



# STANFORD

---

## GRADUATE SCHOOL OF BUSINESS

CASE: OIT-29  
DATE: 10/16/03

### CALL CENTER DESIGN FOR LION FINANCIAL SERVICES

July 11, 2000, was a quiet day of preparation for Andy Carr, Chief Operating Officer of Customer Solutions Group (CSG). Andy had spent the better part of two months analyzing and redesigning the telephone call center operated by Lion Financial Services. He would be making a presentation on July 20th at the corporate headquarters in Chicago, and as he planned the presentation, he wondered which of his recommendations deserved greatest emphasis. To be sure that he didn't lose sight of the big picture, Andy paused to review events leading up to this occasion.

Founded by Earl Williams and Lou Silver, Lion Financial Services (LFS) opened its first branch in downtown Chicago in August of 1974. Initially providing investment management services for corporations and institutions in the Chicago area, the company soon expanded to offer its own array of mutual funds, and then expanded further to provide retirement plans and other investment services for individual customers. Following a sequence of mergers with several small investment houses in the mid 1980s, LFS opened new branches throughout the East and Midwest. With some 350,000 individual and institutional customers, LFS had \$7.2 billion of assets under management in July of 2000. The company had 74 branch offices nationwide, in addition to its Chicago headquarters where about 100 people worked.

LFS served its customers via three channels: face-to-face service in branch offices; phone service through call centers; and online service through an Internet website. Roughly half of all transactions were carried out through the company's call centers, 35% through its branches and the rest through its website.

#### CURRENT CALL CENTER CONFIGURATION

The first LFS call center began operation in 1984 in Chicago, and over the next three years, additional call centers were opened in Boston and New Jersey, each serving customers from an associated geographical region. These three call centers grew steadily throughout the 1990s, but Chicago remained the largest by a substantial margin.

---

Yuval Nov and Professor Michael Harrison prepared this case as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation. This case is based on a real situation, but the client company has been disguised.

*Copyright © 2003 by the Board of Trustees of the Leland Stanford Junior University. All rights reserved. To order copies or request permission to reproduce materials, e-mail the Case Writing Office at: [cwo@gsb.stanford.edu](mailto:cwo@gsb.stanford.edu) or write: Case Writing Office, Stanford Graduate School of Business, 518 Memorial Way, Stanford University, Stanford, CA 94305-5015. No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means — electronic, mechanical, photocopying, recording, or otherwise — without the permission of the Stanford Graduate School of Business.*

All three call centers shared the same 800 number, and a long distance telephone carrier routed incoming calls to their appropriate destination (see below). The Chicago call center handled about 20,000 calls per week on average, as compared with roughly 5,000 calls per week for the other two call centers. Calls that arrived outside business hours (7:30 AM – 5:30 PM Eastern time, Monday through Friday, and 9:00 AM – 4:00 PM Saturday) were directed to a recorded message that announced those hours of operation. Calls that arrived when all lines were occupied received a busy signal, but such occurrences were rare, representing fewer than 0.5 percent of all calls. Arriving calls could be classified into two groups, as follows: 70 percent came from individuals representing only themselves, referred to hereafter as “customers;” the other 30 percent were initiated by brokers and institutional representatives, referred to hereafter as “brokers.” Virtually all of these calls concerned LFS mutual funds or retirement plans, but broker calls tended to be more complex than customer calls, requiring more expertise from the agents handling them. Brokers also had higher expectations with regard to speed of answering calls, quick completion of transactions, and accuracy. Roughly speaking, the LFS call center system had two parallel tracks that handled the two types of callers separately, but there were exceptions to that description, as explained below.

Calls varied greatly in their content and duration: a balance quote usually took just a few seconds, while a query concerning the legal status of an investment portfolio in a will might take more than thirty minutes. After they were completed, certain calls required additional work from the agents that had handled them, such as manual form-filling or data update. This type of work was called “follow-up.” A few basic call types, such as balance quotes or simple buy and sell orders, were referred to as “Quickline” calls. These constituted roughly 40 percent of all customer calls and 60 percent of all broker calls. Quickline calls had an average duration of about two minutes, and they did not require any follow-up. Quickline calls also required the least expertise from agents. Non-Quickline calls required an average of five minutes talking to customers, plus three minutes of follow-up work. The distribution of “talk times” was widely dispersed around the mean value of five minutes, and similarly for follow-up times.

Incoming calls were first routed to an Interactive Voice Response (IVR) unit that was operated on behalf of LFS by a long distance telephone carrier. Callers identified themselves through a touch-tone menu as either customers or brokers, and then through a second-level menu, they described the nature of their transaction or query. Calls leaving the IVR were then automatically routed in accordance with the segmentation scheme described below (see **Exhibit 1**).

All Quickline calls, once identified as such by the IVR unit and regardless of their geographical origin, were routed to the Chicago call center, where they were handled according to the caller’s type (customer or broker) by one of two specialized agent pools. Non-Quickline calls were handled by the call center responsible for their geographical region of origin, and within that call center by an agent pool that corresponded to the caller’s type (customer or broker). The agents handling such calls were designated as either “customer service agents” or “broker service agents.”

In summary, the IVR unit split incoming calls into eight non-overlapping streams, as shown in Exhibit 1, each of which was routed to a queue in front of the agent pool designated to handle its particular combination of characteristics. If the queue was empty and one or more agents in the

pool were idle, then an incoming call would receive immediate service. At the other extreme, if the queue in front of a particular pool was long, then calls in its queue might be redirected to another agent pool, either immediately upon arrival or after some delay, as described in the next paragraph. A typical pool consisted of 10 to 30 agents, whose number would vary throughout the day according to the predicted volume of calls.

Because the actual arrival rates of calls into the eight different agent pools were hard to predict, and in order to avoid long waiting times, it frequently happened that calls were rerouted from their original destination to another pool or to a supervisor—calls redirected in this fashion were referred to as “overflow.” Thus the agents in a given pool might be eligible to take many different types of calls simultaneously, depending on the overflow routing rules that were in force at any given time, and they might give priority to one type of call over another. Generally speaking, non-Quickline agents were able to serve customers faster than their Quickline counterparts, and broker service agents were able to serve customers faster than their customer service counterparts. Because of their training and experience, supervisors could handle any type of call, usually in a shorter time than the agents they supervised.

At least in principle, effective overflow routing could substantially reduce staffing needs, and thus could have a big impact on the system’s operating costs: agents’ wages and benefits constituted almost 70 percent of LFS call center costs. This issue was important enough that the company employed two full-time people in its Chicago call center whose sole responsibility was to generate staffing schedules and overflow routing rules for different days of the week and different time blocks within each day. Some of the routing rules that they produced were quite complex, such as the following: if a customer service call arrives in any location during a particular time block, and if other customer service calls in that location have been waiting more than 3 minutes at the time of the new arrival, then route the new arrival to the broker service pool in the same location if none of the calls in their queue have been waiting more than one minute. There were dozens of routing rules like this, adjusted daily by the dedicated staff.

Because agents in the different pools differed with regard to training and experience, service quality considerations dictated that certain restrictions be observed in overflow routing. For example, Quickline calls could be redirected to non-Quickline agent pools but not vice-versa, and customer service calls could be redirected to broker service pools but not vice-versa. Although these restrictions were generally respected, virtually any type of call could be directed to any agent pool in some combination of circumstances: inappropriate or undesirable matching of calls to agents occurred primarily in times of high congestion, as an unexpected consequence of several complicated routing rules being simultaneously enforced.

The overflow routing described above occurred before any agent actually talked with the calling party. In addition, any call could be “escalated” if it was unexpectedly challenging: a customer service agent could pass a call along to a broker service agent, or either type of agent could pass the call to a supervisor, if the agent did not feel competent to handle the caller’s problem. In extreme cases, an agent or supervisor would promise to research the caller’s question and call back later. This “escalation chain” was essential for handling difficult problems, but training programs and supervisory practices were designed to limit the use of call escalation, both

because callers disliked being passed from one party to another (often with an added queueing delay in between), and because escalation was expensive in terms of call center resources.

The service objectives espoused by LFS management called for customers to wait no more than 20 seconds for their service to begin. In practice, however, this guideline was often violated during peak and even non-peak periods. The average speed of answer (ASA) for the preceding two months had been 46 seconds. Furthermore, the long waiting times in these periods caused almost 15 percent of all callers to hang up before getting service, and customer complaints about the long waiting times were frequent.

## CALL CENTER AGENTS

The LFS call center system employed about 170 agents at any given time, all of them working a nominal forty-hour week. On average, only about 75 percent of those hours were spent “in the seat,” the rest being consumed by breaks, vacation time, sick leave, training programs, and so forth. With regard to staffing a given pool during a given time block, LFS management employed the following rule of thumb: the number of agents in their seats should be adequate to handle at least 1.3 times the pool's *average* call volume. (The 30 percent “buffer capacity” was intended to protect against statistical variability in call arrivals and call durations.) The average wage rate for agents was \$17 per hour, and the total cost of an agent to the company, including benefits, supervision, and other indirect costs, was about double the wage rate.

Agents employed in the LFS call centers completed a training program in the company headquarters before they started doing “real” work; many of them had completed more than one such program. It was common for a new employee to take a customer Quickline training program, to work for six or seven weeks as a customer Quickline agent, then according to staffing needs, take the customer service training program and become a customer service agent. After one to six months of work in the customer service pool, the agent might be offered the opportunity for more advanced training that would qualify him or her as a broker service agent. A small number of agents, after several years of work in the broker or investor service pool, were promoted to supervisor rank in their respective call centers. The possible career paths available at LFS call centers, and the required training periods for each position, are summarized in **Exhibit 2**. In addition, many agents and supervisors were transferred to non-call center functions within LFS every year. The increase in salary following a training program, and the change of environment during and after the training, made those programs attractive for the agents, and the company therefore had good success in recruiting trainees.

Some LFS agents came to work in the call center directly after high school graduation, and some directly after college graduation, but such individuals usually had relevant part-time employment experience, either as call center agents or in some financial service operation. A substantial number of agents were coming directly from positions as secretaries, receptionists or temporary employees in financial services. Another large segment came to work in the LFS call center after unsuccessful stints as stock brokers or insurance agents.

About 10 percent of LFS agents were 18 or 19 years old, roughly 50 percent were in their twenties, another 35 percent were in their thirties, and the remainder were almost all in their early forties. The average age was 27. Agents were divided about evenly between men and

women, and 65 percent were non-college graduates. The annual turnover rate among agents was 45 to 50 percent, about average for a financial call center (but much lower than the turnover rates experienced in other call center environments, like telemarketing): about 2% of LFS agents left each month for alternative employment outside the company, and an equal number left monthly for other positions *within* the company. However, these averages were somewhat deceptive, because the distribution of employment span was highly skewed: about one-third of newly employed agents left within six weeks—either during their initial training or in the first few weeks of work on the phones—so the average term of employment among those who survived the period of “high infant mortality” was about three years. Still, it was rare to encounter an individual who worked longer than five years as a call center agent.

To reduce the learning curve expense associated with turnover, the company introduced a compensation plan that included a salary component proportional to the agent’s seniority, but there was disagreement among the company’s managers about the effectiveness of this measure. In addition to their basic salary, agents were also rewarded according to their performance during their annual review. Agent performance was measured both by the average calls handled per hour, and by the scores received from supervisors who monitored calls. An agent was typically monitored 5 to 8 times per month, but it was rare for agents to be monitored during busy periods. In addition to their individual bonuses, agents sometimes won “group bonuses:” during peak periods, supervisors often set goals for the entire call center, such as answering 200 calls in the next five minutes, and if the goal was achieved, all the agents that contributed to the effort got a bonus. Performance bonuses sometimes represented as much as 10 percent of an agent’s total compensation. Agents whose performance was low for three consecutive months were subject to a warning and special performance checks, although few people had ever been terminated except for poor attendance.

Following the rapid penetration of Internet technology into the financial services industry, LFS had started in 1996 to assign some of its agents to help answer customer e-mail messages. Other agents were assigned to make “outbound calls,” in which they tried to sell the company’s products to potential customers. The basic idea behind these moves was to use the frequent idle periods between telephone calls productively, without losing the agents’ readiness to answer calls. This idea, however, was unpopular among agents: as one agent told Andy, “Every time I finish a call and realize that instead of having a short break I must start typing, I feel like a programmed robot.”

Managers of the LFS call centers were also disenchanted with having agents do fill-in work during idle periods. As one supervisor said: “Just ask yourself, what kind of work can be done in such a haphazard way? What kind of work can be turned on and turned off whenever something more important comes up? The apparent productivity gain tends to be error-filled. On the specific subject of blending inbound and outbound calls, you also need to recognize that the skills involved are actually quite different, at least in our industry.”

Jim Boatwright, Lion Financial’s vice president of operations, was aware of these facts. Facing a steady increase in call center costs and knowing that technology had advanced considerably since the LFS call centers were designed, he felt that a thorough examination of the system should be conducted by fresh and knowledgeable examiners. In February, 2000, he first

contacted CSG, and within two weeks Andy had started working on the project—first studying the existing system through interviews and discussions, and later redesigning it.

### ANDY CARR AND CSG

“Our objective in every engagement is to provide specific and actionable recommendations that will measurably improve quality and reduce cost.”

— *CSG product offering catalogue* (April, 2000)

Founded in 1993 by Andy Carr, a Harvard Business School graduate with five years of experience as a logistics officer in the U.S. Navy and eight years of experience in the call center industry, CSG provided consulting and training services for teleservice operations of all kinds. From home offices in the Denver and Los Angeles areas, CSG’s five senior consultants traveled frequently to client companies around the country. After starting a new project, CSG’s first concern was to study its client company’s structure and methods of operation. To accomplish this, CSG interviewed personnel from all levels of the organization; observed call center operations during peak, normal and slow periods; and collected existing written data, such as reference manuals designed for agent use, training materials and management reports. After completing the initial analysis, and according to the client company’s need, CSG offered the following services:

- Recommending functions to be outsourced on a permanent or seasonal basis.
- Optimizing both long-term staffing plans and day-to-day agent scheduling.
- Providing each agent group with clear-cut rules of thumb to guide them in resolving important customer service delivery questions.
- Creating “call blueprints”—that is, documents that laid out word-for-word and action-by-action responses to a particular category of customer requests. Although blueprints were designed and presented in great detail, CSG almost never recommended word-for-word adherence.
- Building the recruiting process and training programs for agents. These programs covered all aspects of work in the call center, from computer operation to dress code.
- Optimizing the call center’s work group configuration, including number and size of the agent pools and the call routing protocols among them.
- Designing methods for measuring the performance of agents and supervisors, and defining performance-based compensation systems.
- Conducting workshops for supervisors on efficient monitoring techniques.
- Selecting and optimizing software and hardware.

One of the most strongly held beliefs among Andy and his colleagues concerned the importance of “process development” as a means of achieving higher productivity and higher service quality. As they used that phrase, it meant development of work flows for agents to follow, in the form of either tightly structured call blueprints or more loosely structured rules of thumb. CSG developed such work flows for most of its clients, and recommended that supervisors monitor at least ten calls per month for each agent to verify that the rules of thumb or blueprints were followed. Jeff Feuer, CSG's President, summarized the firm's view of process development:

There is a naïve view of call center operations in which managers see an agent's work as a sequence of conversations. In this view, agents need to be given substantive information about the company's products and services, but there is no training with regard to process, because even the greenest agent knows how to talk and how to use a telephone. Unfortunately, when agents are given no training about process, they invent personalized versions for themselves. There is no mechanism for capturing and disseminating “best practices,” and thus no reason to suppose that productivity or quality will improve over time. The manufacturing analog of common call center practice would involve workers being shown how the various parts of a car fit together, shown where to find tools and components, and then told to get started.

Our view is that call center agents are engaging in service transactions, each of which requires some information exchange; in addition to acquiring the necessary substantive knowledge, agents must be taught how to discern customer needs and deliver required information efficiently.

All of the senior consultants at CSG had line management experience, and all of them emphasized training and performance measurement as keys to effective call center management. Jeff Feuer's statement concerns the question of *what* should be learned in training programs, but Andy also had strongly held views about *how*:

In training, you can't rely on people to learn and change behavior based on just *reading* anything. Suppose, for example, that you want to teach your agents about some new software. How would you do it? Pass out a memo that explains it? That doesn't work, as the military figured out a long time ago. You have to give them the manual, then explain it, then tell them that you are going to test them on it, then work them through it again, and then test them. You are not finished until you actually see and hear it done correctly at least twice.

With regard to evaluation and feedback for individual agents, a common practice in call centers was to compare individual performance against group averages, but Andy emphasized how this otherwise helpful practice often backfired:

Agents will complain with justification about comparisons with other individuals whose work is different in *any* way—they can always explain why their calls take more time, why their customers are harder to please, how they deliver higher quality, and so forth. To avoid those kinds of disputes, I like to have large agent

pools whose members see virtually identical streams of calls, statistically speaking.

During the 1990s there had been a good deal of experimentation within the call center industry whereby agents were asked to do a variety of tasks, and given discretion as to exactly when they would do what. For example, agents might be asked to divide their workday in roughly specified proportions among answering inbound calls, initiating outbound calls, and responding to e-mail messages. Andy's experience with such programs had not been positive:

You see a downward drift in productivity, with agents doing less of the work they like least, almost always with a sincere explanation about why their activity mix is just right. Taking inbound calls may not be much fun, and people will rationalize doing less of it if you open that door. I often find myself in the position of limiting agents' freedom of choice. No one likes that, at least partly because more freedom makes one feel more professional. When you take away freedom, you better be very careful to explain the business reason and have a solid payback to the business for the potential loss in morale.

A related point concerns the importance of supervision. Many people, when they read about telecommuting and virtual organizations, seem to think that the concept of "supervisor" is somehow obsolete, but nothing could be further from the truth. For example, if a supervisor can chase down agents in lunch rooms and rest areas at a time of potential crisis, encouraging them to take the break time they're entitled to after the crisis has passed, it really cuts down on the number of people you need to achieve a given service level. Often just the ability to do this has a salutary effect on behavior that you don't realize until supervisors are absent or distracted. At the other extreme, the value of an agent working at home without supervisory oversight, even an experienced one with a high-speed data link and a full computer setup, has proved to be limited. An immediate office peer group spurs productivity and provides an important emotional resource during difficult customer service experiences.

## THE CSG PROPOSAL

Alone in his Denver office on July 11, Andy had completed the charts and tables needed to support his Chicago presentation, so he decided to walk through the presentation itself, speaking to his imaginary audience while moving transparencies to and from an imaginary overhead projector. According to plans then in place, the audience for his presentation would be: Jim Boatwright, vice president for operations; Elaine Delgado, vice president for human resources; Richard Weber, a senior manager who had overall responsibility for LFS training programs; Louise Burkett, vice president for information technology; and Stuart Robinson, the manager in charge of the Chicago call center. Following his standard practice, Andy would begin by addressing the question of how to define "service quality."

**Measuring Call Center Performance.** Call center customers experience a wide range of service outcomes, from disastrous to heroic. Andy's first priority in every design project was to eliminate disastrous interactions altogether. Given that, the fundamental goal was to move every



interaction into the “satisfied” category, and to do so as economically as possible. Except in rare circumstances, he felt that “heroic” service should be quietly de-emphasized, both in training programs and in performance measurement. He expressed his view of this matter to one LFS manager as follows. “If you play up heroic efforts, you get handle times that are long on average and highly variable; service is inconsistent, and the value delivered to customers is dubious. Most of the stories you hear about heroic service come from agents, and when you look closely, most of them involve giving a customer something that wasn't asked for.” The performance measures that Andy proposed to track at LFS were the following:

*Average Speed of Answer (ASA)* for the call center system overall, and for major call categories as well, like Quickline calls and broker service calls. (There is no meaningful analog of this performance measure for individual agents.)

*Average Talk Time* and *Average Handle Time*. These figures would be compiled both for individual agents and in aggregate. “Handle time” was defined as “talk time” plus the time required for follow-up tasks that the agent deemed necessary. Reducing average handle time is an obvious means of improving productivity, Andy said, and shorter average talk time is typically associated with higher customer satisfaction—as measured by follow-up questionnaires, for example—and so is desirable in itself.

*Agent utilization*, defined as total handle time divided by total payroll hours.

*Error rate*, where “error” means entry of incorrect data into the computer system.

*Call monitoring scores*. For purposes of both productivity and quality improvement, Andy emphasized regular, random monitoring of agents’ calls. Feedback from such monitoring would be provided to agents as a basis for improvement efforts, providing an essential complement to formal training programs. Monitoring scores would also be used in promotion and compensation decisions.

Andy had developed a recommended call monitoring score sheet (see **Exhibit 3**), striving to emphasize objective rather than subjective performance elements. The bottom portion of the form listed six modes of “below standard service,” and a “yes” in any of these categories automatically would equate to a zero score for the agent being monitored. In the absence of such an event, the agent would receive a score between zero and 100 based on the top part of the form, that being the agent's weighted average score in “applicable” performance categories.

*Mystery shopping comparisons*. On a regular basis, managers posing as customers would make requests of, or execute transactions through, the LFS call center, then do exactly the same with a competitor's call center, scoring the service received by means of a form similar to Exhibit 3. Retail department stores routinely employed “mystery shoppers” to undertake such service comparisons, and that phrase had made its way into call center terminology.

**Call Center Configuration.** The most radical change in Andy's proposal concerned the number of physical locations: instead of having agents in three locations, the new design put all of them in a single large call center at the existing Chicago site. **Exhibit 4** describes graphically the flow

of calls within this center, including overflow routing rules that will be explained more fully below.

According to Andy's proposal, each customer would receive a Personal Identification Number (PIN) that he or she would be asked but not required to use in all telephone transactions. (Customers could use their social security numbers for this purpose if they so desired.) When a new call was received, the customer would be asked by a recorded greeting message to enter her PIN. Then an IVR unit would ask the customer to describe her reason for calling, using a touch-tone menu. The use of a PIN would eliminate the need for callers to identify themselves as brokers or customers, and the menu of the IVR unit would be automatically adjusted according to the caller's identity.

The main new feature of the proposed IVR unit was that customers would be able to opt for an automated service: a few simple but common services would be available using only touch-tone menus, without any intervention by a human agent. Those services would be available 24 hours a day, seven days a week, and Andy estimated that at least 20 percent of callers would choose to use them. Because some customers are uncomfortable with automation, the automated service would be offered only as an option.

The number of agent pools would be reduced from eight to three: a single Quickline pool would serve both customers and brokers, and because all agents would be located at a single site, only one customer service pool and one broker service pool would be needed. This configuration would induce both a simplified overflow scheme for call routing and a natural linear career path for agents. The overflow routing scheme portrayed in Exhibit 3 was to be implemented on a "zero threshold" basis, meaning that no call would ever be held in a queue if a qualified or over-qualified agent were available to handle it.

For example, if a Quickline call arrived to find all Quickline agents busy, that call would immediately be passed on to a customer service agent if one was available; if all Quickline agents and all customer service agents were busy, then the call would be passed up the line to a broker service agent if one was available; if all broker service agents were busy as well, then the call would be queued in front of the broker service pool, as shown in Exhibit 3. In conjunction with this overflow routing scheme, it was proposed that the Quickline agent pool and the customer service pool be intentionally understaffed, relatively to average demand rates, but the broker service pool be correspondingly overstaffed.

Once a customer call was routed to an agent, the customer's account details and relevant history, as well as her reason for calling (as detected by the IVR unit), would appear automatically on the agent's computer screen, using a Computer Telephony Integration (CTI) system.

Agents would not be required to answer e-mail messages or do other work between calls, except for standard follow-up tasks related to completed calls, and supervisors would not answer calls except as the end of an escalation chain. (Under Andy's proposal, escalation protocols would remain much the same as in the existing LFS system.) Call routing, using the simple overflow logic shown in Exhibit 3, would be done by an Automatic Call Distributor (ACD) without human intervention.

**Recruitment and Training.** With regard to recruitment, Andy recommended that both the average educational level and the average years of relevant experience among LFS agents be lowered somewhat, primarily by allowing attrition to reduce (but not eliminate) the percentage of agents in higher wage categories. The training program that he proposed would emphasize rules of thumb applicable to virtually all incoming calls (see **Exhibit 5**), and more detailed blueprints for a variety of standard call types.

In the interviews he conducted, Andy had observed that agents and supervisors tended to view themselves primarily as financial professionals, like accountants or investment advisors. Andy felt that the low productivity and inconsistency of the existing operation was largely attributable to this worldview. The alternative view he favored was that of agents as providers of high quality customer service, where quality derived from two factors: following carefully designed call blueprints, and having an adequate number of properly trained agents in their seats.

**Measuring Individual Performance.** Summary data provided by the ACD unit would provide detailed information on the performance of individual agents, including average talk time and average follow-up time for each type of call. This information, together with the scores obtained in call monitoring, would serve as a basis for performance-based compensation, and accompanied by supervisors' written suggestions, would provide agents with the feedback that is essential for productivity improvement. Group bonuses would be cancelled in their current form: instead, a monthly incentive would be paid out based on standards set and adjusted for each of the three groups.

**The Bottom Line.** Based on detailed calculations, Andy estimated that the proposed call center design would save \$1,500,000 in operating costs annually; the factors contributing to this saving included greater automation, economies of scale, increased agent productivity, and modestly lower average wage rates. Furthermore, he was convinced that as a result of the training and supervision approach he proposed, customers would get better and more consistent service.

## REHEARSING THE PRESENTATION

Having been through the presentation several times by himself, Andy made arrangements to have his colleague Jeff Feuer give it a critical review two days later, when the two of them would be together in Seattle on another project. Andy thought that his new design would strike some LFS managers as too radical a departure from current practice, so he needed to prepare for sharp questioning and perhaps open skepticism. In the brief time available on July 13, Andy and Jeff followed a format that had worked well for them in the past: Jeff listened in silence to the presentation, then raised questions and concerns that he thought might plausibly come from the LFS managers in attendance, based solely on their job responsibilities (Jeff had never met any of them); Andy responded in terms that he found most natural for purposes of his own thinking, tape recording the session so that he could work out later what to keep, what to delete, and exactly what wording to use.

After he had heard the presentation, Jeff had a firm opinion about how their time could best be used. "There's a potential for debate on any number of fronts, Andy, but HR concerns are the ones where you need to be most careful about tone and choice of words. You and I should stick to people issues in our preparation." With that agreement, the mock questioning began.

**Jeff** (as manager of the Chicago call center): One of the things I hear most often from our agents is that every call is different, and considering those differences, you can't say that an agent is doing a bad job because he or she takes longer than someone else. I worry that with the approach you describe, agents will feel they've been pushed into a one-size-fits-all mold.

**Andy:** There's a great deal of commonality in the calls handled at LFS—90 percent of them fall into one of four clear-cut categories. We may *choose* to focus on superficial differences, treating each call in an idiosyncratic fashion, or to emphasize the commonalities that exist, striving to standardize and streamline procedures. With regard to variations in call duration from one agent to another, I would never come down hard on an agent because of one call, or a small number of calls, but when average handle times differ over thousands of calls, this is obviously not a consequence of one agent getting all the tough cases.

What you describe is a “craft” orientation, and I think what's needed is a production-line mentality, or process orientation. You can still treat people with dignity and respect in a process-oriented environment. I'm a firm believer in being open and honest with agents about expectations and priorities. And there's still room for individual initiative, but it must be exercised within a disciplined framework. Individual preferences are subjugated to the needs of the system. That's why we call it work.

**Jeff** (as vice president for operations): Aren't you emphasizing productivity over quality? Our primary focus should always be on quality.

**Andy:** We want both. My belief, shared by many others in many industries, is that the right first step to assuring “quality” is defining it in clear, objective terms -- what is required or specified. When I ask LFS supervisors for a definition of quality, I get answers like “going the extra mile” and “total commitment to customers.” Down on the ground, the service being provided is idiosyncratic, inconsistent and unfortunately error-prone.

**Jeff** (as head of training): What about professionalism? Aren't you taking us in the direction of factory work, treating agents like telemarketers rather than highly committed financial professionals?

**Andy:** I think that we sometimes fall into the trap of equating professionalism to the absence of accountability. A frequently observed characteristic of “professional” call center cultures is enormous variability in the performance of equally qualified agents—like a factor of four difference in average handle time. The agents simply invent the process for themselves, subtly adjusting both content and procedure to suit personal preferences.

**Jeff** (as vice president for human resources): But I think you're dodging the central issue with regard to professionalism: ours is a relationship business, and our customers are sophisticated, mostly well educated individuals. We need knowledgeable financial professionals to develop and sustain relationships with those customers. The tight control that you're proposing will drive off the very people we should be striving to retain.

**Andy:** In my opinion, LFS agents have more skills and are exercising them more freely than is optimal for LFS costs or for customers. For example, customers who call to execute a simple transaction sometimes end up with unsolicited advice about investment strategy. The result is higher cost *and* lower service quality. The existence of this mismatch of skills to needs is no reason to continue it. There *are* high-level functions within LFS that require personal relationships, but these are rarely performed by call center agents.

Statistically speaking, customers don't encounter individual agents frequently enough for personal relationships to develop, nor do we *want* such personal relationships to develop. The relationship we value is that between a customer and LFS. When customers feel they need to speak with a specific individual, the call center disaggregates and you have a much more expensive "account management" paradigm. And the functions that agents generally perform, like balance inquiries, offer ten times more opportunity to fail and tick customers off than to somehow impress them in a way that garners more business or increases customer loyalty. A tightly managed process avoids the root cause of most controllable customer defections—errors.

The idea that processes should be designed around keeping and motivating highly paid people, instead of deciding the best way to get something done, then choosing people and equipment accordingly, stands operational design on its head. If you have a financial professional whose job is to do a complex calculation for customers, and then you become aware of a software tool that does the same thing better, faster, and cheaper with only data entry skills, should you keep the craftsman and focus on making him happy? Retaining more highly skilled and highly paid people than you need is a cost, not a benefit. Did Henry Ford err by making his processes simple enough that craftsmen didn't want to work for Ford anymore?

**Jeff** (as head of training): Assuming your recommendations are implemented, what do you think will be the effect on turnover?

**Andy:** I would expect to see a one-time adjustment as the skills of the workforce come into alignment with actual job requirements. After that one-time adjustment, I would expect to see slightly higher turnover than at present, simply because you have slightly lower-level people.

**Jeff** (as manager of the Chicago call center): What about teams and peer discipline as a means of enforcing high standards of service, as opposed to direct supervisory oversight and individual performance measurement?

**Andy:** Well, the first thing I would say is that call center agents typically don't observe each others' work, at least not directly, and an agent's peers can never hear both sides of a conversation. It is very rare to see an agent upset over a co-worker's poor service or absenteeism. When there aren't enough people on the phones, it is seen as management's problem. Also, my experience has been that the concept of teams as the appropriate units for performance measurement works worse and worse as you go down in the organization—you need more individual accountability as you go down.

**Jeff** (as vice president for human resources): What about employee involvement in job design? In all the stuff we read about the Toyota Production System, employee involvement is emphasized as a key to commitment.

**Andy:** I think that our approach, emphasizing blueprints and rules of thumb, creates the framework needed for meaningful participation by agents in process improvement. Toyota workers operate in the context of a tightly defined work system: accumulated wisdom about “best practices” has already been captured and documented; workers generate and test incremental adjustments whose potential impact they can reasonably well anticipate based on their limited view of the total system—the fundamental structure of the work system is not changed by these adjustments, and it certainly was not created by such a bottom-up process in the beginning.

But as I said earlier, a typical call center doesn’t really *have* an established process. Agents are inventing processes for themselves; there’s no established baseline from which to define “incremental” changes. One consequence of this is that progress is never cumulative: what you see in one call center after another is that productivity gains leave with the agents. Once you have the necessary structure in place, though, there’s a lot more scope for employee input on how to provide effective customer service than there is on how to install a car door.

**Jeff** (as vice president for operations): What about the hidden benefits of superior service in terms of customer loyalty, or to put it less positively, the hidden costs of indifferent service? Isn’t it true that loyal customers spend more, are easier to service, are more likely to refer other customers, and so forth? In our case, there’s more to customer service than waiting time.

**Andy:** In this context, the key to customer satisfaction is simple consistency: low variability in service experiences is itself a value. Don’t underestimate availability, timeliness, courtesy and accuracy as builders of customer loyalty.

**Jeff** (as vice president for human resources): You seem to be saying that high turnover is inevitable, so there’s no use fretting over it, but that seems like a casual attitude toward a serious problem. It is well accepted among HR professionals that the replacement cost of a knowledge worker is one or two times the worker’s fully loaded annual compensation—that’s taking into account lost productivity, recruitment, training, and so forth, but *not* the potential costs of unhappy customers.

The point I’m making is that there’s a lot of money to be made by reducing turnover, and I’m not sure you’re taking the matter seriously enough. There are a lot of little things we might do to reduce turnover, and I would say that some experimentation with such measures is called for, rather than resigning ourselves to even higher turnover rates.

**Andy:** Yes, I do think of call centers as high-turnover work environments—the only solid exceptions that I’ve ever seen were operations with abnormally high wages and essentially no accountability. It’s true that turnover is costly, and one must look carefully at the associated trade-offs, but for the people we’re talking about, I think the figures you cite are way too high: I would say that replacement cost is more like half of fully-loaded annual compensation, and in the

new (proposed) environment it should be *much* lower, because of vastly accelerated training times and shorter recruiting cycles for a lower level person. And of course, all the costs can be lowered because of a lower average salary.

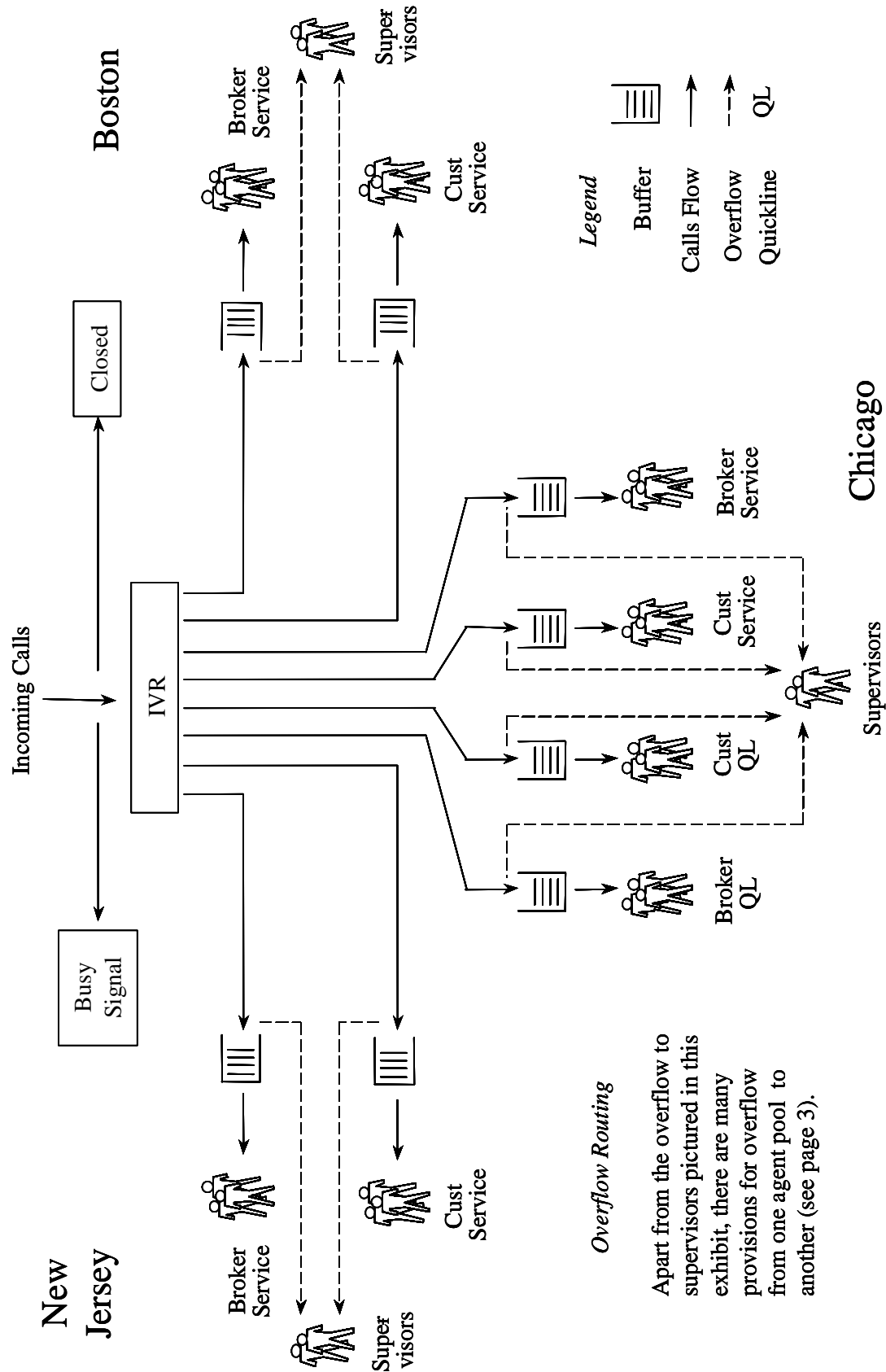
## PARTING WORDS

It was 6:45 PM and Jeff had a plane to catch, so he called a halt to the questioning and looked over his notes. “You need to be careful about members of your audience feeling subconsciously threatened. Managers tend to view agents as younger versions of themselves, and being knowledgeable about the business themselves, they don’t want to think of that knowledge as inessential for agents. By the way, do you have some particular basis for what you said about the cost of turnover?”

Before answering, Andy gathered up his presentation materials. From the hotel conference room where he and Jeff had been working, they walked into the lobby and stood for a few minutes before parting. “Not exactly, but here are the main factors that occur to me. For agents leaving within the first 4 to 6 weeks, the costs are exactly what you’ve spent on them: recruitment expenses, including advertising and interviewing, plus a few weeks of salary and the cost of training resources. In the proposed system it shouldn’t take more than a few months on the phone to reach full productivity—if it does, the work design is seriously flawed—so losing a five-year employee isn’t much different from losing a six-month employee.”

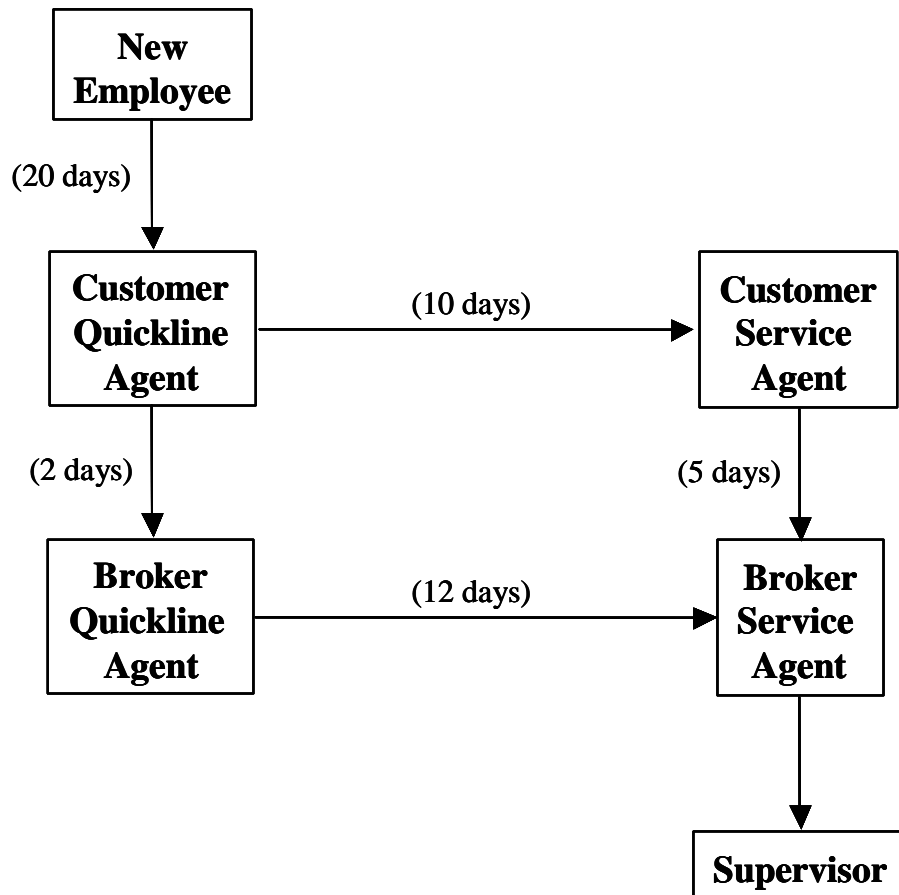
“Well, I’m guessing that the cost of turnover will come up next week, so it’s probably worth your while to think it through from every angle.” At this point Jeff headed out into a late-evening drizzle and hailed a cab from the hotel taxi queue. Andy returned to his room, planning to spend a few more hours that evening on preparation for the LFS presentation.

# Exhibit 1 Current Configuration





**Exhibit 2**  
**Career Paths in LFS Call Centers**  
(Length of Training Program Indicated in Parentheses)

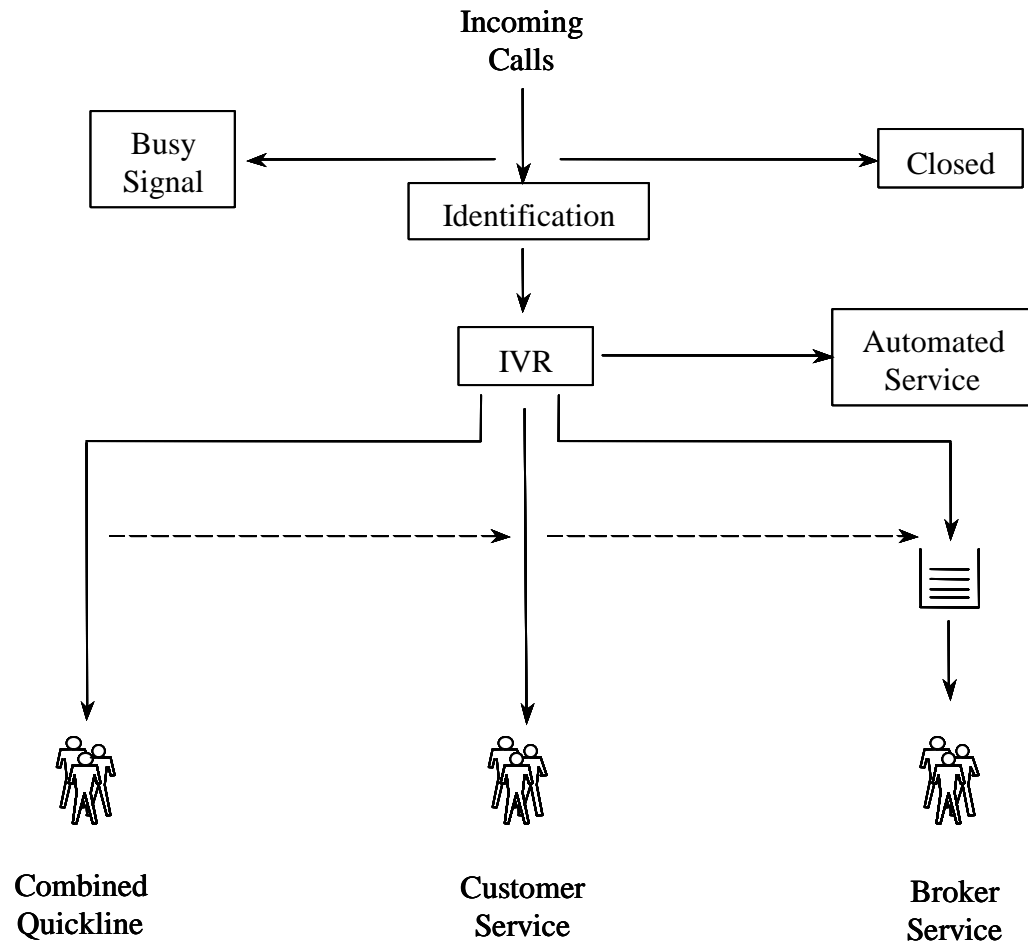


### Exhibit 3

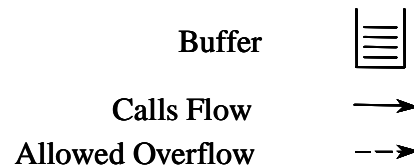
#### Recommended Monitoring Call Categories and Scoring

Call Opening	Yes	No	N/A	Weight	Score
Company/Department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
Use Complete Name	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
Offer Assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
<b>Info Gathering</b>					
Listen to Caller's Request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	
Take Responsibility for Helping Caller or Transferring as Appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
Obtain Required Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	
Paraphrase if Request is not Crystal Clear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	
<b>Resolution</b>					
Complete, Confirmation and Transaction Details	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20	
Accurate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20	
Soft Sell as Appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	
<b>Closing Call</b>					
Offer Additional Assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
Thanks for Calling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
<b>Phone Etiquette</b>					
Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
Address Respectfully	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
Patient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
Ask Permission to Hold	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
Acknowledge Wait	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
Proper Transfer Procedure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
Fill Silence Effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	
Offer Callback, If Appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	
<b>Call Control</b>					
Given the Caller's Needs, Request Assessed Quickly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	
Ensure Complete Resolution of One Question at a Time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	
Retain Active Role in Conversation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	
<b>Below Standard Service</b>					
Negative Attitude	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Hangs up on Caller	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Blames Others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Dumping Call	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Obvious Noises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Violates Policy/ Rules of Thumb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

### Exhibit 4 Proposed Configuration



#### Legend



### **Exhibit 5**

#### **Rules of Thumb**

1. Clearly identify the customer's request before taking any action or making any statements.
2. Never hang up when speaking to an abusive customer without giving two warnings.
3. You may hang up if placed "on hold" for more than two minutes. Make a note in CMS [the computer on the agent's desktop, also used for routing requests] after such an incident.
4. Take responsibility for helping any customer you are not going to transfer.
5. When a customer's request is not crystal clear, recap your understanding of the request back to them. This will ensure a common understanding.
6. When a customer asks a question in a non-technical way—for instance "How's my fund doing?"—ask for clarification in a non-technical way. For example, "Would you like to know how much money you have made since the beginning of the year?"
7. Except as noted in these rules, if possible, deal only with the customer's specific request and only after confirming its accuracy.
8. When asked for a share balance, also provide dollar value, and price per share.
9. When asked for a share price, also offer the change in price from the night before.
10. While we take responsibility for helping, we verify the accuracy of the request before taking action. An accurate request is one in which LFS can verify the customer's assumptions. For instance, that they have an account, that it pays dividends to their checking account, etc.
11. Once the request has been verified as accurate, first attempt to resolve it by providing information from the computer. If that is not sufficient, ask the customer questions, consult the help desk, or use quick reference guides. This result is the "Primary Resolution" of the call.
12. Offer the Primary Resolution in a way that assumes it will be accepted.
13. If there is any reason to believe the customer does not understand the Primary Resolution, ask them, "Would it be helpful for me to clarify that further?"
14. If there is no reason to believe the customer does not understand the Primary Resolution, move to the Standard Close of a call, which is to ask: "Is there anything else I can help you with today?"

**Exhibit 5 (Continued)**  
**Rules of Thumb**

15. If the customer is not satisfied with the Primary Resolution, offer additional LFS resources to resolve the request. For example: extended research time with a call back to the customer, or having the customer talk to a “supervisor.”
16. When the customer cannot, or will not, provide the information or documentation required by LFS policy, clearly note what they will provide and say: “May I ask you to hold for a moment while I work on this for you?” Note the situation in CMS, and call the help desk for a possible exception.
17. Always check on-line resources, or ask the customer questions, if appropriate, before referring to any paper documents.
18. When describing any financial instrument or process (for instance the differences between “A,” “B,” and “C” shares), tailor your initial answer to your perception of the customer’s needs and sophistication. Then, always offer to give more information, or to send a complete description via mail or fax.
19. Use standard methods (for example, CMS record) to request work from others. Take personal responsibility for follow-up (including faxing documents) *only* when:
  - an LFS mistake has led to the customer call, or
  - customer has called on the problem before, or
  - the amount being processed is over \$100,000, or
  - customer is a Top Producer, or
  - the transaction must be completed within two hours.