

# Presentation of Work Objectives for Call Centers

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## **ABSTRACT**

Capital One is exploring ways to present goals and objectives to call center service associates in a way that encourages them to accomplish the pre-determined goal without preventing them from determining their own real-time objectives. We have a simple solution in production, and we are in the process of designing a more robust solution for a more complex environment. Several unresolved issues remain, such as the passivity of the recommendation, the interface behavior that supports the visual clues of the objective, and the measuring of objective fulfillment and the service associate incentives.

## **Keywords**

Call center, objectives, goals, Capital One, Information Based Strategy (IBS)

## **INTRODUCTION**

Capital One is exploring the use of recommender systems as it strives to maximize the value of each contact between a customer, or potential customer, and a Capital One associate. What makes this challenge unique for Capital One is not necessarily the “passing of experience from a community of users to an individual user,” or even providing assistance to new or inexperienced users. Instead, the challenge is to implement Capital One’s own finely tuned Information Based Strategy (IBS) through associates that think and make decisions on their own.

A short note on Capital One’s history is necessary to understand both the company culture and IBS, and its relationship to the software systems we’re building today. Capital One is a financial services company that was spun off from Signet Bank in 1995. Currently our primary product is credit cards in the US market. We believe we’ve been highly successful in that market for the past 5-10 years primarily because of our IBS strategy. We also

believe that IBS can be used in many consumer markets, and we’re starting to see success in telecommunications and auto leasing as well as credit cards in Canada and the United Kingdom.

## **CAPITAL ONE’S INFORMATION BASED STRATEGY**

Information Based Strategy is simply a business cycle of creating a hypothesis or test regarding consumer behavior as it relates to our products, implementing the test, collecting data on the results of the test, and then modifying the test or creating additional tests based on the earlier results.

For example, on the account origination side we might create a test that measures the effectiveness of envelope color on direct mail solicitations. We would select a slice of all households that shared identical demographic information, select our test groups and control groups, and then mail two different credit card offers to the two groups. The offers might be identical in terms of APR, membership fee, etc.—the only difference would be the color of the envelope. As the applications are returned, we can then measure the response rate to determine if envelope color affects solicitations. Although a trivial example, it illustrates the types of thousands of tests that Capital One executes every year.

IBS can also be applied to the areas of account management and collections, where the use of recommender systems is introduced. Account management refers to the use of testing to maximize our values from existing customers in Customer Service; collections refers to the use of testing to maximize the payback from customers that are either unable and/or unwilling to pay their bills.

## **CUSTOMER SERVICE CROSS-SELLS**

Our first attempt at recommender systems came two years ago when we introduced the concept of cross-sells for customer service. Capital One staffs a large customer service center with thousands of customer service associates that take calls from customers regarding anything from address changes to balance inquiries to payment disputes and so on. With a large number of customers contacting us on a regular basis, why not try to

take advantage of that contact by creating additional revenue for Capital One? Thus, the concept of cross-sells was created. While an associate is taking care of the customer request(s), the associate attempts to sell a product to the customer while they are still on the phone line.

Every time a customer calls, we check a database to determine if we should attempt to sell a product related to the customer's existing product. For example, for credit card customers we might sell credit insurance (protection to cover missed payments). The database is pre-populated with customers who are part of our cross-sell tests, and each customer record includes a pre-determined chance of success estimated for each customer/cross-sell product combination.

If the customer service associate should make a cross-sell attempt, a visual indicator is given in the customer service application in the form of a blue border around a button that takes the user to see what the cross-sell opportunity is. The button is always available, but the blue border only appears when there is a cross-sell opportunity and is suppose to serve as a big "Don't forget to do this!" Once the associate is taken to the cross-sell screen, they see the cross-sell product name, a brief description of the product (more information is available via help), and a series of check boxes they should select to indicate the results of the cross-sell attempt, such as: didn't attempt sell, attempted but not sold, sold, don't solicit again, etc.

The results are then stored in the same database and additional batch processing is completed later. Another cross-sell opportunity is queued up for the next time the same customer calls.

From a usability perspective, I find Capital One's first effort in recommender systems to be a good start but somewhat primitive for the following reasons:

- **Complexity of Decisions:** Cross-sell opportunities are not complex decisions for the customer service associate. Associates are instructed to either make a cross-sell attempt or not, and if they are to make a cross-sell attempt it is for one product and one product only.

Associates are not invited to make a cross-sell opportunity if it "feels right." Nor are they given a complex cross-sell opportunity such as "Sell A or B." The strategy is simply: "Sell A or don't sell anything."

- **Passivity of Recommendation:** There's little in the interface that leads the customer service associate to make the cross-sell attempt. They are given a visual indicator on the main screen, and some additional information on a secondary screen, but it's up to the associate to navigate to the right screen, to browse the information and develop a sales pitch, and to make the pitch all while servicing the other requests of the customer. In other words, there's nothing in the

interface that helps the associate manage the conversation.

The one activity in the interface that leads an associate to make a cross-sell attempt is in the wrap-up of the call. If an associate has been presented with a cross-sell opportunity, and they don't indicate a result by the time they try to close the call, they are automatically taken to the cross-sell screen when they try to close the call. There they stay until they indicate a cross-sell result.

- **Lack of Feedback:** Customer service associates aren't given any feedback in the interface, either during the call or after the call, that suggests the results of their efforts.

During the call, the blue button border always appears, regardless of whether the associate has selected a cross-sell result or not, so the associate always has to remember if they've completed that task or not (OK, so we remind the associate at the end if they haven't).

Finally, there's no accumulation of results over time for the associate to see and review their performance and to compare it against the standards, objectives, team norms, etc. Associates do eventually get feedback on their results, but it's through written reports long after the fact.

From a business perspective, cross-sells are wildly successful. They've exceeded our forecasts since they were introduced and Capital One is continually running additional tests to expand this program. I attribute this success to a couple of factors:

- **Associate Incentives:** Associates are highly incented to make the sales attempts. For each sale, the associate gets a small commission that can add up quickly and significantly. Associates that don't make the attempts are also noted and that feedback becomes part of their appraisal.
- **Consumer Behavior:** For reasons entirely beyond the scope of this paper, the customer perceives they are getting a valuable product and makes a choice to buy it. Cross-sell products are not expensive and the customer can quickly see the value of the product in the few seconds that the associate has to sell the product.

Perhaps the most interesting thing about cross-sells, and what sets them apart from other recommender systems as mentioned in the introduction, is that the recommendation is being made to satisfy a business test, not to further train or develop the associates receiving the recommendations. It's not expected or desired that an associate will "learn" what products should be offered to what customers, nor is it expected that associates "filter" the recommendation

through their own knowledge, skills, and experience. It is quite the opposite, in fact. We don't want associates to make their own decisions since that would invalidate the tests. Instead, we want the associates to simply execute the recommendation put forth to them by the business analysts that defined the test.

### **CUSTOMER SERVICE VS. COLLECTIONS**

Having learned the lessons from the cross-sell experience for Customer Service, we are now starting to design a new system for collections. The New Collections system comes from the need to successfully implement IBS in collections--our current systems don't easily support rapid evolution of business tests and the gathering of data necessary to support those tests.

There is one significant difference between customer service and collections as it relates to recommender systems. In customer service, it's typically the customer that has the request or the need to talk to us and so they contact us. When a customer calls, they manage both the flow and objective of the conversation--customer service associates simply respond to the customer's requests. (Which suggests that the art of the cross-sell is in shifting the flow and objective of the conversation from the customer to associate and making the sales pitch.)

In collections the opposite is true. Customers are in collections because they haven't been paying their bill and in most cases they aren't very anxious to talk to Capital One collectors. Most of the contacts in collections are the results of outbound calls from automatic dialers that hand connections off to collectors. Thus, it's almost always the collector that manages the flow and objective with a sometimes reluctant customer.

This distinction is critical for understanding the importance of developing the right recommender system for collections. In customer service, just a small portion of the contact is a recommendation-based sales opportunity. In collections, the entire contact is a recommendation-based sales opportunity.

Collections is basically a stimulus-response environment whereby we stimulate the customer with phone calls and letters, and they hopefully respond with payments. The content of those phone calls and letters then becomes critical to if and when a customer makes a payment on their account.

### **GOALS AND OBJECTIVES**

Every time a collector retrieves a customer's case, they are presented with an objective as part of the case. The objective is determined at or shortly before the contact occurs, so it is recalculated each time we have a contact for that customer. The objective is presented as selectable text (not unlike the underlined blue links that are ubiquitous on the world wide web) in a prominent position on the main screen of the collections system.

To allow for complex objectives, we introduce the concept of goals and give goals and objectives two different meanings. An objective represents an individual action that is requested of the collector. A goal represents the set of actions, or objectives, that are requested of the collector for this contact. For example, in the statement "Sell A or (B and C)," A, B, and C would represent different objectives and the entire statement would represent the goal.

The ability to handle complex objectives has both its advantages and disadvantages:

- It provides an open and flexible method for the creation of future goals. After experimenting with several simple goals and objectives, it's quite likely that the business analysts creating the goals will want to push the bounds of defining goals and objectives. Not knowing what might be created in the future, these flexible goals and objectives provide a solid framework.
- The challenge comes from defining a satisfactory syntax for displaying the objectives in such a way that a collector can visually inspect and quickly determine what exactly is expected from them as they talk to the customer. There isn't enough visual space for long sentences and the collector doesn't have time to read a paragraph. The objectives have to be expressed in some enumerated or bulleted form whereby a collector can quickly see the AND conditions, OR conditions, etc.

We considered a number of visual displays for the goals and objectives, including modeless dialog boxes and modal dialog boxes that present the objectives one at a time. All were rejected because of the potential disruption it could cause for the collector while managing the conversation with the customer.

Besides the complexity of the goal, we are still challenged by the continued passivity of the recommendation. We provide a link from the displayed objective to the secondary screens that perform the recommended action, but it's still too easy for the collector to disregard the goal and choose to do their own thing.

What we're looking for, and have yet to find, is a way to build the interface around the goal in such a way that the collector is gently lead toward the goal. That is, they can still perform any task at any time, but the desired task, or goal, would somehow be more present, more available, and hopefully more likely. They could deviate at any time and perform other task(s) that the collector determined were more appropriate based on the conversation that was occurring.

A wizard is often suggested as a solution, but that doesn't provide the effect we're looking for, for several reasons. First, wizards are generally designed for complex or

seldom used tasks with which the user may need help. They're supposed to be optional alternatives to direct input, which would not be the case here. Second, wizards are quite modal and linear. You either drive to the finish in the order prescribed by the wizard designer, or you cancel out and lose all your work.

We're searching for a visual metaphor, something in between passive text and an active wizard. Something that takes the user gently by the hand and guides them down a path that they can deviate from at any time if they choose.

With regards to feedback, the collections system has made some small improvements over what was provided with Customer Service cross-sells. We no longer need to ask the collector if they have completed the task--we can determine this automatically from the tasks that the collector has performed. If it appears that a collector has completed (or attempted) one of the objectives in the goal, the color changes in the goal display box on the main screen so a collector can always measure their progress against the objective.

This solution presents yet another challenge for us as designers and implementers of the Collections system. How can we determine if a collector has met the objective? For example, a common task in collections is to get a promise from the customer to pay a certain amount by a certain date. Suppose that the collector was given an objective of "Get Promise for \$400.00 by 6/1/1999." When the user selects this item they are taken to the promise screen and given default values of \$400.00 and 6/1/1999 which they can then override. Suppose a collector submits a promise of \$400.00 on 5/25/1999. Does that meet the objective? How about \$400.00 on 6/2/1999? How about \$500.00 on 6/1/1999? How about \$250 now and another \$250 by 6/1/999? Careful consideration will have to be

given to the interpretation of completed tasks and how they relate to the specified objectives.

Careful consideration will also need to be given to the underlying goal of the objectives (for example, is the underlying goal really to collect as much money from the customer as possible, or to maximize our intake over time from a customer?), and ensure that they are expressed in a manner that increases the likelihood of fulfilling our real goal. Moreover, the successful linking of the fulfillment of these objectives to the collectors' financial incentives is critical to business success.

## **CONCLUSION**

The same challenges that we encountered in building our customer service cross-sells system are still present as we embark on building a new system for collections, namely:

- How do we create a system that "leads" the associate to the goal?
- How do we create a system that allows for complex goals and objectives that are manageable for associates?
- How do we ensure that associates are attempting, and hopefully completing, the objectives without explicitly asking them?
- How do we let the associates know the results of previous recommendations and results?
- Finally, how do we shape the incentives for meeting the goals so that associates are encouraged to complete the goals?

All of these challenges are unique in an environment that uses recommendations to implement policy and business tests, rather than developing the knowledge, skills, and abilities of associates to create their own objectives.