Marketing Optimization

An Experian white paper

March 2010

Executive Summary

For your organisation to thrive it is important to make the most of each customer interaction and maximise customer value. In a world where there are thousands or millions of customers, multiple touch points and many potential actions or offers, how can you ensure that your decisions will maximise sales and revenues whilst meeting your budget and customer contact policies?

Marketers make significant investments to acquire new customers and promote products and services to existing customers to increase or maintain market share, product usage and profitability. Even though organisations execute hundreds of campaigns a year, there is always a limit on how many activities can be undertaken and how many their customers are willing to tolerate.

With ever more tightly controlled budgets and fewer resources, marketers are under pressure to demonstrate continued contribution to the performance of the overall business, executing only those activities that will produce the best return. The ability to improve customer value by effectively marketing personalised products and services is increasingly important in the search for a competitive advantage.

Marketing departments are increasingly using analytics to understand and predict customer behaviour, needs and preferences. This allows them to move from bulk marketing campaigns towards smaller and more frequent highly targeted campaigns through a wide variety of customer contact channels. However, the increase in channels and number of different offers in the market means that it is even more challenging for the marketer to pick the best action for each customer from the universe of offers, channels, compliance and contact policies.

Consequently, organisations need a more effective way of selecting the best customer actions to achieve the desired results.

The solution to this issue is an optimization process that enables marketers to choose the best set of customer actions that maximises the campaign's overall economic return, taking into consideration customer behaviour and expected value, whilst satisfying real-world constraints such as product targets, channel volume limitations, fixed budgets and customer contact policies.

Experian offers an advanced Marketing Optimization solution which has been designed for easy-use by marketers who want to create optimal campaigns and contact policies. It allows them to evaluate multiple, optimised scenarios and to view reports to understand the impact of different contact rules and volume targets, before committing resources and budgets. No expertise in advanced mathematics is required; just knowledge of the company's marketing strategies, plans and campaign economics.

Marketing Optimization from Experian can be integrated with most of the leading customer analytics and intelligence solutions. It can be deployed as a stand-alone application or integrated with most third-party campaign management systems, customer databases and modelling tools.

There are over 20 world-class organisations in North America and Europe that are benefiting from Marketing Optimization, typically seeing improvements in their marketing returns of between 10% and 30% or more. Its flexible, user-definable approach, supported by Experian consulting, analytics and data can deliver significant benefits for campaign selection, customer and segment marketing, next best action across multiple touch points and customer level contact planning and forecasting.

Contents

1. Background – the marketing challenge

In principle, marketing is simple: Get the right product with the right message in the right place at the right time at the right price in front of the right person.

But in practice it is not easy: thousands or millions of customers, multiple products, many channels, regulatory complications, dispersed geography, conflicting objectives, limited resources, intensifying competition and you still have to demonstrate real and growing contribution to the performance of the overall business.

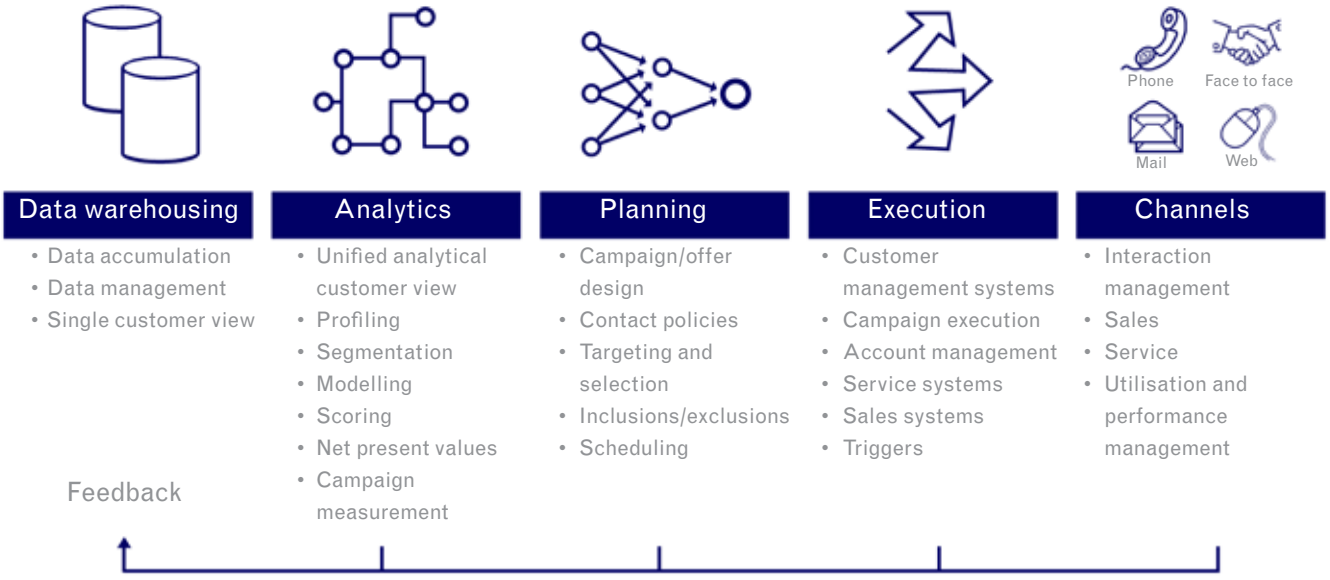
With this pressure and the scale of the marketing environment, finding the most effective and profitable 'customer-offer-channel' mix can be almost impossibly complex.

For example, with just three potential offers per customer there are 8 potential contact opportunities per customer, i.e. 23. When this is scaled to 1 million customers and 20 different offers this creates 220 million potential opportunities. A huge number of potential opportunities need to be evaluated to find the single best contact per customer. Even though some potential contacts can be ruled out because they break a business constraint or rule, the challenge is still huge.

The complexity of marketing decisions creates a huge challenge

2. The traditional approach - data driven marketing

Organisations have made huge investments to capture, store and mine large quantities of customer data in an effort to get closer to individual customers' needs and preferences.



The typical components of a Customer Relationship Management (CRM) strategy

The typical components of a CRM strategy:

- **Data warehousing** - a key enabler providing one definition of a 'customer', a unified customer view across all accounts, an unambiguous information base ready for analysis.
- **Analytics** – providing reporting, segmentation and predictive model analysis tools to mine customer demographic and behavioural data to identify needs, preferences and the potential likelihood and value of customer response.
- **Campaign planning and execution** – managing and automating the tasks of planning and executing campaigns and triggered activities through the contact channels and measuring results.
- **Channel management systems** – managing and tracking the sales and service interactions with customers through the channels. preferences.

These systems provide a high level of detailed information with which marketers can plan, execute and track their marketing activities. These tools have added significant value in driving marketing efficiency and enabling more marketing activity.

Many organisations have now reached data-saturation, with an abundance of powerful information but many still have no effective means of picking the best action for each customer across competing offers, channels, compliance and contact policies.

Most selection techniques, no matter how sophisticated, still rely on little more than guesswork to determine how best to target customers to get the most return. These techniques have evolved over time:

- Campaign managers decide who to target - using business rules and customer profiles, campaign managers use experience and trial and error to select targets.
- Campaign managers decide which deciles to target - rank ordering customers based on a single dimension such as response, applying a subjective cut-off level.
- Campaign managers prioritise trade-offs, playing with cut-offs to fit business goals and constraints - using prioritised rules and matrices of two or three score dimensions to subjectively determine trade-offs.

Most selection techniques involve rules that evaluate only one offer or one customer at a time. In practice, most customers could be considered for more than one offers, so the order in which the rules are applied can give radically different results.

2.1 Comparing different approaches

Consider this simple example: An organisation has four customers and one channel for a marketing campaign. Only one offer can be sent to each customer. Customers have been scored for their response rate and an expected value has been assigned based on this information. The objective is to maximise the return.

	Customer 101	Customer 102	Customer 103	Customer 104
Product A	€90	€70	€20	€50
Product B	€100	€90	€200	€175
Product C	€120	€100	€300	€90

Product-priority approach

Using a traditional product-silo approach, each product would be considered separately and the highest possible value customer selected until the campaign volume is achieved. If, for example, the product priority is A, B, then C and we need only one offer per product, the customer selections would be:

	Customer 101	Customer 102	Customer 103	Customer 104
Product A	**€90**	€70	€20	€50
Product B	€100	€90	**€200**	€175
Product C	€120	€100	**€300**	€90

The total value of the expected return would be **€590** assuming that Customer 103 responds to both Product B and Product C. If we apply a contact rule that excludes selected customers from subsequent selections, the customer selections would be:

	Customer 101	Customer 102	Customer 103	Customer 104
Product A	**€90**	€70	€20	€50
Product B	€100	€90	**€200**	€175
Product C	€120	**€100**	€300	€90

The total value of the expected return would be **€390**

Ranked offer approach
If using a ranked-value per customer approach, each customer would be considered separately and the highest possible value product assigned:

	Customer 101	Customer 102	Customer 103	Customer 104
Product A	€90	€70	€20	€50
Product B	€100	€90	€200	**€175**
Product C	**€120**	**€100**	**€300**	€90

The total value of the return would be **€695.**

If only one Product C can be assigned due to resource constraints in the call centre, the approach has to change:

	Customer 101	Customer 102	Customer 103	Customer 104
Product A	€90	€70	€20	€50
Product B	€100	**€90**	**€200**	**€175**
Product C	**€120**	€100	€300	€90

The total value of the return is reduced to **€585.**

If we can only send one of each product, we would need to seriously consider the order in which we process our list of customers, otherwise we miss most of the best opportunities, in this example we choose A, B then C:

	Customer 101	Customer 102	Customer 103	Customer 104
Product A	€90	€70	**€20**	€50
Product B	€100	**€90**	€200	€175
Product C	**€120**	€100	€300	€90

The total value of the return is reduced further to **€230.**

2.2 Limitations of the traditional approach.

Determining the best actions to maximise return on investment

With marketing departments under pressure to demonstrate return on every activity, the traditional approach does not give marketers the ability to determine which combination of activities will maximise overall profitability.

Using analytics, marketers can measure the expected return from one customer with one product, but when this is combined with multiple offers and channels and resource constraints it can be impossibly complex for the right choice to be made for each customer as well as for the entire portfolio.

One-dimensional targeting

The traditional approach looks at each customer offer separately, using predictive analytics to determine the likely response propensity and using this information for targeting. However, most organisations market many offers per product and run campaigns simultaneously, each with its own goals and often conflicting constraints, creating a highly complex environment.

For example, what happens if a customer scores highly on more than one model? The traditional way of dealing with this is to impose a product hierarchy, with the products or services that are most important to the business having first pick from the customer base.

Customers can be rank-ordered according to the likelihood of response to specific offers and the value of those responses estimated using predictive analytics, but this alone does not provide capability for dealing with the multiple constraints marketers face throughout the marketing and fulfilment processes - e.g. can the inbound call centre deal with the estimated response volume? Will this break the contact policy? My budget has been cut, so can I still achieve my targets? There has been no easy way of dealing with these dimensions, and achieving targets, across direct marketing activity.

No overall campaign goal

Marketing campaigns need to be able to demonstrate their return on investment and contribution to the business goals. Traditional campaign tools don't have the ability to adhere to and monitor an objective such as maximum profit or response. The marketer has to use best skill and judgement to choose activities that will best contribute to this goal.

Respecting customer preferences over multiple products and time

Customer contact policies and preferences are difficult to manage, with most selection tools looking at past campaigns in order to determine offer eligibility within the current campaign. Contact rules ensure customers are not over-contacted, so that the impact of each contact is not diluted. However, this approach does not look across multiple campaigns or at the best distribution of contacts in the future to filter out conflicting, irrelevant or less profitable offers that might be made to the same customer.

The traditional product-led approach does not enable the consideration of marketing activities at a customer level, resulting in potentially conflicting and overlapping messages. The result is customers saturated with offers, which are at best ignored and at worst, create complaints with customers increasingly using mailing opt-out options which reduces the potential customer base.

Segmentation not personalisation

For many marketing departments the goal is personalised communications. However, with traditional tools it is not easy to create personalised messages for thousands or millions of customers. The best that can be done is to group these customers into segments based on a combination of characteristics and hope that they behave in the same way, and therefore, you would want to treat them in the same way.

Limits of tools

Easily accessible spreadsheets can only go so far in balancing campaign volumes and channel availability, nor will they connect the planning of campaign activity with the actual selections and execution. As the frequency and complexity of campaigns increase, spreadsheets cannot achieve the scale of the analysis needed.

3. The next step – marketing optimization utilise optimisation

The complexity of today's marketing is driving new techniques in marketing analytics and decisioning. Optimization enables marketers to allocate the best set of customer actions that maximises the overall campaign objective, taking into consideration predicted customer behaviour and expected value, whilst satisfying business constraints such as product targets, channel volumes, fixed budgets and contact policies.

Constrained, mathematical optimization is an objective decisioning technique that can be used to simplify the complexity of marketing decisions. It adds a layer of intelligence to the marketing processes and systems that exploits the modelling, data warehousing, and campaign and customer management systems already in place.

The concept of optimization is not new: it is derived from operations research and has been used for many years in the manufacturing industry's supply chain management, for airline resource management and for financial investment risk assessment. Historically it has been seen as a complex mathematical process requiring specialist researchers, therefore making it slow and impractical to implement, with some techniques not scaling to large problems.

Today it has been well proven in marketing with high performance packaged solutions available to business users, meaning the same significant improvement is now possible as has been seen in other industries. It is now being adopted as the next generation of marketing decisioning, putting the marketers in the driving seat.

Optimization enables marketers to answer questions such as:

- What is the best set of campaign offers to assign to customers in order to achieve our business objectives?
- How do I maximise the success of this campaign in terms of its overall contribution to business profitability, taking into account product sales targets, a limited budget and volume limitations?
- How do the constraints on our marketing activities influence marketing effectiveness?
- How do we balance the trade-off between the organisation's ability to deliver and a customer's willingness to respond?
- How do different offers relate to each other?
- How do I balance competing product-line priorities?
  How can I link my campaign planning and campaign execution environments?
- How do I implement a contact policy to ensure customers don't get multiple, conflicting or less profitable offers in the future or even across multiple campaigns today?

3.1 When to use optimization

- When considering a new CRM or Customer Management System investment.
- Where there is increased competition for the same customers.
- When it is recognised that some of the financial success is hampered by existing decision systems and processes.
- When the business mandate is for above market performance.
- When merger or acquisition activity forces a re-evaluation of systems and strategies to support the marketing or risk function.
- When the decisioning and contact management activities need to extend across new channels.
- When the organisation is overwhelmed by increased analytic-based decisioning complexity.

4. What is marketing optimization?

Many organisations consider optimization as "getting the right product, with the right message, in the right place, at the right time, at the right price, in front of the right person". However this can cover almost any technique to improve marketing processes, in reality this could be little more than rank-ordering customers by profit. While this technique is successful at selecting the most profitable offer or action for an individual customer, it cannot consider the best distribution of offers to maximise overall portfolio profitability.

Historically, the underlying problem with using optimization for marketing challenges has been the complexities in the scale, dimensions and time-sensitivity of the marketing environment. Some approaches simplify this problem through data reduction techniques such as clustering, but in doing so have missed the real opportunity. The true benefits come from using constrained, mathematical optimization techniques designed for the scale, complexity and time-sensitive nature of the marketing environment.

Mathematical, constrained optimization is a specialist decision support technique. At its core is an allocation process which delivers truly optimal decisions based on strict mathematical analysis, by balancing multiple decision variables based on objective analysis of three key factors:

- The business objective to be achieved, an overall goal or strategic imperative such as maximising return on investment, maximising sales or minimising budget expenditure.
- The options that are available to be selected from, such as the list of actions or offers that customers can be eligible for and the rules governing their selection.
- The constraints that limit your activities, such as the costs of solicitation, contact policies, timing, risk, channel capacities and budget.

Optimization uses these factors to find the 'best' solution to the complex problem by balancing the options within the constraints to achieve the objective. Optimization significantly outperforms current best practice approaches by evaluating the entire set of actions and offers simultaneously, rather than one at a time.

4.1 Comparing different approaches

Using optimization the allocation process would happen in a completely different way from traditional marketing techniques. Optimization considers all the potential decisions simultaneously; finding the best combination of offers overall rather than the 'one-at-a-time' traditional approach:

	Customer 101	Customer 102	Customer 103	Customer 104
Product A	€90	€70	€20	€50
Product B	**€100**	**€90**	€200	**€175**
Product C	€120	€100	**€300**	€90

Including the limitation of only one offering of product C, the total value of the return would be increased to **€665** an increase of nearly **12%** over an advanced ranking approach.

If we also have to consider the limitation of sending only one of each product:

	Customer 101	Customer 102	Customer 103	Customer 104
Product A	**€90**	€70	€20	€50
Product B	€100	€90	€200	**€175**
Product C	€120	€100	**€300**	€90

This returns a value of **€565**, an improvement of **145%** over an advanced ranking approach.

Of course this example has been extremely simplified compared to business as usual, which has:

- Many more customers.
- Many more offers across a range of products.
- Budget constraints applied to each product.
- Sales or volume targets for all products.

However it illustrates the optimization approach and the potential benefits to be gained.

4.2 The optimization process in practice

Optimization works by simultaneously evaluating every outcome, automatically considering hundreds of potential decisions about offers, recipients, timing and channels to determine the optimal mix of actions for a campaign or set of campaigns.

The optimization process incorporates any available information, for example:

- Business goals - e.g., profitability, return on investment, attrition rates, first year net present value (NPV).
- Customers - e.g., outcome estimates, response scores, revenues, net present values, usage propensities, contact history, triggers, segments, contact restrictions and strategies.
- Offers - e.g., offer and channel definitions, offer economics, cost of sale, revenues, customer eligibility, timings and dependencies, stock availability, sales targets.
- Channels - e.g., cost of delivery, capacity limitations, minimum volumes.
- Resource constraints – e.g., marketing budgets, cost per acquisition.

Optimization must be an interactive process, it does not replace marketing expertise, instead enhancing it and enabling marketers to manage the complexity inherent in their activities. The best optimization tools create 'scenarios' that meet the business objectives using the inputs and constraints set by the organisation.

This scenario planning approach gives marketers the ability to test 'what-if' questions and truly understand the interactions between marketing activities and returns before committing marketing resources to the optimal scenario for the organisation.

By balancing these competing factors effectively and understanding the trade-off between different objectives, marketers are able to set priorities for their activities to maximise results.

4.3 Analytics in optimization

At the heart of the analytics for optimization is developing the utility function, which is based on the business goals, constraints and the decision inputs that affect those goals.

The utility function is the definition of the equation to be maximised or minimised globally and must reflect the unique problem being solved for the organisation. Simple and more complex examples are:

Profit = (Average Product Revenue x Propensity to Respond) – Cost of Offer

or

Return = (Product Profit x propensity to buy x channel propensity x seasonality adjustment x first year NPV factor) – Cost of offer
Cost of offer

NPV = Net present value

Decision inputs are the variables that define data assumptions and offers to the optimization process. For example, response, risk, churn and activation scores, costs and eligibility considerations. The best optimization solutions allow an unlimited number of decision variables to be considered.

Constraints drive the optimization application towards an optimal result that meets the needs of the organisation. The best optimization solutions allow an unlimited number of constraints to be applied at any level appropriate to the problem being solved. An example of a global constraint would be limiting the overall budget calculation to a specific value. An example of an offer level constraint would be limiting or increasing the number of times an offer is selected.

Optimization produces the greatest benefit when using predictive analytics. Optimization typically utilises the measured effect or consequence of different actions being taken, for example, response rates, likelihood of take-up and profit estimates, for each product, so that the likely outcome of a customer / offer / channel combination can be evaluated.

Modelling can determine the effects of applying different actions to customers and establishes the relationship between various marketing activities and the value for each activity. The best modelling can also determine the opportunity cost of not taking an action.

4.4 Business applications of optimization

Optimization can be applied to all areas of prospecting, cross sell, up sell and retention marketing, for example:

- **Contact Planning – 'when to contact?'**
  Connecting the contact planning and execution processes to identify the best mix of contacts, offers and channels for each customer across the entire campaign calendar.
- **Next Best Action – 'which proposition?'**
  Identifying the next best proposition for each customer to determine the best offer and channel assignment in batch or real-time.
- **Campaign Optimization – 'which product?'**
  Choosing the best offers, action prompts or inserts for customers from existing inbound or outbound campaigns.

Organisations can use optimization in many different ways: deciding real-time, ad-hoc sales prompts in a customer service centre or branch network, optimising individual direct marketing campaigns, or, at the other end of the scale, it can be used to proactively plan an organisation's marketing activities over an extended period of time.

For example, an organisation can combine information about actual and potential customer events, such as product renewal or products reaching the end of term, with contact history, channel and product propensity scores. Using optimization, the organisation is able to make truly objective decisions to proactively optimise its marketing campaigns over a financial year, taking into account day-to-day resource and business considerations. In essence, this enables the marketer to create a marketing plan for each individual customer.

As customer behaviour, budget, resources and product plans change, this plan is rapidly, automatically and dynamically updated for each customer.

5. Marketing optimization applications

5.1 Marketing optimization for prospecting

The successful identification and targeting of potential new customers is key to driving business growth and success. Optimization can be used to decide whom to solicit and with which offer and terms, for example for affinity lead allocation and point of sale product pricing.

Using optimization for prospecting can help to answer questions such as:

- How can I improve the effectiveness of my acquisition direct marketing budget?
- How do the constraints on our acquisition marketing activities influence marketing effectiveness?
- How do different offers relate to each other?
- Does one offer impact profitability of another offer?
- How do I balance competing product-line priorities?

Case study - Top five International Investment Company

Challenge: To maximise response rates from 20 million prospects choosing from ten competing offers using a fixed budget.

Solution: The Marketing Optimization solution from Experian is used to select prospects for each campaign. It arbitrates across the multiple products, segments and constraints to allocate the marketing spend effectively.

Results: Optimization has been able to improve response rates by **175%** when compared to the introduction of models and rank sorting. This represents an incremental revenue of **€15 million** over three years.
% change in KPI over business as usual.

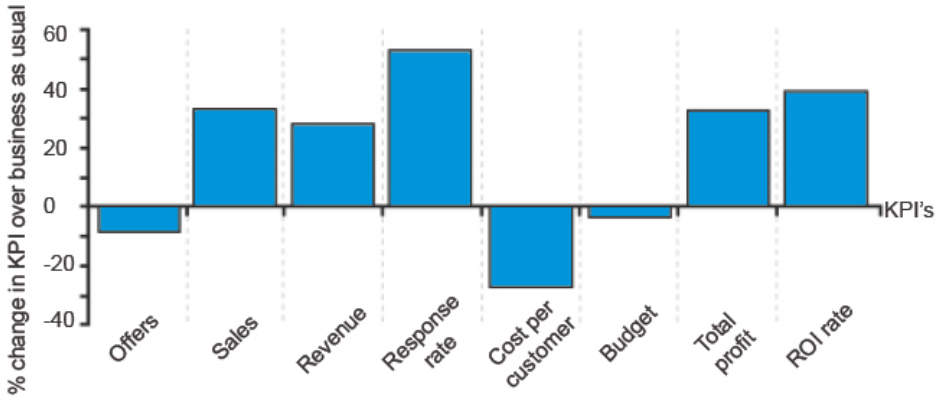
5.2 Marketing optimization for cross-sell and up-sell

With ever increasing competition the ability to maximise return from existing customers is a significant source of revenue and growth.

Optimization can be used to decide which customers to target and with which offer, channel and timing, for example, determining the next best action, contact management strategies and lead generation and allocation.

Using optimization for cross-sell and up-sell can help answer questions such as:

- What is the best set of offers to assign to customers to achieve our business objectives?
- How do I incorporate a contact policy to ensure customers don't get multiple, conflicting or less profitable offers?
- How can I link my campaign planning and campaign execution process to maximise effectiveness
- How can I ensure I make the best decision for the customer, the product and the channel?



The typical benefits of optimization for cross/up sell comparing optimised results against business as usual for a number of key performance indicators (KPI).

Case study - Global wireless telecommunications operator

Challenge: To maximise revenues from multi-offer, multi-channel campaigns to promote usage in their five million customer base through daily Short Message Service (SMS) and Multimedia Message Service (MMS) offers.

Solution: The Marketing Optimization solution from Experian is used to create daily contact lists. It maximises effectiveness by finding opportunities that had been missed by previous selection approaches. It achieves the business objective within the operational constraints of fixed channel volume limitations and strict contact policies.

Results: The organisation saw a **30%** revenue increase on its campaigns for the same marketing spend. Optimization also changes the focus of marketing activity evaluation to profit measurements rather than just outbound volumes; so the organisation now understands the value of each campaign.

Case study - Large UK Retail Bank

Challenge: To prioritise Customer Service Representative action prompts for inbound customer service calls in real-time.

Solution: The Marketing Optimization solution from Experian identifies the best leads to meet sales and revenue expectations across all products, adhering to strict customer contact frequency policies and work load constraints. It considers inbound contact likelihood, relative action profitability, seasonality and customer relevance and provides analytical decision intelligence into the operational CRM environment.

Results: The organisation saw a **25%** increase in Net Present Value over existing NPV rank/sort business as usual process. The solution streamlines marketing planning process and provides the ability to forecast the price effect of different strategies before committing scarce resources.

5.3 Marketing optimization for retention and reactivation

With customer acquisition costing an estimated eight times more than retaining existing customers, it is no surprise that organisations focus on retaining and reactivating their customer base. However the economics of retention can be extremely complex, in particular evaluating the effectiveness of different activities. Optimization is ideally suited to solving this problem, for example, to determine save offers and select win-back offers.

Using optimization for retention and reactivation can help to answer questions such as:

- What is the best combination of save offers to assign to customers to achieve our business objectives?
- How best to respond to churn events at every customer contact interface, not just in specific retention work-streams.
- Managing proactive retention and reactive 'save offers' to balance the trade-off between retained value versus the cost.
- How to dynamically integrate retention and cross/up-sell programs with priority triggers.

Case study - Leading International Wireless Provider

Challenge: To use the fixed retention budget to maximise retained revenue from 'churn-prone' customers.

Solution: The Marketing Optimization solution from Experian is used to create retention campaigns over a twelve-month period to assign the appropriate save-offer revenue to lock-in retained revenue, all within a fixed budget.

Results: The organisation has seen an **18%** increase in retained revenue, equivalent to €190 million per annum, or €500,000 per day. The number of retained customers has risen by **12%**.

5.4 A detailed optimization case study

About the client

One of the UK's largest financial services providers offers banking, investment banking and investment services to their 10 million+ personal customers in the UK.

Every month they typically conduct more than 50 outbound telemarketing and direct mail customer cross sell and retention campaigns that aim to maximise customer Net Present Value.

Their direct marketing approach is product-silo orientated, with fixed budgets per product marketing unit and outbound volume targets per product. The existing campaign approach was to select the required population from top-decile response and revenue scores and then apply business rules to assign offers within contact rules and to ensure that constraints are satisfied (e.g. number of pieces mailed, budget splits, etc.)

Experian were required to prove the value of its Marketing Optimization solution wihtin the client's own environment.

Solution

Experian undertook a two week prototyping exercise to enable the client to assess the value of the Experian Marketing Optimization solution. The key goals of the exercise were to quantify the value of optimization and to assess the software's flexibility and ease-of-use, and its technical performance and ability to be integrated within the client's environment.

A prototype was created to establish a business case through retrospective campaign analysis and comparison of optimised results to the Business As Usual (BAU) process. It utilised optimization to simulate the financial and operational impact on the past campaign.

Key steps included the creation of average response, revenue and cost metrics per decile from actual campaign results, propensity scoring the portfolio of customers and then simulating the campaign using the same data inputs and resource constraints used by BAU decision process. Marketing Optimization was used to mathematically allocate offers to individual customers, maximising expected NPV return whilst satisfying all constraints:

- Individual product budgets.
- Individual product sales targets.
- Overall outbound channel volumes.
- Customer contact rules (the number of contacts per product, per period).

Identified benefits

Optimization produced a 24% uplift in a single monthly campaign representing millions of euros in additional revenues per annum, for the same marketing spend.

The introduction of optimization allows the organisation to maximise marketing profitability and ROI. It provides a business desktop 'what-if' tool that enables interactive results enabling quick evaluation of the financial impact of different marketing strategies, for example, changes to contact rules.

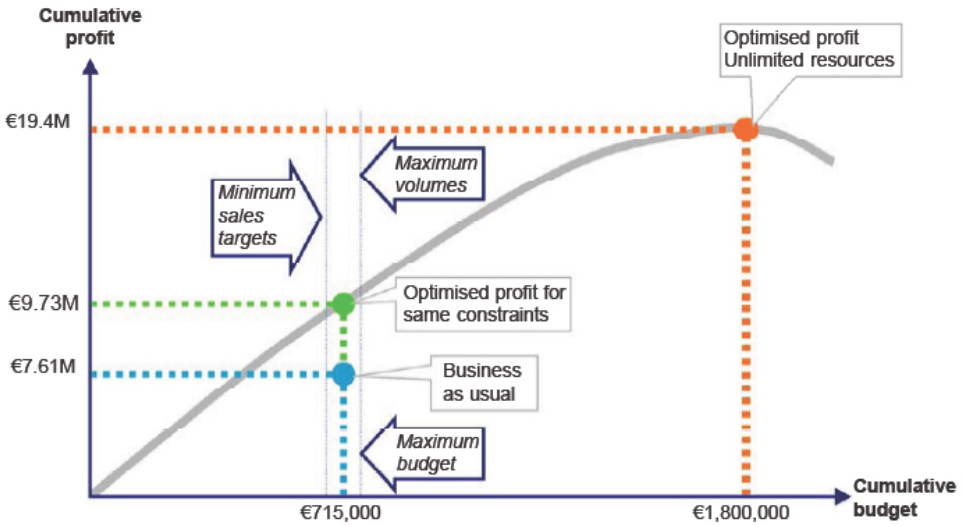
It is a highly flexible and configurable application to support business needs and requirements – today and in the future, with no coding required – maximising the investment in customer centric marketing strategies. Customer-level optimization provides the framework to support additional investments in statistical modelling and analysis, to increase the number and sophistication of information as new scores become available.

"Experian Marketing Optimization provides the missing link between the marketing planning and operational execution processes, allowing us to drive true competitive advantage"

Results comparison

	Offers	Expected sales	Expected revenue	Costs	Expected profit	Expected average profit/offer
Business As usual (BAU)	2.46M	17,753	€8.33M	€715K	€7.61M	€3.10
Campaign Optimization	2.46M	22,228	€10.4M	€715K	€9.73M	€3.96
% Change vs BAU	-	**+25.2%**	**+24.8%**	-	**+27.8%**	**+27.8%**

Table illustrating the effect of optimization on a single monthly customer cross-sell campaign



Graph illustrating sensitivity analysis: profit versus budget

6. How Optimization improves traditional marketing approachs

Determining the best actions to maximise return on investment Optimization gives the ability to create marketing campaigns with the confidence of objective, mathematical decisioning finding the best overall set of actions.

All dimensions
Optimization works by simultaneously considering every dimension of the marketing campaign, evaluating hundreds of potential decisions about offers, recipients, timing and channels to determine the optimal mix of actions for a campaign or set of campaigns.

Overall campaign goals
The setting of an overall objective for the activities controls optimization. The marketer can implement the chosen scenario with confidence, having fully evaluated the effects beforehand.

Personalisation not segmentation
With optimization the organisation sets the top-level goals, constraints and potential actions and these are applied to every individual customer, giving truly individual marketing plans. Optimization allows you to manage the 'segment of one'. Respecting customer preferences over multiple products and time Optimization enables organisations to use customer and preference information to plan communications over time and truly make the transition from a product led organisation to one that considers each customer as an individual.

This customer focus enables a 'conversation' with the customer, with a timely stream of relevant and appropriate messages.

Better understanding
The best optimization solutions offer flexible and scalable tools, which give the marketer the ability to simulate multiple 'what-if' scenarios, to understand the interactions and impact of the activities before committing marketing resources to the best scenario for that organisation.

7. Optimization solutions from Experian

Experian offers optimization solutions that can be applied across the customer lifecycle, to achieve both marketing and credit objectives. Strategy Optimization is specifically designed for use in the marketing environment, enabling marketers to maximise the effectiveness and returns from their customer marketing programmes.

7.1 Expert Optimization Consulting

Our optimization experts provide best practice solution design and implementation services, including specialist analytical services to help you define and implement an analytical framework for testing, modelling and tracking the decision inputs.

We work with you to identify appropriate processes, resources and skill sets required to operate the solution or we can manage the solution on your behalf. We can provide data discovery and enhancement, analysis services and develop, implement and manage any models that are required.
How to make this happen in your business:

Step 1 - Start with a simple evaluation of how optimization can benefit your organisation. This can be a two to three day desktop analysis of past campaign data to identify the potential benefits and implications of adopting optimization in your business.

Step 2 - Prove a business case for moving to an optimized approach to customer contact. This is typically a pilot that lasts 2 to 6 weeks and tests optimization when applied to a specific business issue.

Step 3 - Implement optimized customer decisioning in a phased approach. Start simple by extending the pilot to live operation, then evolve use across other business areas.

The Marketing Optimization solution comprises two key components, expert consulting and advanced software.

7.2 Advanced optimization software

The well-proven Marketswitch Optimization technology uses patented, mathematical, constrained optimization technology that enables marketers to easily create, analyse and apply sophisticated optimization algorithms through a graphical front-end.

Additional Experian software and process tools can be provided to create a unified customer view, analyse customer behaviour, build and manage models and make and track customer decisions. These tools can be used in a desktop environment or integrated as part of a production process. For example, Strategy Management decision support technology enables marketers to implement scoring models, segmentation models and tree-based business rules to augment the optimization process through a graphical front-end.

In all cases, our software is backed up by an extensive infrastructure to provide business and technical user support.

The Marketswitch Optimization software allows marketers to create and analyse multiple scenarios based on their own unique business goals - such as maximised profit, sales, revenue, ROI or minimised budget - and constraints - such as sales targets, channel capacities, lead volumes, hurdle rates, customer eligibility and individual customer contact policies.

Analysis reports let users explore their scenarios to understand how the different constraints, costs and customer contact policies impact on their business objectives. Once a satisfactory scenario has been identified, it can be applied to the customer population to either generate a list of customers with optimal offers or deployed as a decision cache for use in a real time contact process.

The optimization technology can operate across outbound (batch) and real-time (interactive) channels, including email, direct mail, telemarketing, customer service centre, website, and point-of-sale locations with support for a wide range of platforms. It can be used stand-alone or integrated with most marketing automation, CRM, data mining and customer database technologies.

- Optimise any mathematically user definable goal - allows you to maximise or minimise any quantifiable value, such as profit, revenue, customer retentions or sales - at the individual customer level or household level.
- Robust constraint functionality - you can easily customise and set constraints such as budget or minimum sales volume goals at any user-defined level - e.g. account, customer, household, campaign, channel and business unit .
- Flexible policy rule, eligibility criteria, and event trigger inputs - you can define inputs such as marketing and offer costs, customer history, event-based triggers, business compliance and customer contact rules.
- Intuitive graphical user interface - allows you to set up new optimization scenarios in minutes, without requiring any programming, modelling or statistical skill sets .
- Interactive what-if (simulation) analysis - it helps the user determine the best marketing scenario before executing a campaign.
- Industry-leading scalability - it is proven to operate within the most complex marketing production environments, optimizing at the true, individual customer level.

8. About Experian

Experian is a global leader in providing information, analytical and marketing services to organisations and consumers to help manage the risk and reward of commercial and financial decisions.

Combining its unique information tools and deep understanding of individuals, markets and economies, Experian partners with organisations around the world to establish and strengthen customer relationships and provide their businesses with competitive advantage.

For consumers, Experian delivers critical information that enables them to make financial and purchasing decisions with greater control and confidence.
Clients include organisations from financial services, retail and catalogue, telecommunications, utilities, media, insurance, automotive, leisure, e-commerce, manufacturing, property and government sectors.

Experian Group Limited is listed on the London Stock Exchange (EXPN) and is constituent of the FTSE 100 index. It has corporate headquarters in Dublin, Ireland, and operational headquarters in Costa Mesa, California and Nottingham, UK. Experian employs around 15,500 people in 36 countries worldwide, supporting clients in more than 65 countries. Annual sales are in excess of $3.8 billion (£1.9 billion/€2.8 billion).

For more information, visit the Group's website on www.experiangroup.com.

About Experian's Decision Analytics division

Decision Analytics is the international division of Experian specialising in providing credit risk and fraud management consulting services and products.

Over more than 30 years, it has developed its best practice analytical, consulting and product capabilities to support organisations to manage and optimise risk; prevent, detect and reduce fraud; meet regulatory obligations; and gain operational efficiencies throughout the customer relationship.

With clients in more than 60 countries and offices in more than 30, the decision analytics division of Experian delivers experience and expertise developed from working with national and international organisations around the world across a wide range of industries and business size.

For more information, visit the company´s website on www.experian-da.com.

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