50	-	-	-	-	-
XXXXXX	Sale	Forecourt	XXXXXX	50956	XXXXXX	£50	£50	-	-	-	-	-
XXXXXX	Sale	Exclusive	XXXXXX	587	XXXXXX	£150	£150	-	-	-	-	-
XXXXXX	Sale	Early Return	XXXXXX	50956	XXXXXX	£50	£50	-	-	-	-	-
XXXXXX	Sale	Early Return	XXXXXX	587	XXXXXX	£50	£50	-	-	-	-	-
XXXXXX	Sale	Forecourt	XXXXXX	587	XXXXXX	£50	£50	-	-	-	-	-
XXXXXX	Cancellation	Exclusive	XXXXXX	23096	XXXXXX	(£150)	-	-	-	-	-	-

6. Project Synopsis

Prior to 2014, MI Analysts in the client's Finance Department had developed a framework to allow the production of Credit Notes for their dealership network on an individual basis. The production of each credit note required multiple copy & paste actions, first to source base data from their ERP system and then to copy and paste into a calculation worksheet linked by formulas to a formatted set of front end 'Credit Note' sheets as detailed in the prior screenshots.

Clearly an unsustainable labour-intensive manual process and prone to human error, the client approached FD4Cast via word-of-mouth recommendation in order to scope out the possibility of automating the production of their Dealer Credit Notes.

A first-stage automated proof of concept was developed soon after initial requirements were discussed. This was the springboard to an 'eye-opening exercise' that allowed stakeholders to visualise what was actually achievable. As a result the project scope was then re-evaluated and widened to include additional functionality not previously considered.

The end result was a fully-automated system allowing a few specialist users to follow clearly indicated process steps as detailed in a customised MS Excel navigation ribbon. Processing time was reduced from days to hours, and human error was eliminated from the process. A series of checksums and generic checks were built into the automation process in order to highlight potential errors where previously manual visual checks were required.

Dealer Manager MI Reporting was also improved, allowing stakeholders to 'slice-and-dice' on a self-serve basis in order to review individual performance.



The initial financial investment in this particular automation project was immediately recouped (not counting FTE time saving) as a result of the new ability to programmatically detect Cancellations which previously were being written-off.

In January 2018, the client underwent a larger business process re-organisation involving a change in ERP system. The opportunity was therefore taken ahead of time to automate the production of ledger entries for automatic upload, with all individual car registrations needing to be output in a required format for subsequent upload into the new ERP system on a monthly basis.

ABOUT FD4CAST

Founder owner James Power is a BA/MI Analyst who specializes in the design and delivery of MI solutions built in MS Excel, Access & SQL for organisations requiring streamlining and automation of their administrative and financial processes.

As organisations seek to embrace the much-heralded ‘brave new world of automation’, FD4Cast operates in a specialist niche which seeks to sit between the end-user and the in-house organisational IT department.

‘Agile’ solutions are typically required in order to ‘oil the cogs’ of the process interaction between ERP systems and the MI Analyst (who often may not be a VBA specialist) in order to enable faster and error-free production of MI Reporting to therefore leave more time for actual business analysis.

Where appropriate, existing business processes are analysed & redesigned, and VBA code is used in order to automate previously manual copy/paste exercises. In addition, data cleansing, automated matching, duplicate detection, and general spreadsheet manipulation techniques will be incorporated in any given delivered project.

Data can be imported from base data source files or email attachments. In some instances where required, web-scraping exercises can be performed.

WORKING METHODOLOGY

1. Typically a first stage scoping exercise is undertaken with client input - i.e. requirements / objectives.
2. If ‘Automation’ opportunities exist, then these are identified and presented to the client.
3. A ‘Proof-of-Concept’ deliverable is agreed and produced for UAT (User Acceptance Testing).
4. End-to-End project scope agreed and then coded.
5. Error handling implemented in the base code in the event of new future data formats causing the overall process to deter from the original agreed ‘Happy Path’ route.
6. Continual support & maintenance agreed as an ongoing requirement, or on an ad-hoc basis.