



## Optimization in CRM: Not Just Another Meaningless Vendor Buzzword

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The world of Supply Chain Management (SCM) has long understood the role and value of optimization, but the world of customer management completely misunderstands it. The term *optimization* is tossed around freely by all types of Customer Relationship Management (CRM) vendors, which promise to optimize your marketing or sales process. However, optimization is a very specific flavor of decision support that most don't support or even understand. With this in mind, I decided to review AMR Research's coverage of the early use of optimization technology in supply chain planning and scheduling to help users understand what optimization is and, more importantly, what value it offers in making key CRM decisions.

### What is optimization?

Optimization comprises five major elements:

- **Decision support technology**--To solve large, complex problems
- **Advanced or applied mathematics**--Primarily linear, integer, and mixed integer linear programming, but also Bayesian and Genetic Algorithms (GAs)
- **Constraint-based**--Modeling key constraints in resources, time, or risk
- **High-performance computing**--Often memory-resident technology, with a reliance on computing to quickly evaluate millions, if not billions of different solutions
- **Optimized results**--Producing the best or optimal mix of choices based on constraints and business objectives

### What is the role of optimization in customer management?

Optimization has many potential applications to traditional CRM issues, but it typically falls into three camps:

- **Offer Optimization**--The ability to determine the optimal offer for each individual customer based on a combination of demographics, sales history, and behavior, offer optimization is a revolutionary approach for major consumer marketing organizations, which have been forced, because of the size of the customer or prospect pool, to aggregate individuals into high-level segments in order to present offers. Being able to market to a segment of one based on behavior rather than demographics has allowed companies like Capital One Financial to dominate its industry. **Marketswitch** is the main vendor in this segment, and **Unica** offers capability as well.
- **Price Optimization**--This is the ability to model customer demand at the microsegment level in conjunction with competitive, cost, market, and supply data to determine the best price to maximize revenue and profitability. Few vendors use pricing strategies that recognize or mathematically measure the value that their product has in specific customer or channel segments and optimize price and product availability as a result. By completely rethinking the way price is set, managed, and discounted as demand varies over a product lifecycle, the potential here in early customer deployments shows 10% to 20% incremental revenue opportunity. The key vendors are **DemandTec**, **KhiMetrics**, **KSS**, **Spotlight**, **i2 Technologies**, and **ProfitLogic** in Retail; **Pros RM** and **Manugistics** in Airline and Hospitality; and **Rapt**, **Metreo**, **Zilliant**, and **Manugistics** in High-Tech and Manufacturing.
- **Schedule Optimization**--One of the most proven targets is the scheduling of resources, whether equipment or people. The same is true in resource-intensive call centers and field services, in which the objective is maximum utilization of resources and meeting customer satisfaction or service levels. The benefit of optimization only becomes relevant in larger environments, typically those of more than 100 agents or technicians. **Blue Pumpkin** leads in the call center workforce management arena, and **ServicePower** and **Click** are the main vendors in the field services scheduling market.

Other opportunities for optimization include sales territory management, risk management, and demand and

replenishment.

**Optimization offers tremendous value, but only if you have data and manage change**

Optimization is a great opportunity for users to capitalize on the significant investments in operational data coming out of other CRM or Enterprise Resource Planning (ERP) investments. However, culture and data readiness present the largest hurdles. From a cultural perspective, optimization requires a real shift in thinking that will question, if not render obsolete, existing decision processes. This requires people to change their job and change policies; it all spells a big investment in change management to get the benefits from the advancement in technology. On the data side, most companies will need 18 to 24 months of clean data in order to drive these engines.

As always, I would like your feedback at [rjohnson@amrresearch.com](mailto:rjohnson@amrresearch.com).

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