

True Marketing Optimization

A Marketswitch Paper



Abstract

Goals have changed for today's enterprise marketing organizations. While once measured by the sheer amount of marketing activity they were generating, these groups are now expected to be profit centers, executing only those activities that will truly maximize the profit returned to the corporation.

Marketing departments, in general, are not adequately prepared to function in this profit driven environment. The size of the potential set of offer-customer-channel combinations that they could execute against is mind-boggling. How is a marketer to decide what the optimal subset of combinations is that will maximize profit?

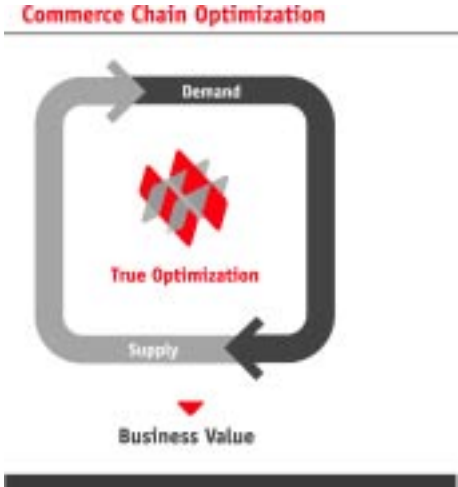
Marketswitch has developed a mathematical approach to solve this financial economic problem. This paper describes how Marketing Optimization can be used to develop campaigns - based on the interdependencies of individual customer characteristics, potential promotions or offers, available channels, and business constraints - that will deliver the maximum amount of profit back to the business, raising ROI's to a previously unattainable level. It also describes how Marketing Optimization can be used in coordination with other marketing technologies to maximize the effectiveness of overall marketing efforts.

Introduction

In recent years, traditional target marketing strategies have enabled marketers to organize data, discern data patterns relevant to consumer's purchasing behavior, and automate the campaign execution process. While valuable, these traditional approaches fall short in the following ways:

- They limit you to one-dimensional techniques, such as personalization. These techniques look at each product in a silo, determining customer interest for each. But you market many products simultaneously. Additionally, each product typically has its own goals and constraints, such as minimal acceptable revenue or maximum budget that may conflict with one another. These issues cannot be addressed one dimensionally if one seeks to maximize productivity across the marketing mix.
- You have millions of customers, but you cannot treat them as individuals. The best you can do is treat them as a part of a larger grouping or segment, and make the leap of faith that all members of the group act the same way all of the time...and more importantly, that you would want to treat them the same way all of the time.
- You don't have the ability to pick an overall campaign goal, such as profit, to maximize. The best you can do is make educated guesses or follow general if-then rules to increase your profitability.
- Automation tools allow you to boost the level of marketing activity in your organization, but not necessarily the level of your results.

Drawing from historical approaches used in the management of the manufacturing supply chain, airline revenue yields, and financial investment risk assessment, we determined that mathematical optimization technology could be applied to address the limitations associated with traditional marketing techniques. In fact, if we could bring optimization technology to the “demand-side” of the *supply and demand* equation, we could fulfill a desire of all leading-edge businesses...a fully optimized Commerce Chain¹ – with companies such as i2 and Manugistics optimizing the supply-side of the Commerce Chain and Marketswitch optimizing the demand-side.



Making optimization practical on the demand-side required pure mathematical breakthroughs since the marketing environment is characterized by unique complexities in scale, dimensionality, and time sensitivity (real-time customer interaction). Years of original research and development by Marketswitch produced the required advances. As a result of these efforts, true mathematical Marketing Optimization software is now available for enterprise marketing. This software can allocate marketing resources across multiple channels, business constraints and marketing scenarios to target the right customer with the right product through the right channel at the right time, all while maximizing the customer's financial return to your business.

¹ A Commerce Chain is defined as the end to end process by which a company delivers products and services to its customers

Marketing Optimization - Benefit

The goal of any business is to maximize profit. In theory, maximizing profit is simple – simply achieve the full profit potential of each and every customer relationship. But with millions of customers, many different products and product lines, and multiple communication channels, how can you find the right set of customer-product-channel combinations that will maximize overall profitability while simultaneously satisfying all of your unique goals and constraints? There is only one solution to this complex problem - Optimization.

True mathematically-based Marketing Optimization can be used to answer questions such as:

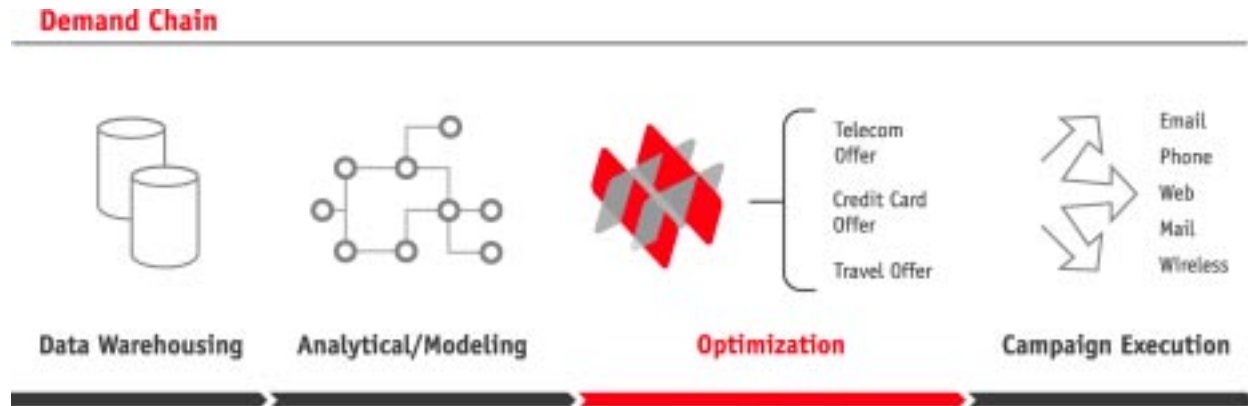
- Should certain customers get one product offer through your call center and should others get a different product offer through e-mail such that your overall profit is maximized?
- Did the purchase made by the last customer on your web site achieve your overall profit goals on a specific product line, thereby affecting how to market to the next customer?
- What is the maximum possible profitability of a multi-offer campaign with limited budget?
- What is the optimal mix of offers to send to each customer so that the minimum number of sales for selected offers are met?

With Marketing Optimization software you can select an overall goal, such as profit, and specify all of the constraints of your marketing campaign, such as budget, customer acquisition cost, or product specific volume requirements to name a few. The software then determines which customers should get which offer through which channel to ensure your overall business goals are met. You can also examine multiple "*what-if*" marketing scenarios prior to campaign launch to determine the appropriate course of action to accomplish your business goals *before committing marketing resources*.

In today's marketing environment, with customers surfing to your web site and dialing into your call center, you need the ability to optimize your customer interactions on the fly. Marketing Optimization technology can operate in real-time, allowing your web site to serve up the right offer and your call center agent to reference the right promotion during each customer interaction to ensure your goals are achieved. It scales to cover communication channels such as e-mail, web advertising, wireless, direct mail, and outbound telesales, giving you the breadth needed to optimize all of your customer touch points.

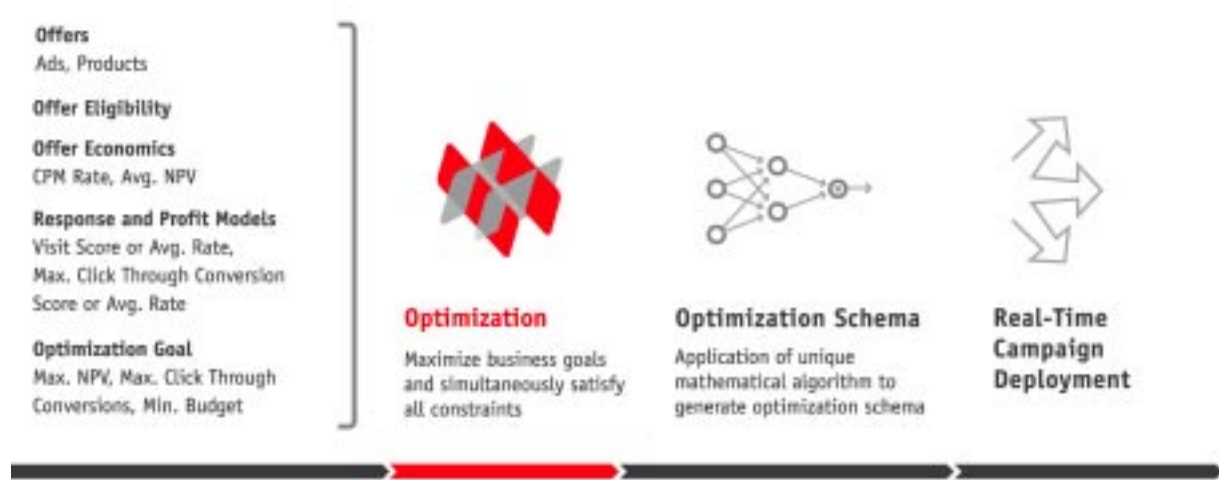
Marketing Optimization – In Practice

Marketing Optimization enhances and exploits all of the modeling, data warehousing, and automation systems you have in place today. In fact, since it fine-tunes your activities for maximum financial performance, it quickly increases the hard dollar returns from those other Demand Chain investments. The figure below shows how Marketing Optimization fits into your existing Demand Chain.



Optimization is THE ROI component of your marketing process. For example, assume your company is planning a number of different marketing campaigns that will take advantage of all of your communication options, including your Web site, call center, and wireless channels. Your data warehouse provides the customer data required to target your campaigns. Your data modeling tools divide these customers into segments and determine each segment's propensity (likelihood) to respond to certain promotions. But there is a problem; your budget allows you to target only a limited portion of your customer base, and you have infrastructure requirements that limit the use of one or more of your communication channels (e-mail, direct mail, telemarketing, wireless, and web advertisements). Additionally, your company has an overall profitability goal as well as specific business unit or product level revenue goals that need to be addressed. The software runs different “*what-if*” simulations, using data inputs from your modeling activities, to derive your campaign’s optimal marketing scenario to achieve your overall business goals. This optimization simulation can be fed into your campaign management program to build and launch the campaign. The result is a campaign that is mathematically proven to deliver optimal performance and maximize an economic function such as profit.

The diagram shown below shows the inputs that are required for Marketing Optimization.



All of these variables are typically available from the marketing analysts designing the various campaigns. Where specific models are not available, average values can be used as proxies to complete the optimization process.

Conclusion

Just as optimization technology revolutionized the management of the manufacturing supply chain, airline revenue yields, and financial investment risk assessment, Marketing Optimization software is revolutionizing how marketing activities are being managed and executed by leading-edge companies. This software, which allocates finite resources across multiple marketing opportunities, can be used by your marketing department to achieve the maximum value and profitability from your marketing efforts.

Simply stated, optimization is THE ROI component of your marketing process. It is complementary to other investments that your company is making in the marketing organization, such as investments in data mining software for modeling or marketing automation software for campaign execution. Optimization provides the hard-dollar economic payback from your Demand Chain process.

To find out how your organization can take advantage of this breakthrough class of software, visit Marketswitch Corporation, the sole provider of True Optimization software, at www.Marketswitch.com.