

› Conclusions Paper



## Improving Multichannel Marketing with Optimization

# Contents

Marketing Optimization: A Complex and Business-Critical Endeavor .....	1
Traditional Ways of Matching Customers with Campaigns and Offers.....	2
Campaign Prioritization .....	2
Customer Prioritization .....	2
True Optimization Requires a Holistic Approach ....	2
Understanding the Value .....	2
Proving the Value of Marketing Optimization Across Industries.....	3
Quantifiable Results .....	4
Seven Steps to Optimize Your Marketing.....	4
1. Data Is the Foundation - So Invest in It.....	4
2. Define What You Want to Optimize Given Specific Constraints.....	5
3. Deploy the Right Enabling Technology.....	5
4. Facilitate a Mind Shift at Management Levels .....	5
5. Create a Customer Contact Council .....	5
6. Start Small and Grow .....	5
7. Jump-Start Adoption by Exploiting Your Existing CRM System .....	5
Conclusion .....	6
Learn More .....	6

## Marketing Optimization: A Complex and Business-Critical Endeavor

In today's multichannel world, optimizing the performance of marketing activities is complex because of the explosion of channels - there's just no way around it. Consider what's involved when trying to maximize profits by offering multiple offers to different audiences across diverse channels. The company may have multiple offers for customers - for example, to save 20 percent on their total purchase, get free shipping on orders over \$50, and earn a free \$10 gift card if they spend \$100. And these special sales promotions are made available across a variety of channels - for instance, in stores, online and via mobile ads.

In any business scenario, a big question is how to best match which customer gets which offer through which channel, at which time, and how frequently to achieve a specific goal - for instance, maximizing sales?

If you think you can figure this out using an Excel spreadsheet, think again. It's a topic explored in a recent webcast conducted by the American Marketing Association and sponsored by SAS. Titled *Making Better Customer Connections with Marketing Optimization*, the webcast focused on helping members of the marketing community derive the greatest return on their marketing investments. Ideas and best practices were shared by:

- **Amartya Bhattacharjya** - a Principal Solutions Architect at SAS and deep domain expert in the area of marketing optimization.
- **Hillary Ashton** - former Director of Customer Intelligence for SAS.

"Assuming you're with an organization that has some level of complexity, you quickly find that there are thousands, tens of thousands, or even hundreds of thousands of possible permutations you can use to match customers with offers and campaigns," states Ashton. "Plus, companies have all of these different business problems and offers they want to get out to customers, but marketers have to do this while balancing lots of competing priorities - or constraints."

For example, if you worked for our hypothetical retail business, you may need to:

- Comply with the company's corporate policy on the maximum number of contacts per month (in most cases, two times per month).
- Avoid offer fatigue by making sure that each customer only gets the same offer every three months, for example.
- Ensure customers always receive the most relevant offer, which may be based on their previous purchases, what they've been browsing on the web, or what they've talked with an associate in the store about - or a mix of all three plus other variables.
- Reduce the total mail volume to either maintain or reduce the cost for direct mail.
- Make sure that the offers are relevant for each customer.
- Reduce the shopping range to a reasonable distance - perhaps 15 miles.
- Make sure that you're not overspending on customers with a low probability of conversion.
- Stay within your overall budget by taking a macro view of the budget and verifying that all of your marketing programs don't exceed that budget.
- Make sure that your marketing ROI continues to improve and budget does not increase.
- Block all of the other offers for new customers for the first few weeks that they've joined the company.

These are just a few examples of the real-world constraints facing marketers responsible for multiple offers and channels, different customers and customer segments. According to Ashton, to truly optimize marketing, you need a systematic way of matching customers to offers, campaigns, frequencies and channels - all while taking business constraints into account.

## Traditional Ways of Matching Customers with Campaigns and Offers

According to Ashton, this problem has been around forever – and marketers have attempted to solve it a variety of ways. Ashton and Bhattacharjya overviewed the most common “traditional” approaches: campaign prioritization and customer prioritization.

### Campaign Prioritization

For years, marketers have applied prioritization techniques (also referred to as business rules) to try to achieve their marketing objectives. “Prioritization is a subjective or a business-driven approach of putting more importance on a particular campaign than another so that those campaigns get ‘first dibs’ on the customers,” explains Bhattacharjya. “If you have campaigns and they have certain constraints – for example, you want to get a certain number of target customers – you would run the campaign and capture a subset of customers. Then you would use the next campaign to try to capture another subset of customers, and so on – using a sequential waterfall approach.”

But how does prioritization work given marketers’ constraints – such as the number of times you are allowed to contact customers, requirements about remaining within business budget constraints, and so on? Research shows that prioritization fails in the face of such constraints because 1) it requires that you subjectively start with one campaign over the other, and 2) it doesn’t allow you to achieve the best possible combinations, or permutations, for marketing campaigns.

### Customer Prioritization

Savvy marketers eventually decided to flip the problem notes Bhattacharjya. “They said, ‘Let’s look at each customer one at a time and try to determine the best campaign or the best offer for each one.’ When you take this approach, you can be very customer-centric with your marketing because you’re carefully selecting the best offer for the customer.”

But again, in light of the various constraints, business regulations and contact policies that limit what marketers can do, this approach fails to achieve true marketing optimization. As you apply constraints as well as contend with budget constraints, you will eventually run out of offers for remaining customers. And then what do you do? Even in the simplest situations, this approach has limitations.

## True Optimization Requires a Holistic Approach

True marketing optimization requires a holistic approach to matching that considers all customers, campaigns and offers, and constraints in question simultaneously. The only way to do this is with analytics, not spreadsheets. “Marketing optimization is about using analytics to optimize the outcomes of campaigns and offers,” explains Bhattacharjya. “It allows you to literally find out what would be the best combination or campaign to assign each customer or segment, taking into account all the constraints and contact policies, so you can systematically achieve your objective.”

### Understanding the Value

To illustrate the power and value of a holistic approach to marketing optimization relative to other approaches discussed, Bhattacharjya shared a simple example: Imagine that a marketer has three offers going to just nine customers. “Let’s say the goal is to maximize profit, and the constraints, or the business rules, you have to meet specify that you need to reach every customer with one offer, or one campaign,” he says. “In terms of constraints, you can only offer each campaign to three customers due to inventory capacity and budgetary limitations.”

Bhattacharjya summarized the results achieved using each approach – and the results may be surprising. As shown in Table 1, the holistic campaign optimization methodology yielded \$715, compared to \$615 using campaign prioritization and \$655 using customer prioritization.

Methodology	Revenue achieved	Percent increase
Campaign prioritization	\$615	(baseline)
Customer prioritization	\$655	6.5%
Campaign optimization	\$715	16.3%

As this example illustrates, a true marketing optimization approach enables you to obtain the maximum possible return on your investment within the constraints you have to work with. It does this by:

- Assigning the optimal offer to the right customer.
- Determining the right channel to reach this customer.
- Identifying the right time to send the offer to this customer.

It sometimes specifies an offer or campaign for a customer that isn't intuitively obvious, yet will actually deliver the best outcomes. "In the case of our simple scenario, if you were to look at it holistically, and select and apply an optimization approach to these variables and constraints, you would get a return of \$745," says Bhattacharjya. "That's close to a 4 percent improvement even over the customer prioritization approach." This is a tremendously improved incremental return.

Marketing optimization approaches naturally outperform traditional approaches to decision making – as well as the approaches that your competitors are likely using.

At the same time, it allows you, as the marketer, to know not only which campaign to send to each customer at a particular time, but also how to strategically determine whether the constraints they are using are the best possible constraints for meeting marketing and sales goals. "For example, if you have a budget to work with, an optimization approach would help you determine the efficacy of that budget" says Bhattacharjya. "You can get answers to questions like, 'What would happen if we increased the budget by 2 percent or decreased it by 2 percent? What would be the impact on the ROI?'" In other words, a holistic approach to marketing optimization enables you to realize both tactical and strategic benefits.

## Proving the Value of Marketing Optimization Across Industries

Solving marketing optimization challenges using constraints has been practiced widely in other industries since the late 1990s, particularly in financial services and telecommunications. Today, new industries are rapidly adopting optimization techniques. For example:

- Retail organizations are now using it to maximize the outcomes for seasonal or holiday marketing campaigns and offers – which can be numerous. "They want to know to ensure that when they send out campaigns and offers – given their limited budget for direct mail – to customers, they are matched to the right customers and being sent through the best channel for each customer," says Bhattacharjya.
- The hospitality sector is using it to optimize their promotional weekend campaigns across different channels, offering special spa or resort offers to entice visitors to stay.
- Health care organizations are using it to present offers and campaigns for insurance products – for example, by taking into account what plans will deliver most value to the organization and the risk levels in customer segments.

"We are clearly at an inflection point for marketing optimization," notes Bhattacharjya. "Businesses in most industries have customer-rich data and are embarking on at least one kind of an analytics exercise already. So they are primed for deploying marketing optimization. They can start using the data and tools that they have for marketing optimization – and leap ahead of their competition by doing so."

Campaign optimization can solve the matching problem for every company, regardless of industry.

## Quantifiable Results

Table 1 previews the kinds of benefits that organizations can achieve by applying holistic marketing optimization techniques. "I know that some of these ROI numbers sound tremendous - and even unbelievable," says Ashton. "But they are real, quantified results. The point is, if you're not using holistic marketing optimization techniques, you're likely leaving a lot of money on the table. For instance, we're working with a retailer who is currently using a prioritization approach. We've shown them how - given the same offers, customers and business rules - holistic marketing optimization results in decisions that deliver an 80 percent lift in sales."

Client Type	Benefits
Retail Bank	<ul style="list-style-type: none"> <li>• 55% increase in profitability of DM program.</li> <li>• Payback in 4 months.</li> </ul>
Retail Bank	<ul style="list-style-type: none"> <li>• 50% campaign ROI improvement.</li> </ul>
Major Insurer	<ul style="list-style-type: none"> <li>• 12% increase in revenue; 52% in earnings</li> <li>• Savings of more than \$4 million per year.</li> </ul>
Telco	<ul style="list-style-type: none"> <li>• \$6 million incremental LTV in the first month.</li> </ul>
Telco	<ul style="list-style-type: none"> <li>• Reduction in call center contacts by 25% without decreasing effectiveness.</li> </ul>
Telco	<ul style="list-style-type: none"> <li>• Increased response rate by between 300 and 1,000 percent.</li> <li>• 400% improvement in campaign ROI.</li> <li>• 30% reduction in campaign costs.</li> </ul>
Retail Grocer	<ul style="list-style-type: none"> <li>• Individualized targeting of monthly coupon mailers.</li> <li>• Increased offer response rates.</li> <li>• Decreased mailing costs.</li> </ul>
Specialty Retailer	<ul style="list-style-type: none"> <li>• 60% lift in expected sales.</li> </ul>
Hospitality	<ul style="list-style-type: none"> <li>• Doubled the number of responses across email offers.</li> </ul>

Table 1: Examples of Success Metrics for SAS Customers

Similarly, a hospitality organization targeting prospects worldwide through email used holistic marketing optimization, and they saw a twofold improvement in the number of responses compared to results achieved using traditional prioritization approaches.

"Whatever your criteria or your objectives are, in most cases, you will find a reasonable amount of improvement using optimization. And if you think about the scale you are operating at, if there is even a 5 percent improvement in your ROI or some kind of objective like profit and revenue, it would pay for this kind of solution or approach many times over - in just a few months."

Hillary Ashton, former Director of Customer Intelligence, SAS

## Seven Steps to Optimize Your Marketing

What prevents customers from realizing the full value of optimization solutions? What are some of the most common pitfalls marketers encounter as they adopt it? And what needs to be in place in order for marketing optimization to work effectively within an organization? Consider the following best practices offered by Ashton and Bhattacharjya.

### 1. Data Is the Foundation - So Invest in It

"The precursor to optimization is having clean, trusted marketing data," says Bhattacharjya. "You can't have marketing optimization without it."

For many marketers, data is inherently problematic. It may be scattered all over their organization - or worse, they don't even know about the data that's available to them. Specific to

optimization, marketers need to collect and centralize data that helps them understand:

- Their campaigns.
- Individual customers and customer segments, such as demographic information, risk information, profitability data and prior response data.
- The prioritization rules, business rules, or customer rules that your organization may be applying right now (to the extent they can be documented and codified).
- Predictive models, as determined by the types of optimization sought (for example, if you are trying to maximize the responses, you would need response models in place, not your profitability model).

## 2. Define What You Want to Optimize Given Specific Constraints

Before you start the process, you need to define exactly what you want to optimize. "For example, if you want to optimize ROI, you need to clearly define and quantify what you mean by ROI, including the rules and constraints that you want to satisfy," adds Bhattacharjya. These constraints are inputs that go into the optimization process.

## 3. Deploy the Right Enabling Technology

Finally, like any game-changing initiative, it's one thing to have the technology - or the analytic capability - in place, and it's another to know how to get the most from it. "I recommend that companies seek out expert guidance from someone who has successfully applied this technology and optimization process before," says Bhattacharjya. "It's very important that you have folks available - a trusted partner who can give you a helping hand as you craft your problem, identify the data needed to get you going, and move from step A to step B, and so on."

## 4. Facilitate a Mind Shift at Management Levels

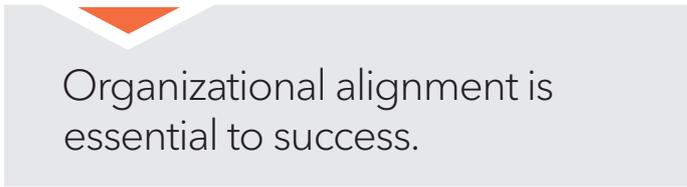
For many marketing departments, adopting optimization requires a mind shift - especially for business managers and product managers used to offer-centric or customer-centric approaches. The best way to achieve this is to secure top-down sponsorship at high levels of management, as the approach is meant to optimize marketing across all lines of business and all campaigns. "The interests of these sponsors need to transcend specific lines of business and product lines," says Bhattacharjya. "They can also revise incentive structures and performance metrics for product line managers so that they are better aligned with the goals of optimization."

## 5. Create a Customer Contact Council

Consider creating a customer contact council - product line managers who get together regularly to compare the campaigns they have planned and synchronize them optimally. Ideally, this group would be led by someone with oversight for all products across the enterprise.

## 6. Start Small and Grow

As with any transformational initiative, consider starting small, proving the value, and then expanding your optimization initiative across the business. "Identify a small problem - one that exists in one line of business - and get started with that," suggests Bhattacharjya. "You'll be able to see the success of this approach, incrementally improve on it, share results, and then grow it into your organization."



Organizational alignment is essential to success.

## 7. Jump-Start Adoption by Exploiting Your Existing CRM System

CRM systems not only capture valuable customer data, but also structure the operating parameters that affect the available data for marketing to use. Both are important prerequisites for adopting marketing optimization.

In light of what holistic marketing optimization does - satisfy all existing business rules while determining the best combination of customers and segments to achieve your goals - it enables you to apply intelligent decision making to CRM data without disrupting your CRM system. "Use it to revise the decisions made regarding which customer gets what campaign or offer," says Ashton. "Your optimization solution can then feed results back into your CRM system."

## Head Off the Biggest Point of Failure: Lack of Alignment

“At the end of the day, the biggest point of failure for optimization programs is a lack of alignment between the different lines of businesses or products subject to this optimization approach,” says Ashton. To drive alignment, communicate to everyone in your organization that there’s going to be a give and take between campaigns and all lines of business - and that this will not adversely affect business managers. In addition, be sure to adapt incentive structures for managers in ways that will help managers stay focused on facilitating the success of the campaigns.

## Conclusion

Optimization delivers results quickly - and it’s highly applicable to any business with an existing multichannel strategy.

“Optimization is all about decisioning and choices,” explains Bhattacharjya. “So as marketers, when we want to reach our customers, especially in today’s world, we have to go across multiple channels, both online and offline, offering multiple products and services. Given that you have so many ways of reaching your customers, it begs the question: What’s the best way to reach each customer with your offers and campaigns? Optimization techniques help you answer this question by identifying the most effective channel to reach your customer - the one that will produce the best result for your organization.”

## Learn More

To learn more about marketing optimization explore the following resources:

**Information about SAS® Customer Intelligence solutions:**  
[sas.com/en\\_us/software/customer-intelligence.html](https://sas.com/en_us/software/customer-intelligence.html)

**Thought leader views on marketing:**  
[sas.com/en\\_us/insights/marketing.html](https://sas.com/en_us/insights/marketing.html)

**Fresh perspectives from marketing practitioners** (SAS Customer Analytics blog): [go.sas.com/2qt00f](https://go.sas.com/2qt00f)

**Twitter:** [@SAS\\_CI](https://twitter.com/SAS_CI)

SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration. Other brand and product names are trademarks of their respective companies. Copyright © 2016, SAS Institute Inc. All rights reserved.  
107002\_S149640.0116

