



# Global entertainment firm improves email marketing return on investment with data science

## Industry case study: retail

### Challenges

- Limited marketing coordination across departments
- Slow and expensive manual processes
- Need for better understanding of customer behaviour and interests
- Need to better target marketing communications using data-driven decisions
- Limited Return on Investment (RoI) from digital marketing communications

### Solutions

- Bespoke propensity models to work within the customer's existing analytics software
- Automated data modelling report production
- Automated model assessment report and alert system

### Benefits

- Better targeting of digital communications to ensure accurate, relevant messages
- Greater RoI from email marketing spend
- Maximised value of leads
- Reduced marketing costs
- Automated analysis to highlight any model degradation



Implementation of advanced techniques and automated processes to reduce marketing costs and maximise email campaign RoI.

### Background

Our customer is a mass media entertainment brand with a worldwide presence. It relies on analytical software to process its business-critical customer data, to allow key departments to share essential marketing communications with its customers. Analytics-informed decisioning is vital to ensure ongoing brand awareness amongst our customer's existing customer base.

### Business issue

The customer was struggling to coordinate targeted email campaigns across departments. This led to communications being shared with their own customer base that did not reflect individual preferences or purchase history.

### Why was this required?

The customer's difficulties in accurately targeting its emails stemmed from an unclear interdepartmental strategy as to how departments should prioritise communicating with certain individuals on the database. This led to many emails not being effectively targeted. Meanwhile, little email customisation meant content didn't always fully resonate with recipients, lowering the perceived value for the individual and,

therefore, reducing the propensity to respond to calls to action or make a purchase. In turn, this reduced email campaign effectiveness.

The customer had in-house data scientists, however, they were too busy with other work to commit to this project. Therefore, the customer turned to Amadeus Software for support.

## Vision

The customer wanted a solution that would allow them to optimise their email marketing campaigns and target customers according to their propensity to purchase offerings from a particular business department. This would enable them to generate greater sales and new business opportunities, leading to maximised RoI from much more effective campaigns.

## Amadeus solution delivered

In response to the customer's challenges, Amadeus used the existing analytics platform to reengineer all email marketing and implement the following new approaches:

- Bespoke propensity modelling of historic data across multiple lines of the business to provide accurate predictions of future customer behaviour to certain messages. Modelling utilised various statistical techniques which were new to these business departments, such as logistic regression, variable clustering and dimension reduction.
- The modelling process was automated to produce detailed monthly reports, scoring customers' propensity to buy within certain parameters, based on previous purchase behaviour and interests. This reduced the manual intervention required to generate this insight
- ROC curves were created to monitor any degradation of these models. Should degradation occur, an automated system alerts users that model maintenance or refinement is required.

## Results

Following the implementation of these techniques, our customer obtained several key benefits:

- Precise email targeting ensured future email messages were only received by those to whom the content was most relevant. In doing so, this reduced the cost of sharing such campaigns.
- One particular branch of the business identified a statistically significant uplift in ticket sales following the implementation of these data science initiatives. This enabled profit maximisation for that particular branch of the business by increasing customer spend whilst reducing the cost of its email marketing. This equated to the marketing team generating greater RoI from their campaigns.
- Increased potential value for each individual contact per campaign thanks to an increase in the likelihood of them making a purchase.
- Improvements in customer experience – any emails received by customers now directly target their interests, increasing the perceived value of the campaigns for the individuals.

Amadeus' application of **data science** techniques enabled the customer to generate a statistically significant uplift in ticket sales for an individual arm of the business.

---

## About Amadeus Software – trusted analytics experts

Founded in 1989, Amadeus has an impressive history of supporting its customers in maximising their Return on Investment from data through the application of data analytics and data science across its key business services.



**SAS Software | Consultancy | SAS Training | Managed Services | Graduate Placement**

Amadeus partners leading providers within the industry, including SAS, Microsoft and AWS, to ensure our customers receive the best solution to meet their challenges. These solutions can be across any main programming language, such as SAS, Python, R or SQL.