TO: Jim Jones, Director, Katie School of Insurance

FROM: Farzaneh Fazel

RE: 2003 Faculty Development Grant Report

DATE: February 5, 2004

Enclosed please find my report for the Katie School Faculty Development Grant that I received last summer. I would like to thank you for the opportunity to learn more about the operational practices and latest technologies used by the call centers of insurance and financial services industry. I especially appreciate your help in identifying and providing contact information for Allstate and AFNI. This study has helped, and will continue to help, in my research as well as in enriching my courses by covering the latest operational practices of insurance industry regarding their call centers. Thank you.

FACULTY DEVELOPMENT GRANT REPORT

Optimal Staffing of Call Centers

Farzaneh Fazel

The purpose of this faculty development grant was to learn more about the operations of call centers in insurance and financial services industry and become more familiar with their practices. I started the project by conducting a literature search and learning more about the latest developments in call centers; new opportunities and challenges, technological advances and related vocabulary, and location planning. Specific information about the operations of call centers was then obtained from three major insurance and financial services companies located in Bloomington and Chicago area; I visited two call centers and conducted an interview with a work-force-management analyst of a third major company.

The following is a list of questions that I asked in my visits and interviews:

1. How many call centers do you have nationally (internationally)?
2. How many employees in each call center?
3. Are calls transferred between call centers automatically when a center is busy?
4. How many different services are offered by your call centers?
5. Do your call centers handle only incoming calls or do they also make outbound calls?
6. Do your call centers only handle phone calls or do they also deal with fax and e-mail messages?
7. How do you define quality service/ how do you define customer satisfaction?
8. How do you measure customer satisfaction?
9. How do you decide on setting customer service levels?
10. What are employee requirements/requests about their work schedules?
11. What is the turn-over rate of your employees? What are the common reasons for leaving?
12. What are the common complaints of your employees related to their work schedules?
13. What kind of training program do you have for call center employees?
14. Are your employees full time or part time? If part time, what is the minimum number of hours per day or week?
15. How do you do the work force scheduling? What kind of software?
16. What constraints and requirements (related to customers and employees) are considered in scheduling?
17. What kind of improvements would you like to see in your schedules, if any?
18. Any other issues/questions that you would like to find an answer for?

The following is a summary of the information collected from the three companies interviewed.

General Information about Call Centers

The number of call centers for these companies range from 7 to over 100. Only one of the three companies contacted has call centers outside of the U.S., in Canada.

Number of employees in each call center range from five to several hundred.

Most of the call centers handle mostly in-coming calls, but during slack time some of them respond to e-mail and faxes and make marketing or follow up calls as well.

Some call centers answer the calls and serve the customer to a certain degree and then transfer them to other specialized call centers for claims, billing, banking, etc.

All three companies use computer software for their scheduling. These codes are based on the queuing models and do not use simulation or optimization techniques. In addition, one company uses manual scheduling for call centers or groups with fewer than 25 employees.

One of the companies studied provides call center services for other companies. In this company, for some clients, the number of customer service representatives (CSRs) is determined by the client; some clients even request a given fixed number of operators at all times. This is clearly a source of inefficiencies.

For most call centers the pattern of incoming calls is cyclical on a daily basis, with predictable highs and lows.

Customer Service

Only one company conducts customer surveys to get feedback from customers regarding their satisfaction with the services received. Another company is considering conducting customer surveys. Customer service for all of these companies is measured as service level, which is defined as percentage of callers served within a certain length of time. Some also use other quantitative measures such as average handling time, error rate, average speed of answer, and percentage of abandoned calls.

One of the companies studied provides call center services for other companies. For this company, usually clients (other companies who outsource to them) specify their required customer service levels.

Sometimes customers call back and complain about the quality of the service they have received and that is the only form of customer feedback for some of the call centers.

All of the companies have a script that the employees have to follow, mostly for legal reasons, but also for efficiency and to lower mistakes.

All three companies monitor calls for quality control and coaching.

Employee-Related Issues

Turn-over rate is very high for call center employees; sometimes as high as 200%. This is a major concern for companies I interviewed.

The exit interviews conducted by the HR department of one of these companies provides the following as the top four reasons for the high turn-over rates:

Job Abandonment	19.65%
Attendance	17.48
Other Positions	13.6
No reasons	12.19

One company accommodates employees by providing a number of weekly work schedules and asking them to choose a schedule. Employees with higher seniority have priority in choosing their schedule.

Employee training programs mostly focus on technical and legal aspects of the job but there is also training for interpersonal skills. Training programs range between one to 12 weeks in duration. There is also on-going training through weekly/monthly team meetings and monitoring calls and coaching the employees. Team leaders randomly monitor a few calls from each employee and check for accuracy of data input and data gathered and also for soft skills.

Observations and Comments

One of the companies I interviewed does not employ part timers; they think it is too much hassle and the turn-over rate would be too high. This leads to too much excess capacity at times and poor service at other times. This practice significantly lowers the productivity of a call center with cyclical pattern of incoming calls and raises the cost without lowering customer waiting time.

One of the companies schedules workers as a team, with each team having about 15-20 members. This practice can also lead to serious inefficiencies in operations since, for example, at a time when the call center would need three additional employees, they would either remain understaffed with long waiting time for customers, or schedule an entire team of 15 people, resulting in excessive idle time. In my visit, I observed many employees being idle.

None of the call centers I interviewed/visited has a clear definition of customer service and customer satisfaction, except for service level which is defined as percentage of callers who wait for less than certain length of time. Only one company conducts customer surveys and that is done by their research department on a national level.

Most call center managers do not have a clear picture of why employee turn-over rate is so high. They mostly blame the schedules or the pay as a source of employee dissatisfaction. According to a former call center employee, however, many employees dislike being monitored and coached more than they dislike their pay or their schedules.

Areas for Future Studies

1. *Using queuing models and linear programming for optimal staff scheduling of small call centers.* Currently the computer software used by these companies are not capable of generating optimal schedules and for some smaller centers scheduling is done manually.

2. *Identifying the factors that result in employee satisfaction and conducting a quantitative analysis of the cost trade-offs involved in improving employee satisfaction and reducing employee turn-over rates.* Cost benefit analysis could be performed for the following:

   - Higher wages vs. turn-over rate
   - Higher number of employees vs. turn-over rate
   - Cost of turn-over rate of part timers vs. cost savings associated with part timers

3. *Identifying the factors that result in customer satisfaction in call centers, and defining customer service.* Currently, none of the call centers I interviewed/visited has a clear definition of customer service and customer satisfaction, except for "service level" which is defined as percentage of callers who wait for less than a certain length of time.

4. *Finding out how long an average customer is willing to wait and not consider the service poor.*

5. *Analyzing what if scenarios.* For example, what if we changed the ratio of full time to part time employees, what impact would it have on call waits and costs.

6. *Quantifying customer waiting costs*

Clearly there are linkages among these areas. Therefore these studies could be done separately, or be combined into a single comprehensive project in which waiting line analysis is used to develop optimal schedules while considering employee and customer satisfaction.