



# Changing Face of Data & BI in TMG

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# What We Will Cover

- Timeline for TMG – Explain changing data landscape
- How we used to operate
- How we transitioned – Stage 1
- How we transitioned – Stage 2
- What we have achieved so far
- Future opportunities
- Summary

# Timeline to today –Publishing to Digital

## TMG Timeline

- 1977 Launch Thames Valley Trader
- 1988 Re Brand Auto Trader
- By 1995 13 Regional Editions
- 1995 Launched Topmarques.co.uk
- 1996 Launched autotrader.co.uk
- By 1999 5 National Magazines
  
- 2006 Purchased 2<sup>nd</sup> Byte
- 2009 Launched Auto Trader iPhone Ap
- 2009 Purchased Autotrader-mail
- 2010 Launched Razor
- 2010 Auto Trader Mobile
- 2011 Ipad Ap launched
- 2012 Android Ap
- 2013 Windows Ap
- 2013 Closure of Publishing Divisions

## Data

- Print Run / Copy Sales
- Surveys
- NRS / TGI
- Page Impressions / Hits
- Page Impressions / Hits
- By 1999 5 National Magazines
  
- Dealer / Manufacturer Website / response
- New Device Advertising response
- Trade to Trade auction data
- Dealer Website performance
- New platform response / audience
- New platform response / audience
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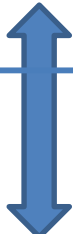
Traditional  
Magazine

Digital  
Data

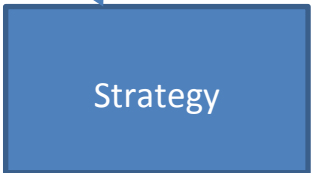
130 million rows a day, mobile grown data by c30%

# The Way We Operated

IT & Product Manage  
Development Plans



Marketing Manage  
Comms Plans



# How Did We Transition – 5 Steps in 2 Stages

## Stage 1

Step 1. Define  
Business Goals.  
Understand Current  
Position

- Identify most critical needs of your business.
  - Acquire new customers?
  - Retain high-value customers?
  - Increase Share of Wallet
- Assess the procedures, policies, and technologies you have in place for capturing, analysing, and acting on customer information across your company.
  - What gaps in data
  - What gaps in skills
  - What gaps in process

Step 2. Capture  
Questions that Need  
Answering

- Who are my customers?
- Are there differentiated customer segments and what motivates them?
- Why are some customers leaving and why are some staying?
- What makes them satisfied and loyal?
- Are there product/service enhancements needed?
- What is the value of my customers today, and what is the going forward/projected value?
- Who are my most profitable/least

# Changes As a Result of Stage 1 – Data Warehouse

## How Did We Get The Right Data Available?



- 4 Tech “interested in Data”
- IT were programme owners
- Budget sat in IT within main budget
- Dbase maintenance
- Support to IT
- Limited Business Use



- Low investment
- Low tech
- Wrong data

- Business owns programme from definition to consumption
- Budget linked to strategic goals
- Remains in IT
  - Facilitate
  - Maintain
  - Manage
- Programme Delivery Manager
- ETL Developers
- Cognos Report writers



- Integral to Business success

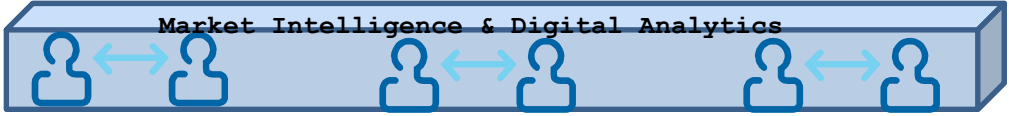
# Changes As a Result of Stage 1 – Process Management

## How Did We Unlock Access To The Data?

**Cross Functional**



**Product**



Analysts are point of contact for business and capture requirements working with DW Developers



Cognos Reports, Cubes



SPSS Predictive Analytics

Layer of self serve

**IT**



Aim for single repository



Source Data – load

# Changes As a Result of Stage 1 – Skills / People

## How Did We Unlock Value In The Data?

Team Skills	Tools	Support
<p>MI – Business / Marketing Graduates -8</p> 	<p>Excel Access Hitbox</p>	<p>Data Warehouse Cognos reports</p>
<p>Maths &amp; MSc Statistics</p>  <p>Graduate Diploma in Mathematics and Statistics</p> <p>MI = 5 Digital Analytics = 6</p>	<p>Excel Minitab SPSS Omniure</p>	<p>Data Warehouse Cognos reports Cubes Query Studio SPSS</p>
<p>Data Scientists ?? Technical Developer / Mathematics degree</p> 	<p>??</p>	<p>??</p>



# How Did We Transition – 5 Steps in 2 Stages

## Stage 2

### Step 3. Predict

- Do small scale POC
- Tackle a single issue
- Do it with cross functional team
- Have clear required outcome
- Measure impact

### Step 4. Act

- Work with business unit to change approach through POC
- Experiment on model findings – test and evolve
- Feed back findings from teams & customers into model

### Step 5. Expand

- It is evolutionary change, cultural as much as anything.
- Look to involve more business functions
- It can quickly deliver significant, even game-changing business improvements:
- Be careful not to run before you can walk
- Refine how you measure progress

# What Have We Achieved So Far With SPSS – POC Challenge

Business Challenge	Action Taken	Strengths / Benefits	Weakness / Issue	Impact of SPSS
<b>POC - Customer Retention</b>	3 weeks build of Excel model to predict churn, - Achieved 72% accuracy.	-Proved to the business customers could be saved before cancelling -Conversations with customers were positive & focussed	-Time consuming to run -Not scalable -Broke easily -learning loop very difficult to manage	-2 day build -90% accuracy -Runs automatically -Operationally scalable -22% decline in cancellations
Value Leakage	Review how discounts given to save business	-Right value offered depending on customer profile -Consistency across team -Knew who to say no to	-Culturally challenging for team -Change commission & target approach	Stopped giving value away Focussed discounts based on customer value
Growing Product Penetration	Upsell Analysis added to summary of customer performance	-Ensures right conversation is had with customer -Highest value opportunity -Better targeting / forecasting -Reduces churn risk -Value based packaging & pricing	Change to sales approach Commission target evaluation	Enables effective targeting Improves customer satisfaction Improves team morale

# Telesales Performance Report – Predictive Model

Predictive modelling to calculate likelihood of churn & proactively prevent it from occurring

## Dealer summary performance:


Metric	Dealer (June 2013)					Status
Weekly value	£144					N/A
Yield	£8.50					LOW
Spend per stock	£71.95					N/A
Stock volume	9	15	-44%▼	10	-14%▼	HIGH
Stock contract	8	61	-87%▼	0	n/a	N/A
Stock contract utilisation	108%	25%	325%▲	N/A	n/a	N/A
average stock price	£6,124	£5,474	12%▲	£8,138	-25%▼	HIGH
% under priced stock	41%	547356%	-100%▼	#DIV/0!	n/a	N/A
% neutrally priced stock	47%	547356%	-100%▼	#DIV/0!	n/a	N/A
% over priced stock	12%	547356%	-100%▼	#DIV/0!	n/a	N/A
Dealer Portal logins	18	13	41%▲			LOW
Response Tracker logins	1	6	-83%▼			
Image penetration	90%	90%	0%▼			
Average number of images	7.0	7.0	0%▲			
Adverts with attention grabbers	0	N/A	n/a	1	-100%▼	HIGH
Number of days with AT			n/a	#N/A	n/a	N/A
Number of cancellations			n/a	#N/A	n/a	N/A
Number fo retracted cancellations			n/a	#N/A	n/a	N/A
Search Appearances per stock	4,939	2,953	67%▲	8,262	-40%▼	HIGH
Full page adverts per stock	227	135	67%▲			
Dealer website clicks per stock	4.6	4.7	-3%▼			
CTR: SAs to FPAs	4.6%	4.6%	0%▲			
CTR: FPAs to website clicks	2.0%	3.5%	-42%▼			

Summary of metrics to enable quick analysis and summary of how to approach call with dealer. Key targets prioritised based on what will improve the performance most.

Revenue Leakage

Predictive modelling to give best offer available to optimise likelihood of dealer accepting & getting best response

**CHURN RISK: 84%**



**BANDING: B**

**DISCOUNT: 20%**

**KEY AREAS OF FOCUS:**

- focus 1
- focus 2
- focus 3

**OPPORTUNITIES:**

- opportunity 1
- LG additional Leads: 11.0% uplift
- opportunity 2
- SRG uplift: 8.0% uplift

Product & Value message

# What Have We Achieved So Far With SPSS – Business Driven

Business Challenge	Action Taken	Strengths / Benefits
What is most efficient way to manage customers	Calculated cost to Serve Linked to key customer behaviour around engagement, payment, product take up downgrades..	<ul style="list-style-type: none"> <li>-enabled us to move customers from field to telesales with no revenue risk</li> <li>-reduced contact cycles for those not needing support</li> <li>-reallocate resource more effectively</li> </ul>
Who are key targets for latest product launch	early adopter analysis. Profiling of current product mix Behaviour analysis around product usage Needs analysis for that product	<ul style="list-style-type: none"> <li>Highly successful launch</li> <li>Revenue early</li> <li>Motivated Sales team</li> <li>Learn with those most likely to buy – create value messages</li> </ul>
Very resource heavy in creating KPI packs / reporting	Built all key reports in SPSS using larger data outputs from DW. Merging with Data not yet in DW	<ul style="list-style-type: none"> <li>-Moved from segment specific to dealer specific</li> <li>-Reduced build time from days to hours</li> <li>-Easier to add new metrics</li> <li>-Automates reporting from raw files</li> <li>- Speed at which we can turn around bespoke analysis for Dealers/Groups</li> </ul>

# Future Opportunities With SPSS

Business Challenge	Opportunity / Benefit- SPSS
Large Customer want more Bespoke Reporting	<ul style="list-style-type: none"><li>- More sophisticated &amp; tailored Reports “bespoke templates”</li><li>- Quick turnaround on large data volume</li><li>- Makes data available to insight teams direct</li></ul>
Proving the value of products to customers	<ul style="list-style-type: none"><li>-More accurate forecasts</li><li>-Quick and easy (for Maths Grads)</li><li>-Links up to the new Data Warehouse software Cognos 10, enabling smooth process of data capture, analysis &amp; feeding back into Dealer Portal Next Generation to target dealers with personal messages &amp; Upsell</li></ul>
Most efficient use of Marketing spend – is the targeted buying working	<ul style="list-style-type: none"><li>-Behavioural segmentation can cost up to £70k+ via marketing agency – they don’t know your business as well as your analysts will</li><li>-Measure impact of your advertising on key business performance metrics – test and learn</li></ul>
Reduction of Bad Debt – particularly in recession	<p>Customer profiling – enables you to manage bad debt risk differently</p> <ul style="list-style-type: none"><li>- Plan with customers payment schedule based on how they advertise</li></ul>

***Not to mention on site personalisation***

## Summary

- Longest time to change was structure / culture
- When data was available biggest challenge was managing demand
- Business has to buy into the change & drive it
- POC was manageable but relevant
- Benefits have to be clear as there are loads of “interesting” things that you can do
- Payback will be easy to prove

# Thank you

## Questions?

