

STAFF SCHEDULING IN LARGE OFFICES OF NATIONAL CPA FIRMS

41

Miklos Antal Vasarhelyi*
University of Southern California

Introduction

SAS No. 4 IN SECTION 160.07 STATES: "Policies and procedures for assigning personnel to engagements should be established to provide reasonable assurance that audit work will be performed by persons having the degree of technical training and proficiency required in the circumstances." In addition to this statement, several other paragraphs of Section 160 dealing with quality control considerations are concerned with issues around staff competence, staff consultation procedures, staff supervision, staff hiring and staff advancement.

These issues, in spite of being vital to good audit practices, have received little attention in the literature. In addition, assignment procedures are closely tied to independent auditor firm profitability as inadequate scheduling may lead to multiple problems including mismanagement of staff time.



Dr. Miklos A. Vasarhelyi is an Associate Professor of Accounting at Columbia University. An assistant professor of accounting at the University of Southern California for four years, Dr. Vasarhelyi received his PhD from UCLA and directed the Rio Datacenter and the Catholic University of Rio de Janeiro's MBA program in Brazil. Currently, Dr.

Vasarhelyi is the principal investigator of a project developing an on-line educational computer audit package sponsored by the Touche Ross Foundation. Author of many professional articles, he published the text *APL for Management*.

Staff counseling, promotion, termination and hiring procedures interrelate with the scheduling process. They are the valves through which schedulers may control personnel availability and competence. Information is provided to the scheduler through performance evaluation reports while the entire process leads and determines (but not uniquely) the quality of audit work and firm performance.

The quality of audit work can be hurt by inadequate scheduling. Junior staff morale is affected by long unassigned periods, followed by 70-hour weeks. Efficiency also suffers by having in-charges working on several jobs simultaneously as well as harming firm profitability by having a low number of billable hours and excessive overtime payments. Good scheduling will enhance the firm's reputation for punctuality and quality of audit work, will decrease staff turnover by smoothing the work load and will allow better audit work by planning the right person for the right job.

This study examined the assignment procedures of 12 Los Angeles offices of national CPA firms to ascertain the similarities, the differences and creative approaches in their scheduling methods. The results of the survey are described below.

Survey of Scheduling Practices

The study involved 12 of the 25 largest national CPA firms, including all those designated "Big Eight." It was

* The author is very grateful for the enthusiastic cooperation received from all firms that were contacted and participated in the survey. Also, the comments of Professor A. N. Mosch of the University of Southern California and Mrs. Marina Vasarhelyi of Coopers & Lybrand were appreciated.

conducted by a loosely structured, questionnaire-based interview, guided by a set of questions which the author prepared in advance but which followed the directions the interviewee wished to emphasize. Interviews were conducted with the scheduler(s) of the LA office (or area) of each of the firms and lasted from one and one-half to three hours. All forms used by the firms were requested by the interviewer. Interviews were written up and sent back to the schedulers to verify their accuracy. These results were tabulated and again checked back with the interviewees for accuracy and suggestions.

Results

The table summarizes responses from 12 firms on the many dimensions of the scheduling problem. Overall, most firms follow reasonably similar practices but implementation details differ considerably. The first finding of the survey pointed toward the fact that the scheduling activity is very closely related to staff counseling, promotion policies and evaluation methods.

Scheduling Policies

The representative CPA firm will not have a national policy for staff assignment. It will typically have some general national guidelines concerning the process and each office will attempt implementation in accordance with SAS No. 4. The scheduling system is geared toward the assignment of staff accountants and seniors but a few also include managers. Most often, however, the assignment of managers is made on an ad hoc basis by negotiation with the partners involved. The scheduling system will only serve to keep track of their assignment. This is due to the fact that typically a manager/supervisor will, at the same time, be involved with several audit engagements and allocate his time among them. On the other hand, seniors are mainly assigned to one job, with overlaps due mainly to overruns or unanticipated problems. Scheduling is usually restricted to audit staffs. Tax, MAS and small business are seldom part of the system. Partners, on the other hand, schedule themselves based on client demand, technical expertise and other functional obligations. The offices surveyed had from one to three people performing the scheduling function, assigning anywhere from 20 to 300 staff members.

The Scheduler and His Function

The scheduler tended to be a person with at least four years of audit experience or, in a few instances, a very experienced personnel officer. Ordinarily the "director of scheduling" assigned all jobs, and an assistant took responsibility for bookkeeping and recording as well as short-term schedule adjustments.

Two firms used a computer system for scheduling purposes, but several firms used some computer reports as an input to the scheduling process. This input is usually a by-product of the time-sheet and billing system which contain engagement listings, broken down by partner or manager in charge of the engagement.

Two types of scheduling requests seem common. The first, in which a specific staff member is requested by name, occurred in about half of the engagements. At engagement planning time, in-charges request particu-

lar staff members to return to the job on the following year. The second type of request involved an unnamed staff member of a certain level, most often an intern or staff assistant. This second type of request required considerable discretion from the scheduler.

Scheduling Priorities

First priority is given to providing a new staff member with a wide variety of experience in a number of jobs (large/small, different industries and different audit tasks). This priority is most common in the first two years of audit employment and is very much in compliance with the spirit of SAS No. 4. Most firms state clearly that no specialization by industry should occur before two years on the job, and a few of the firms philosophically frown on the idea of industry specialization. Job assignment should be done within the cost/benefit analysis of determining the person who will perform the job most efficiently and at the least cost to the client as well as providing a wide range of audit experience to the staff member.

On a second priority level, questions concerning the specific staff member tend to be considered. In Los Angeles, particularly, the consideration of job location vis-a-vis staff member's residence tends to have high priority in order to avoid many hours of commute time. Marital status and other background factors are considered as are the staff members' preferences concerning the nature of jobs (e.g., SEC work, large/small client, etc.).

Procedural Issues

All firms had some type of master schedule with at least three months of staff planning. Most firms had a policy that these master schedules are always available for staff consultation. Some objections to the open master schedule policy were voiced. One scheduler felt that changes in the master schedules may be misread by the staff, causing undesirable behavioral effects. A scheduling board was often found in small practices, while a scheduling book or computer printout tended to be used in larger practices.

Typically, the key document that initiates scheduling is an engagement planning form. These forms are usually received early and after some adjustment and negotiation posted to the master schedule. Some firms tend to request engagement planning forms to be filled immediately after the completion of a year's job while others ask for them at pre-set times of the year (once or twice a year). Engagement planning forms usually encompass: (1) names or levels of staff requested (e.g., two staff accountants); (2) the dates for interim and end-of-the-year work; and (3) a budget for the job. These are prepared by the accountant-in-charge (AIC), reviewed by the manager or partner of the engagement, and forwarded to scheduling. Schedulers review requests for reasonableness, consider the career development needs of the requested staff members and then try to comply with the request as stated. The key consideration is staff availability and then, the priority issues, discussed in the assignment priorities section above, are considered. Schedulers have to juggle with dates of interim work and reassignment of staff to efficiently staff jobs. Once a

satisfactory (and most often negotiated) solution is reached, the schedule is posted onto the master schedule and the in-charge (and sometimes all engagement assignees) receives a copy of the final engagement plan. Any material changes on the plan generate a new round of negotiations and the distribution of revised engagement plans. In addition, the AIC is requested to personally contact all assignees prior to the engagement date for arrangements and pre-engagement activities.

Conflict Resolution

Most schedulers described their jobs as "solving a giant crossword puzzle" where all parts of the picture must fall into place. This giant puzzle always generates conflicts between assignments. Efficient staffing requires that most of a staff member's time be billable, therefore not allowing for large pools of unassigned staff. The tighter the utilization standards are, the more difficult it will be to avoid staffing conflicts. Several approaches tend to be adopted by schedulers concerning conflict resolution: (1) managers resolve short-term conflicts among themselves and bring the solution to the scheduler while long-term conflicts are solved by adequate job planning by the scheduling staff; (2) all staff utilization negotiation is done through the scheduler who can then inform managers of facts of which they are not aware; and (3) weekly meetings are scheduled during the busy season among all managers to resolve scheduling conflicts.

Three issues are closely related to scheduling conflicts. The first relates to the ratio of planned and referred jobs to unanticipated jobs. Large national firms tend to have more repeat engagements and better knowledge of jobs which will be referred from other offices (such as the audit of a subsidiary). The smaller the ratio of planned jobs, the more often scheduling conflicts will occur. A second consideration is that the staff availability reporting system is crucial to conflict avoidance and resolution. Firms that report staff availability on a regular basis tend to have fewer conflicts as requests are more reasonable and better informed. Third, the nature and rank of the scheduler is an important element. A frequently overruled scheduler tends to be ineffective as a problem solver and makes the system chaotic. This will be discussed in greater detail later in the article.

Schedule Planning

Engagement planning is a continuous process for some firms with the scheduler constantly posting the master schedule. Others have a system where all the foreseeable engagements are assigned on an annual or semi-annual basis, with the scheduler making only minor adjustments due to engagement variances, staff changes and unforeseen work. If the scheduling process is a committee task, the second alternative is the norm as constant meetings of the committee would be too costly.

Evaluations, Counseling and Promotions

The scheduling and personnel functions are extremely interrelated. Adequate job performance provides important scheduling information while inadequate job performance may indicate both assignment problems

and/or personal inadequacies of the staff member in question. All firms surveyed had a formal staff evaluation form which was routed through the scheduler before being placed in the staff member's file. In some instances, the scheduler had key personnel functions which included making promotion and salary recommendations. In most instances, however, promotions and salaries were established by committees and were based on job performance evaluations and other judgmental considerations.

In addition to formal evaluations, all firms had set up some system of staff counseling. The philosophy of the staff counseling system varied considerably from simple career advising and performance feedback to a more complex set of objectives which involved firm socialization, communication of information and reduction of turnover.

Some Examples of Interest

Firm 10 (from the table) has a formalized computer-based scheduling system. All data is collected locally through a minicomputer and teleprocessed to their national office on Fridays. By Monday morning all requested reports are delivered, by air freight. The scheduler proceeds with their distribution and makes the adjustments which will, in turn, serve as input for the next Friday. The actual scheduling is done manually, but the use of the computer seems to be an excellent decision support system for the scheduling function with many interesting side features that tie up with billing and variance reporting on specific jobs.

Firm 7 reduced the scope of their scheduling process by installing the concept of "groups" within their audit division. By organizing staff members into groups, the total number of schedulees was reduced to 40. In terms of overall firm efficiency, they have a group availability report which relates to the coming four weeks and is distributed to each one of the groups. This procedure enables out-of-the group assignments after group scheduling needs are satisfied.

Firm 8 probably had the most cost effective system, with a large number of staff members being assigned on an overall southwest area basis. The system, however, is totally manual and extremely dependent on one person's memory and skills.

Suggestions

On the Scheduler

The rank, position, experience and personality of the scheduler is of major importance. Audit experience is helpful to understand the nature of auditing jobs, but this can be replaced by extensive personnel background in CPA firms prior to the scheduling functions. In the words of a scheduler, the person doing his function "must have clout" and/or rank. If a scheduler is frequently overruled, he becomes ineffective.

The personality of the scheduler is of utmost importance; he must be person-oriented, trustworthy and able to communicate in a non-threatening but authoritative manner. He must also be aware of his power—or perceived power—over the careers of staff members. One of the most important determinants of career success as well as staff motivation may be the proper job assign-

ment. The scheduler must perceive the nuances of personalities in jobs, anticipate staff personality clashes and acknowledge client preferences. He must enjoy the staff's trust in order to gather informal information concerning client characteristics. Thus, while a scheduling committee may resolve the question of authority, much of this human interaction may be lost in the committee assignment method.

Particular attention should be given to the continuity and backup of the scheduling function as many of the key scheduling issues are of an informal nature and consequently are not well documented. Schedulers should be given long-term, renewable contracts and assigned backups for vacation periods and replacement. One approach could involve leaving all short-term scheduling adjustments to be performed by the backup scheduler.

On the Scheduling System

The scheduling system must encompass the following elements: (1) an engagement planning form; (2) a master schedule with the planning for the following year; (3) an efficient communication system; (4) an interaction between billing, staff utilization and variance reports; and (5) the often-neglected scheduling performance evaluation system. It is essential in terms of scheduling efficiency and firm profitability to constantly monitor staff utilization and the quality of engagement planning. This monitoring should be done on a month-to-month basis and compared with the long-range plans of staff utilization and engagement variances (overruns). The scheduler should be rewarded in terms of how well these ratios meet the firm's objectives (which should be explicitly stated).

Automation, by the use of data processing, may considerably facilitate the evaluation task and help with communication between the scheduling, the billing and the variance reporting functions. One rule-of-thumb would recommend the utilization of a computer system for staff record keeping if more than 40 persons are being scheduled. This system should be online to be consulted by the AIC at the client location during the engagement planning stage, and have extensive edit capabilities to avoid data entry errors. This system, however, should be viewed only as a record keeping system. The assignment process itself should not be automated as there are too many variables involved which prevent the development of a satisfactory scheduling algorithm.

On Personnel Issues

Concerning counseling, promotions, and evaluations CPA firms usually have national policies. These policies should be closely linked to the scheduling process in order to give early warning on possible employment status changes as well as to receive input concerning potential causes of staff attrition and client problems. Promotion criteria and procedures should be openly discussed and stated. Controls should be established to monitor how closely they are being followed. Such measures may establish a climate of openness which will help the scheduling process considerably.

Finally, the scheduling of vacations, jury duty leaves, training and other non-client related matters should be

heavily influenced, if not determined, by the scheduling department in order to improve the flexibility of the assignment task.

Conclusions

Overall, the scheduling systems worked very well. Their importance is intuitively accepted by office managements in spite of a certain lack of recognition. Investment in improved scheduling systems may pay off in terms of firm profitability, employee morale and reduced turnover among employees.

This survey was based on large and medium CPA firms but its findings are not restricted to these firms. The small practitioner is the one who will be helped the most by these considerations as his practice grows, as certain problems can be foreseen and the procedures of large firms can be adapted to the small practitioner's problem.

In spite of extensive efforts by the AICPA and several regulatory bodies to set standards for the accounting profession, very little research has been done on administrative processes through which firms achieve high standards of quality. These internal processes such as personnel selection, internal consulting staffs, termination procedures, client procurement methods, fee structures and scheduling methods are of key importance to the quality of audit work and must be studied—but not legislated—much more extensively.

specialists
in
controllers
accountants
bookkeepers
accounting
support
services

Account Abilities
accounting personnel services • temporary/permanent

los angeles
(213) 385-9107
orange county
(714) 634-2063
san francisco
(415) 398-3366
palo alto
(415) 856-8400
dallas/houston

TOPIC	Scheduling system	Best level scheduling	Approx. number of people scheduled	Characteristics of scheduler	Computer system	Scheduling priority	Type of master schedule	Way to inform staff of assignment	Method of conflict resolution	Yearly lookahead	6-month planning	3-month planning	Periodic schedule up-to date to staff	Personnel and assignment	Key document request	Counseling	Promotions	Situation
FIRM 1	All local	Audit personnel, only seniors included	90	Woman, audit back-ground; sub. to PIC of personnel; one of two people, manager	No (used to have one)	Industry specialization only at higher levels. Objectives: (1) as many AIC as possible, (2) varied industry experience, (3) both large and small clients	Master scheduling sheet	Manager is responsible	Negotiated through scheduler	Yes	6-month planning	3-month planning	Weekly status report from each audit site; weekly list of available personnel	Separate but very coordinated functions	Request for assignment accountants	Formal partner/manager counselor assigned, 2 meetings a year	Personnel committee head by personnel partner, use summary of all evaluations, once per year	On all jobs over 35 hours, partner prepares, manager rates (A to F) and discusses with (but does not show to) evaluate
FIRM 2	Local forms, some national guidelines	Audit only, managers and supervisors included	105	10 years w/firm, 6 as auditor, 4 in consulting, manager	No	(1) Availability, (2) job specialization, (3) identical work at same level, (4) Career development, broader experience	Loose leaf book	Manager supervisor is responsible	Negotiated with scheduler	Yes	6-month planning	3-month planning	Every two weeks	Joint functions	Request for staff assignment 75% name request	Formal partner counselor assigned, meet at least once a year, keep in touch groups	Compilation of evaluations and popularity polls by scheduler, decision by the PIC, once a year	80 plus hours jobs evaluation discussed with supervisor, popularity sells consulting managers
FIRM 3	Local	Managers	40	Audit manager, scheduling functions integrated with existing client responsibilities	Not for scheduling but for support functions	Move staff up in assignment responsibility; no identical work at same location, industry expertise, personalities	Spread sheets	Accountant in charge must inform	Resolved by the scheduler on a bi-weekly basis	Yes-1-year forecast	Yes	Yes	Bi-weekly schedules	Separated functions	List of recurring jobs, bi-weekly assignment request	Informal	Based on evaluations	All jobs, filled by the supervisor
FIRM 4	Local	All areas—audit, tax, MAS	100	Six years in scheduling, personnel coordinator, needs clout, partner work	No	Find staff member who is most competent and billable at lowest rate; staff's aspiration, geographic location	Master sheet; 6-7 months	Weekly updates to senior and up	Monthly meeting of all scheduling coordinators	Yes-1-year forecast	Yes	Yes	Weekly updates of master sheet	Joint functions	Request for accountants' time (react) schedule	On an ad hoc basis by the PIC and personnel coordinator	Once a year by personnel and the PIC based on evaluations and qualitative factors	80 plus hours jobs National form, second part relates to career objectives
FIRM 5	Local	Seniors, audit dept.	20	Partner, still active in work	No	Finish current job, staff's experience, staff's aspiration	Assignment book	In-charge must inform staff	Negotiation among managers, final decision is the scheduler	Yes—jobs to be done	Scheduling 5-6 months in advance	No	Daily	Performed by the same persons	Staffing request and schedule	3 times a year (one at promotion time) with personnel partner	Once a year partner makes decisions	All engagements with 40 hours, staff sees evaluation
FIRM 6	Local	Audit only	40	Audit partner and staff member	No	Staff's experience, staff's availability	Assignment book, monthly for 12 months	Send copies of staff assignment form and change in audit schedule	Consultation among parties involved, resolution by partner in charge of scheduling	Yes	Yes	1 month look forward daily to partner	Staff availability form daily	Separate functions	Planning summary request, names specified	Semi-annual with partner or manager	Once a year decided by all partners and managers, salaries are separate	For assignments of 28 hours, comments of evaluate allowed, four-point scale, three main areas: technical, professional; and personal

FIRM	Local national guidelines	Local	Managers	Managers	Managers	Senior, audit and small business records maintained for audit managers and partners	150	125	165	Audit background, manager level (auditor), 3 people involved	Yes, tracking system	Start with small jobs, move up to larger, different industries, different audit duties	12 months lookahead	8 week, bi-weekly distribution of assignments, summary to scheduler, look-ahead to specific assignment	Scheduling makes final negotiated division	Yes	Yes, by committee meeting	Yes	Yes	Weekly meeting of managers	Yes—1.5 year	Yes	On a job-by-job schedule basis	Staff availability, weekly, staff utilization	Separate but coordinated	Joint	Listing of partner's jobs	Big brother and counselor, partner arranged	Based on managers' evaluations, summaries, submitted to partners, Biannual	40 plus hours jobs
FIRM 7	Local	Local	Managers	Managers	Managers	Senior, audit and small business records maintained for audit managers and partners	150	125	165	Audit background, manager level (auditor), 3 people involved	Yes, tracking system	Start with small jobs, move up to larger, different industries, different audit duties	12 months lookahead	8 week, bi-weekly distribution of assignments, summary to scheduler, look-ahead to specific assignment	Scheduling makes final negotiated division	Yes	Yes, by committee meeting	Yes	Yes	Weekly meeting of managers	Yes—1.5 year	Yes	On a job-by-job schedule basis	Staff availability, weekly, staff utilization	Separate but coordinated	Joint	Listing of partner's jobs	Big brother and counselor, partner arranged	Based on managers' evaluations, summaries, submitted to partners, Biannual	40 plus hours jobs
FIRM 8	Local	Local	Managers	Managers	Managers	Senior, audit and small business records maintained for audit managers and partners	150	125	165	Audit background, manager level (auditor), 3 people involved	Yes, tracking system	Start with small jobs, move up to larger, different industries, different audit duties	12 months lookahead	8 week, bi-weekly distribution of assignments, summary to scheduler, look-ahead to specific assignment	Scheduling makes final negotiated division	Yes	Yes, by committee meeting	Yes	Yes	Weekly meeting of managers	Yes—1.5 year	Yes	On a job-by-job schedule basis	Staff availability, weekly, staff utilization	Separate but coordinated	Joint	Listing of partner's jobs	Big brother and counselor, partner arranged	Based on managers' evaluations, summaries, submitted to partners, Biannual	40 plus hours jobs
FIRM 9	National philosophy and directors, local scheduling forms national evaluations	National	Managers	Managers	Managers	Senior, audit and small business records maintained for audit managers and partners	150	125	165	Audit background, manager level (auditor), 3 people involved	Yes, tracking system	Start with small jobs, move up to larger, different industries, different audit duties	12 months lookahead	8 week, bi-weekly distribution of assignments, summary to scheduler, look-ahead to specific assignment	Scheduling makes final negotiated division	Yes	Yes, by committee meeting	Yes	Yes	Weekly meeting of managers	Yes—1.5 year	Yes	On a job-by-job schedule basis	Staff availability, weekly, staff utilization	Separate but coordinated	Joint	Listing of partner's jobs	Big brother and counselor, partner arranged	Based on managers' evaluations, summaries, submitted to partners, Biannual	40 plus hours jobs
FIRM 10	National	National	Managers	Managers	Managers	Senior, audit and small business records maintained for audit managers and partners	150	125	165	Audit background, manager level (auditor), 3 people involved	Yes, tracking system	Start with small jobs, move up to larger, different industries, different audit duties	12 months lookahead	8 week, bi-weekly distribution of assignments, summary to scheduler, look-ahead to specific assignment	Scheduling makes final negotiated division	Yes	Yes, by committee meeting	Yes	Yes	Weekly meeting of managers	Yes—1.5 year	Yes	On a job-by-job schedule basis	Staff availability, weekly, staff utilization	Separate but coordinated	Joint	Listing of partner's jobs	Big brother and counselor, partner arranged	Based on managers' evaluations, summaries, submitted to partners, Biannual	40 plus hours jobs
FIRM 11	Local	Local	Managers	Managers	Managers	Senior, audit and small business records maintained for audit managers and partners	150	125	165	Audit background, manager level (auditor), 3 people involved	Yes, tracking system	Start with small jobs, move up to larger, different industries, different audit duties	12 months lookahead	8 week, bi-weekly distribution of assignments, summary to scheduler, look-ahead to specific assignment	Scheduling makes final negotiated division	Yes	Yes, by committee meeting	Yes	Yes	Weekly meeting of managers	Yes—1.5 year	Yes	On a job-by-job schedule basis	Staff availability, weekly, staff utilization	Separate but coordinated	Joint	Listing of partner's jobs	Big brother and counselor, partner arranged	Based on managers' evaluations, summaries, submitted to partners, Biannual	40 plus hours jobs
FIRM 12	Local	Local	Managers	Managers	Managers	Senior, audit and small business records maintained for audit managers and partners	150	125	165	Audit background, manager level (auditor), 3 people involved	Yes, tracking system	Start with small jobs, move up to larger, different industries, different audit duties	12 months lookahead	8 week, bi-weekly distribution of assignments, summary to scheduler, look-ahead to specific assignment	Scheduling makes final negotiated division	Yes	Yes, by committee meeting	Yes	Yes	Weekly meeting of managers	Yes—1.5 year	Yes	On a job-by-job schedule basis	Staff availability, weekly, staff utilization	Separate but coordinated	Joint	Listing of partner's jobs	Big brother and counselor, partner arranged	Based on managers' evaluations, summaries, submitted to partners, Biannual	40 plus hours jobs