Original Article

How should the goals for 'contact optimisation' be set, and how should contact optimisation be managed in a multi-channel inbound and outbound environment?

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ABSTRACT Contact optimisation is currently a well-established marketing technology and is used by many large companies with significant customer bases across most vertical markets. However, there has been little effort made to challenge the objective function of maximising contribution, which is used by most systems. This article canvasses the views of industry experts with regard to alternative or parallel objective functions that include longer-term customer value and customer retention. It also takes a look at widening the scope for contact optimisation to include both inbound and outbound channels.

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INTRODUCTION

Experiments in the field of 'contact optimisation' have been undertaken by marketers for over a decade, usually supported by software tools that fit communications to individuals on the basis of maximising returns over time, while respecting a range of constraints.

The subject of this article is to question the goals currently set by marketers to drive

contact optimisation tools towards their business objectives, and to explore alternatives.

For the purpose of this article we are going to define 'contact optimisation' by using a description of the activity from Forrester Research:

Contact optimization applications work by processing inputs, including customer data, global business rules, contact

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policies, predictive model scores, business constraints, and objectives, to identify optimal solutions. Vendor approach varies, but, at a conceptual level, the technology incorporates five key activities:

1. All possible contacts are calculated based on model scores, business rules, and campaign data.
2. Contacts that meet set exclusions or suppression rules are eliminated.
3. The impact of each contact on business objectives and constraints is calculated. This is expressed as a measure like profit or revenue.
4. Mathematical techniques are used to identify the best or closest solution in order to assign each customer to the right contact(s).
5. The optimized lists of customers per identified contact are produced, and often handed off to a campaign management system for execution.¹

Although there has been much investment in technology to support contact optimisation, there has been little recent discussion around the goals and constraints that should be applied (see stage 3 above). However, setting the right goals is fundamental if the technology is to add value to direct-marketing activities.

The author asked a handful of acknowledged experts² in the field of contact optimisation to present their views, and their responses form the starting point for our discussion. However, we have then projected some potential directions that we suggest contact optimisation needs to take if it is to continue to add value in managing interactions between companies and their customers.

QUESTIONS WE PUT TO OUR EXPERTS

The following questions were put to each of our experts:

- 1 Would you agree that PVC is currently the most frequently employed objective

function for contact optimisation, and if not what do you regard as the front-runner?

- 2 What do you regard as the pros and cons of using PVC?
- 3 Which alternative objective functions would you consider? (These may cover any objective area for customer communications including but not restricted to customer care, customer experience, customer knowledge and customer retention.) Please explain your reasons for wanting to use alternatives.
- 4 The constraints employed by contact optimisation software have usually included budget, ROI, contact density and repetition, and product sales volume. Please consider whether this list should be extended, and what new constraints should now be made available.
- 5 Contact optimisation technology was initially developed for batch outbound activity such as mail. It is now being employed in many different ways including inbound sales off service, web content and channel choice. What do you regard as the most important communications areas and contact points for contact optimisation in the future?

We should explain that 'PVC' is used to describe the formula that attempts to describe the potential value of any possible future communication:

$$(\text{Propensity} \times \text{Value}) - \text{Cost}$$

Propensity is the likelihood of the recipient responding to a communication in the way that the organisation requires (such as placing an order); value is the longer-term value to the organisation of the individual responding in that way; and cost is the cost of making the communication.

HOW OUR EXPERTS RESPONDED

1. *Would you agree that PVC is currently the most frequently employed objective function for contact optimisation, and if not what do you regard as the front-runner?*

The panel confirmed that PVC was the predominant objective function used in contact optimisation, but explained that other considerations often have to be met; these were, specifically, customer recruitment, customer satisfaction and customer retention. Additionally, one expert explained that cost was often left out of the equation, as in many environments it is either trivial (like emails) or difficult to measure (like inbound sales off service).

2. *What do you regard as the pros and cons of using PVC?*

The pros:

- Strong for a short-term business perspective
- Widely understood across the business
- Simple to include in a financial business case
- Easy to work with
- Helps to arbitrate between campaigns

The cons:

- Not customer focussed
- Biases communications towards the most profitable offer (ones with a high NPV) rather than the one the customer wants most
- Ends up being similar to a campaign profitability hierarchy
- Value is difficult to define (for example, for brand and customer satisfaction impacts)
- Propensity can take many forms and is difficult to 'level' between campaigns
- Requires updated NPVs to work
- Costs are not always available (for example, for handling inbound campaigns)
- Propensities only available for established products, and not appropriate for

non-product sales campaigns such as activation, retention or customer service

3. *Which alternative objective functions would you consider? (These may cover any objective area for customer communications including but not restricted to customer care, customer experience, customer knowledge and customer retention.)*

- Something that measured the forecast change to individual customer profitability as a result of the communication
- Should be driven by the objectives of each specific campaign
- Focus on retention of high-value customers and on customer service
- Would continue to use PVC but would use the constraints to balance the outputs

4. *The constraints employed by contact optimisation software have usually included budget, ROI, contact density and repetition, and product sales volume. Please consider whether this list should be extended and what new constraints should now be made available.*

- Would build in a counterbalance to the degree of inappropriateness that the business is prepared to accept for a message, and offer some form of penalty for going outside 'normal' thresholds
- Would need different constraint sets for different campaigns or channels
- Outbound contact constraints need to take account of inbound activity that is customer driven and difficult to plan for
- Need to be able to force sufficient prompt volume into inbound communications channels such as contact centres
- Being able to enforce customer life-stage activities such as Welcome, as well as event triggers and retention for high-value customers
- Excluding communications that fall below a minimum allowable response probability, or too far down an individual customer's ranking of possible communications
- Customer channel preferences must be respected (not just channel opt-out)

5. *Contact optimisation technology was initially developed for batch outbound activity such as mail. It is now being employed in many different ways including inbound sales off service, web content and channel choice. What do you regard as the most important communications areas and contact points for contact optimisation in the future?*

We here quote verbatim two of the responses that between them provide important guidelines for the direction that contact optimisation must take:

- In a true Web 2.0 environment I actually see Optimisation technology being replaced as we move to more of a customer driven 'pull' approach so the filtering is done by the consumer not the business so the challenge moves from pushing our content to generate interest to ensuring our presence across all interactive channels is high enough to make us first choice for selection.
- In the future I believe that the offers through optimisation must be multi channel and that the offers must be consistent across channels. The sort of position where direct mail offers are aligned to call centre but siloed from the internet needs to be got past. Channel choice will always vary by segment but the customer offer needs to be consistent.

POINTERS FOR THE DEVELOPMENT OF THE NEXT GENERATION OF CONTACT OPTIMISATION

In this final section, we draw on the challenges set by the experts to discuss some objectives and criteria for the development of the next generation of contact optimisation technology.

1. How to set the objective function?

We appear to have to choose between either applying a common standard for arbitration between all campaigns to offer

an individual customer, or putting product sales and customer care campaigns into separate selection silos because we cannot find a suitable common standard.

If we take the common standard approach, in our opinion, the best common standard suggested by our experts is 'the change to future individual-level customer profitability as a result of the customer receiving a particular communication'. In this case, there is no theoretical obstacle to all types of campaigns being measured in this way. Indeed, the formula used to calculate the profitability change could be PVC, or it could take an entirely different form based on the objectives for the campaign in question; a retention campaign could, for instance, be measured by multiplying the expected reduction in attrition risk by the future value of the individual customer.

However, calculating the change to individual customer profitability as a result of communications may be difficult or indeed impossible; in these cases it may be better to put campaigns not intended for product sales, let us call them care campaigns, into a separate selection silo. Care campaigns can be ranked at an individual level by the customer's care needs, and the most suitable selection made. However, we still need to be able to arbitrate between care and product sales. There will need to be rules that either prioritise one sort of campaign over another, or that manage both together, using contact density rules that differentiated care and product sales campaigns.

2. Applying contact optimisation across inbound and outbound channels:

The requirements here are more to do with technology than they are with communications strategy, but for most organisations they will be extremely demanding.

To satisfy the needs of providing contact optimisation across inbound and outbound channels we suggest

- a central contact optimisation data view for contact decisioning where all recent historic inbound and outbound contact history from all channels, including web, SMS and call centre is recorded. This is a huge shift from an outbound contact history database, and will also require some systematic categorisation of inbound contacts;
- the maintenance of customer channel preferences, and contact consents, across all channels supported by a permissions rules engine that disentangles different levels of consent given via different channels. These customer preferences could in time be extended to include content and product preferences, as well as channel;
- a content management system that, where possible, serves common content across multiple channels;
- a methodology for communications planning where the outbound contact decisions may be regarded as certain, while the inbound is contingent on prior customer activity. This means that to get reliable sales and contact volume estimates, organisations will need to be clever at predicting inbound contact levels by category and channel; and
- a contact decision engine that can use an individual's probability of inbound contact as a factor in determining whether to release outbound contacts to him.

3. New constraints not normally included in contact decision engines:

Our experts provided a couple of suggestions that we feel require action:

- Providing minima for prompt volumes (many of the execution environments such as customer service centres require minimum levels of outbound communications, and prompt for action in respect of inbound calls).
- Excluding or penalising communications where response probability is low but value of a response high; in a conventional PVC decision environment, no account is taken of this and communications with a very low 'P' can get through because of their high 'V'.

CONCLUSIONS

The outbound focussed, PVC-dominated approach to contact optimisation has served reasonably well for the last decade. However, the introduction of multi-channel communications, where much of the activity is customer generated, calls for a radical change to this approach.

This article has summarised the views of some of the main UK experts in contact optimisation, and based on these we have suggested some pointers for development, but we are conscious of the fact that we are very much at the start of the journey to what may in future be called 'Contact Optimisation 2.0'.

In this new world, inbound prompting will be considered with as much care as outbound selections, and optimisation will be as much focussed on customer care campaigns as it will be on product sales.

REFERENCE AND NOTE

- 1 Vittal, S. (2006) *Understanding Contact Optimization Techniques*. Cambridge, MA: Forrester Research.
- 2 In total, five experts responded; one is a consultant and the other four hold senior marketing positions in financial services, retail and telecommunications.