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Contingent time off : an incentive approach to office productivity increases

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CONTINGENT TIME OFF:

An Incentive Approach to Office Productivity Increases

(A Field Study)

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by

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ABSTRACT

Productivity gains in a clerical setting on the order of ten to twenty-five percent can be achieved through the use of contingent time off (CTO) incentives. To test this hypothesis, four clerical groups who performed routine repetitive tasks were given productivity goals of 25% over their respective group's average weekly productivity level. If a group achieves the weekly goal before the end of standard 40 hour work-week, the group of employees will be given time off with full pay based upon a specified formula. Results of the study indicate that CTO can result in productivity increases ranging between 13 and 40 percent.

INTRODUCTION

Increasing international and national competition and concern over cost control is forcing many companies to look for innovative methods to increase employee productivity. One method that has not received a great deal of attention in the literature is Contingent Time Off (CTO). In this approach, employees are rewarded with time off at full pay for meeting increased productivity goals. This approach appears to offer management an effective method for achieving productivity increases in selected business environments while, at the same time, sharing the benefits of these increases with employees. It also can lead to significant cost reductions as productivity increases.

This study was intended to demonstrate that an incentive in the form of CTO can result in significant clerical worker group productivity gains. To measure the effects a CTO program has on productivity gains, a field study was conducted on four groups of clerical employees. All employees performed the same tasks over an eight week period and were measured for productivity and quality changes. Comparisons were made against pre-test productivity and quality measures. CTO time was earned by employees if their respective group reached productivity goals jointly agreed to by management and the clerical staff in less than the standard workweek.

The company's willingness to participate in the study resulted from senior management's concern over previous company financial

losses and the resulting need to find less costly ways of running the business. The Sales Accounting department was a prime candidate for experimentation since it was a routine "paper pushing" area requiring a relatively large number of employees to perform the work.

If CTO resulted in sustainable productivity gains in the office environment, a method of increasing office productivity would have been found which did not require additional financial resources. In fact, payroll and related costs could decrease if a proven CTO program could be implemented.

LITERATURE REVIEW

A review of the literature reveals an abundance of incentive programs revolving around financial rewards (O'Dell, 1984), employee involvement, safety incentives (Minter, 1985) and other positive reinforcements. Unfortunately, there is little available on CTO. In their review of CTO programs, Lockwood and Luthans (1984) cited five private sector experiences with CTO, all of which supported the hypothesis that CTO can increase productivity. Several of these are discussed in the following paragraphs.

At one manufacturing plant employing over 2,000 hourly workers a CTO program was implemented in a production area. Workers and management met and agreed to CTO standards which included a 25% increase in productivity and penalties for items manufactured with defects. Productivity was measured on a daily basis and if the

group met its production goals the entire group could go home. The results were impressive with a 25% productivity increase by employees who worked only an average of 6.5 hours per day. Unfortunately, a subsequent change in management resulted in termination of the program and productivity decreased by 12.5% from the original level. Lockwood and Luthans (1984) note that once instituted, a CTO program must continue regardless of management changes. Otherwise, a company should not implement CTO unless it is specifically identified as a short term program since the subsequent termination of a CTO program could possibly result in actual productivity declines.

Lockeed Shipbuilding and Construction Company used a one-time CTO program to reduce safety-related accidents. In this case, employees were given a target goal of reducing safety related expenses from 15.15% of payroll dollars to 5.0% for which all participating employees were to be given two extra days of paid vacation. The program was a win-win situation: the company saved $4.2 million and the employees received their time off.

In order to finish year-end production requirements early, one high-tech manufacturing firm promised its employees they could have as paid time off, any time saved during December if the company met a set of production and quality goals. This program resulted in a 20 percent productivity increase for the company with no change in quality and the employees earned an extra two weeks off.

The process of goal setting by itself has been found to be an effective method for improving task performance Locke (1968),

Latham & Yukl (1975), Locke and Latham (1984). Thus, it is possible that establishing productivity goal increases may be effective without any incentive. Buller and Bell (1986) state that the increases may result from changes in strategies on the part of participants to improve. Locke, Shaw, Saari and Latham (1981) suggest that goal setting often results in task strategy changes as well as skill development and creative problem solving. In a laboratory setting, Shaw (1983) found that establishing specific goals for subjects led to the development of more Task Strategies than under conditions where no goals were set.

While CTO may prove to be beneficial to both the company and employee, positive results could also prove to be a threat to employees. Employees perceive that if a job can be done more efficiently, jobs will probably be eliminated, possibly theirs. As Tuttle and Sink (1985) note, even the mere presence of a productivity measuring system is threatening to those being evaluated. The authors discuss six areas of threat around which employees become concerned: misunderstanding or misuse of productivity measurements, exposure to inadequate performance, additional unexpected time and reporting demands, distortion of performance, reduction of autonomy and reductions in staff. It is the last area, staff reductions, which was initially and directly addressed in the proposed CTO approach because if a modest increase in productivity (10 - 25%) can be achieved, staff reductions through attrition or reductions in force will eventually occur. The perceived threat (layoff) can lead to resistance to measurement and in fact, em-

ployees could intentionally sabotage the program. As Tuttle and Sink point out, a successful productivity measurement system requires skills at managing the resistance to its presence during its introduction. A strategy to circumvent possible resistance to productivity measurement is to involve employees in the design and implementation process. At the same time, a promise to reduce job positions through attrition and not layoffs, should help alleviate fears, while addressing the realities of cost control and potential staff reduction.

RESEARCH METHODOLOGY AND RATIONALE

Sample

The research was conducted using four test groups in a field setting over an eight week period. Each group was comprised of seven (7) to ten (10) people. The initial test design called for the use of control groups; however, this approach was discarded since the groups could not be isolated to ensure that they were not interfering with the results of other groups being tested. All of the employees were clerical workers in an Accounting Department of a large (2 billion dollars) national retailer. Their primary responsibilities were to audit daily store sales and to correct sales related problems for each store in the chain. To accomplish these tasks, auditors are required to review detail sales data including sales receipts, gift certificates, credit card receipts,

coupons, etc. submitted by the stores and compare them to computer generated information. Discrepancies are researched and corrected by the auditors. An audit is complete when all discrepancies are resolved and paper work is submitted to a supervisor.

Program Development

The program was designed with extensive input from employees. As suggested by Lockwood and Luthans (1984), for a CTO program to work it must be accepted by the participants. If employees feel the goals and penalties are such that they cannot possibly earn a reward, they will see the program as a sham. Thus, to ensure a program which would have the best chance of acceptance by the entire staff, the program framework was developed through meetings with group supervisors and an informal leader from each of the four groups. A number of basic rules were agreed to by both parties including:

1. Each group would have their existing number of required weekly audits increased by 25 percent. Thus, if a group was required to do 200 audits per week, the goal was increased to 250. On a per auditor basis the workload (number of audits) was evenly distributed within each of the groups.

2. If the CTO objective (number of audits) was accomplished in less than 37 1/2 hours per auditor, (excluding supervisory time) the company would split the hours saved 50-50 with the group's employees, including the supervisor. For example, in a group with 7 employees, the goal would be reached anytime the audits were completed prior to 7 x 37 1/2 or 262.5 man hours. If, for example, this group met it's goal in 222.5 hours, 40 hours would have been saved and each of the seven auditors and one supervisor would each be entitled to 5 hours (40/8) of CTO.

3. Once an audit was completed, the resulting paperwork was forwarded to other departments for further processing. If an auditor did not do his work correctly, personnel in other departments must go through extensive research work to correct it. Consequently, if any auditor errors were detected by departments outside the group, the group was penalized three audits for each error. Any penalties were added to the group's weekly goal. This was to encourage quality work. Errors detected and corrected as a result of a group's internal supervisory quality assurance process were not penalized.

4. Employee absences due to sickness or vacation would make goal attainment extremely difficult or impossible, particularly during the summer vacation period. To accommodate the program, we reduced a group's goal at a rate

of 1.70 audits per hour (the department's overall average audit rate) for each hour of auditor absence. The same approach was used when auditors were given special assignments unrelated to their audit work or when the work was exceedingly difficult due to circumstances (usually related to computer failures) beyond the group's control. Thus, for example, if an employee was absent five hours, the group would be credited with 8.5 (5 x 1.7) audits towards it's weekly goal.

5. After the program began, employees were concerned about the issue of absenteeism. While a group was compensated for absences due to sickness, many employees felt it was unfair to share equally CTO with employees who were absent one or more days. Therefore, it was agreed that employees who missed more than one day would not get any CTO time off and that an employee who missed one day would only get 80 percent of the group's average CTO for the week.

It should be noted that serious consideration was given to testing a CTO program on an individual employee basis instead of by group. Previous experience using company gift certificates instead of CTO for achieving individual productivity goals, while successful, had a serious drawback: employees were so intent upon their own success that the well being of group members was no longer

valued, and, in fact, became a hindrance. For example, during the retail Christmas season, as much as 20 percent of the work force is comprised of seasonal employees who must be trained by full time auditors. During the incentive program, these trainees did not receive the full attention they required for training, nor would experienced auditors offer to help other group auditors with difficult audits because it decreased their own productivity. If, however, group goals were used, it would be to everyone's benefit to help trainees or other group members. A subsequent survey of employee attitudes towards that program revealed that they would rather work on a group basis.

Measures

Objective measures were used for productivity measurement: the number of audits completed on a per hour basis. Standard procedures and reports were already in place to measure quality and quantity. In order to meet company deadlines, employees were usually required to work for the entire 37 1/2 hour week and were given their CTO at some later scheduled date. Each audit performed was accompanied by an audit statistics form which was used as a data entry form into a computerized productivity measuring system. Relevant data included: store location, auditor, audit errors detected during quality assurance, and financial data. Hours worked were submitted separately by the supervisor.

Under the CTO project, two productivity measures seemed necessary: productivity from the beginning of the week until the CTO goal was reached and productivity for the entire 37 1/2 hour week. The purpose of the full week's productivity measure was to determine the effect, if any, of reaching the goal would have on group productivity for the rest of that week. If there was a significant drop-off, then future CTO programs would be modified to provide CTO based on an entire week's work.

Establishing CTO goals can be difficult. If too low, you give away unearned time. If too high, goals cannot be achieved and everyone loses as employees and management become frustrated. A goal of 25 percent over the existing workloads was established because both group members and the supervisory staff thought it was attainable. In the previous year, productivity was increased by 50 percent so we felt that much of the "fat" had been "squeezed out". Achieving a 25 percent increase would require extra effort and new ways of working.

Each group supervisor was responsible for performing a quality assurance (Q.A.) review of at least five randomly selected audits per week per auditor. The Quality Assurance process required the supervisor to check each selected audit for standard items: correct totals, accounting transmittals completed correctly, exceptions properly documented, etc. Auditors with audit errors were given immediate feedback. While auditor errors were reported as errors detected during a supervisors' quality assurance review, penalties were <u>not</u> assessed against the audit group as long as they were de-

tected by the group's supervisor. This procedure ensured that supervisors did not feel that they were hurting group CTO performance by finding errors. Completed audit paperwork was forwarded to other departments and subsequent problems found with the work were formally communicated back to the respective supervisor and auditor. In addition, an independent random quality assurance review was performed on all audits which previously underwent supervisory Q.A. review. Errors detected and not corrected on audits previously reviewed by supervisors would result in penalties which reduced a group's CTO time. This ensured that group supervisors were closely monitoring quality.

Benchmark productivity measures were established for all four audit groups over a nine week period prior to the beginning of the first tests. During this period, each group's productivity was measured in terms of audits per hour. All changes in productivity (except post test comparisons) were measured against each group's benchmark.

While the primary thrust of this study was to evaluate CTO in a clerical production environment where all employees had very similar work duties, additional tests were conducted on four separate clerical groups (E,F,F,H) in which both the groups and employees within a given group had vastly differing responsibilities. The purpose of doing additional testing was two-fold. First, if an opportunity for employee rewards within one area of a department is provided, a similar opportunity must be provided for other areas or non-participating employees will feel that they are being treated

unfairly. Perceptions of unfair treatment can cause resentment towards management as well as employees in CTO groups. This can result in work slow downs and even strikes. Secondly, management wanted to begin to explore methods of increasing productivity in clerical departments which were not suited to production line incentive methods.

The common element in all non-audit groups was the requirement to complete financial reports within a specific time frame. Thus, group report completion deadlines for earning CTO were established for these four groups. In these tests, the number of employees in each of the groups was reduced by 20 to 25%. Thus, if the groups were able to perform their tasks with the reduced headcount, a 20 to 25% productivity gain will have been realized. Two of the groups (G and H) could earn an extra week's vacation if all deadlines were met over a six month period. The two remaining groups (E and F) could earn an extra day off per month if reports were completed on an established monthly schedule over a six month period. There were no quality assurance checks for any of these tests since errors, if detected, would not show up until after several months had passed. At the same time, any errors found would only affect these groups. Thus, any quality problems would be self penalizing since they would take away from their chance of obtaining their CTO goal.

RESULTS

Productivity during the test period, for all audit groups (A,B,C,D) combined, improved by an average of 23.8 percent, increasing from 1.72 to 2.13 audits per hour. This is shown in Table One. Individual group gains ranged between 13.4 and 40.1 percent. While improvements were noted for all groups up to the point of reaching their CTO goal during the week, subsequent productivity after the weekly goal was reached generally declined. This is reflected in the overall lower average productivity measures of 1.95 shown for the entire work week compared to the CTO average of 2.13. This measure (for the entire week) includes both CTO productivity time and non-CTO work time. In spite of the post CTO weekly decline, however, the total weekly gains averaged 13.4 percent. One group (A) had such low productivity after reaching its CTO goal for the week that they actually declined (on a total week comparison) from their benchmark of 1.56. Group (D) was unchanged at 2.49 audits per hour for either CTO or total week measures.

The groups averaged 3.35 CTO hours off per employee per week during the test period. The range was 2.06 to 4.25 depending upon productivity and absenteeism. Total CTO hours earned during the test period approximated 725. Based on the 50-50 split time savings (50% to employee, 50% to company), an equal amount of time was therefore available to the company for these employees to work in other areas.

Post test productivity measures revealed a general pattern of sustained productivity gains averaging 9.9 percent above the bench-

marks. Changes in group post test productivity ranged from a decrease of 8.7 percent to a gain of 22.4 percent. Group "A" actually declined from their benchmark of 1.56 to an average of 1.41 audits per hour during the test period. This occurred even though they increased to 2.12 (an increase of 36%) on the average up to the time they met their weekly CTO goal.

Quality did not suffer during the course of the program. The number of errors detected averaged 25.7 per group during the benchmark period and was only 24.3 during testing.

The tests of the four clerical groups in which employees (within the groups) performed disparate tasks had mixed results. The two groups ("E" and "F") which could earn an extra day off each month were successful in reaching their goals every month even though they operated with 20-25 percent fewer people. The two groups ("G" and "H") which had to meet six consecutive monthly deadlines (after which they could earn an extra week of vacation), were not as successful. Two of their monthly goals were not met.

A post-test survey was given to all employees who participated in the program to measure employee perception of the CTO program. The survey revealed that employees in the audit department were overwhelmingly positive about the program. On a scale of 1 (disliked very much) to 10 (like very much), the main response 8.7. Over eighty-seven percent of the same groups also perceived the program as fair and one hundred percent felt the program was a success. When asked to respond to the question, "In your opinion, did your fellow group members pull their fair share of the work load?",

employees responded with 34.8% "definitely" and 65.2% "more often than not".

The groups outside the audit area were somewhat dissatisfied with the program. In terms of fairness ("do you feel the program was fair?"), between 28.6 and 53.8% said the program was unfair. Interestingly, the Reporting and Control group (H) indicated that over half of the employees (53.8%) saw the program as unfair but 83.3% of the same group saw the program as successful. A complete summary of the survey and results are shown in Appendix "A".

DISCUSSION

The results clearly demonstrate that a CTO program can improve productivity over the short term. Post testing gains (compared to the benchmarks) averaging 9.9 percent also indicate some permanent gains may also be realized. There can be, of course, no long term (over 12 months) conclusions. The fact that CTO productivity averaged 2.13 audits/hour up to the CTO goals but only averaged 1.95 audits/hour for the entire week was not surprising. The groups pushed hard to reach their target and once achieved, they "cruised". In fact, it appears that some of them vacationed for the rest of the week. Group "A", for example, averaged 2.12 audits per hour up to reaching their goal, but total weekly productivity actually declined to 1.41 audits per hour, below their 1.56 benchmark. The implications here are that a CTO program should set goals or targets which would reward high productivity for the

entire work period be it a day, week or month. Therefore the present program should be modified, for example, to give a specified CTO reward (say 10 minutes) for each audit over a specified target. This would push the groups for the entire work period.

Observations of each group during the test revealed a pattern of supervisors and individuals developing new approaches to reaching their goals. Better ways were found to do the work and this could, in part, explain the "permanent" gains reflected in the post test gains of 9.9 percent overall. Thus, it is quite possible that a short term productivity program which pushes people to their "limits" can result in improved procedural or system changes which translate into permanent gains in the long run. Another factor, which could have lead to the improvements is that specific goals, if accepted, have been found to lead to higher performance than generalized goals ("do your best") or no goal at all (Locke, 1968).

In looking at the range of group benchmarks in table 1, groups A, B, and C were reasonably close which is reflective of the similar type of work performed. Group D, on the other hand, at 2.18, performed audits which were generally easier and this explains the higher benchmark averages. Immediately after the CTO program, system changes required group D to switch over to performing more difficult audits. This is the probable reason group D was the one group to show a post test decline (-8.7%).

Management was pleased to see that quality did not decrease and that it actually improved. This was probably due to the fact that errors could result in substantial penalties. One group (D)

actually performed more audits than required to "put some extra" away in case of errors.

The survey clearly indicated that employees in the audit groups perceived the program more favorably than the other areas (auditors rated the program at 8.7 versus non-auditor rating of 5.5). This rating could be attributed to the fact that audit work, because of its repetitive nature lends itself to more of a "production" environment where small changes in work patterns can lead to significant time savings. It is also possible that audit goals were set too low, thus, making achievement too easy.

Non-audit Groups G and H were more successful and pleased with the program. Their reward was a possible day off per month. On the other hand, Groups E and F which were on an all or nothing reward program, were not successful for several reasons. Two of their monthly goals (second and fourth month) were not met. They were under increasing pressure each successive month not to fail or all of their previous efforts would be wasted. They frequently met with management in an attempt to alter their goals. They also protested that many of their employees were new which kept their group's from being as efficient as possible. Initially, management resisted changing the program. However, after realizing that the all or nothing approach over a prolonged period was demoralizing to the groups, changes were made. Their goals were modified to require them to only meet monthly deadlines to earn single days off instead of the cumulative all or nothing approach.

Part of the disparity between audit group perceptions and the other groups could have resulted from an inadequate amount of planning for the non-auditor CTO programs. A lot of effort was put into development of the audit CTO program whereas the other programs were hastily arranged. In hindsight, it is suggested that a future CTO program for clerical groups who perform disparate functions be assigned monthly goals with a reward at the end of each month. In addition, more extensive employee participation in the development of the program would be beneficial. Interviews with employees in the non-audit groups ("E", "F", "G", and "H") revealed that they were unhappy because the program was started when a relatively large number (33%) of their employees were new to both the company and department and did not understand their work. As a result, the groups could not meet their deadlines. One group of six employees who were all experienced, was able to easily meet their goals and was totally satisfied with the program which rewarded them with an additional week of vacation.

One of the benefits of a short term CTO program is that it can indicate how much additional productivity can be obtained from employees. Taken over a several month period, employees may also develop new approaches to performing work which can result in short and long-term gains.

While audit employees enjoyed the results of the program, many of them expressed some pleasure when the program terminated. They said they were tired of constantly pushing to meet goals. Thus, it is possible that this type of program may not work over a longer

period particularly if employees feel that the level of goal difficulty would be increased on a consistent basis.

MANAGEMENT IMPLICATIONS

In assessing the implications of the proposed CTO program, some consideration must be given to situations in which factors outside a group's control negatively impact the group's productivity. In the present study, computer related problems made it occasionally impossible to earn CTO and even though fairness dictated that a group was deserving. Conversely, when conditions change to make CTO attainment relatively easy, goal adjustments should be made but not to the extent that employees become alarmed over the possibility of job loss.

The study would also suggest that the development of a CTO program should have extensive participation on a volunteer basis by clerical employees and should not be totally under management control. This ensures an atmosphere of trust which will be necessary when problems occur in the program.

Management must also realize that a CTO program may heighten the issue of future staffing reductions. Employees are smart enough to realize this and will ask what will happen to their jobs as they become more efficient. To counter this, management should consider a written offer to eliminate jobs only through attrition.

One of the most difficult issues revolves around how to reward employees within groups who perform disparate functions. The re-

sults of the study suggests that CTO should be awarded on the basis of meeting monthly report deadlines where possible.

In administering the CTO program, one of the by-products was that supervisors had a tendency to do clerical work to help a group meet it's goals instead of performing supervisory functions. A little participation is acceptable and desirable but, too much over a long period is dysfunctional, because it detracts from the supervisor's main function: supervision. Discourage this practice.

A CTO Program can result in short term productivity gains. Hence, its value might lie in getting a company through a crunch. It might also serve as an excellent way to determine how much of a productivity increase can potentially be obtained in an area.

In order to maximize possible productivity gains, CTO should be earned on the basis of an entire week's or period's productivity. This will prevent "post goal" productivity declines. An alternative would be to let employees have their time off as soon as goals have been reached. This assumes, of course, that there would be no 50-50 split of time saved with employees and, thus, once a goal is reached, the employees go home.

In the present study, it is estimated that a 15 percent productivity gain over the long-term would result in a minimum savings of $75,000 annually from the audit groups alone. This could go as high as $300,000 if all clerical employees participated. From a short term perspective, savings can also occur. For example, the headcount reductions which occurred in the groups performing disparate functions resulted in real dollar savings. In fact, they

were never increased back to their original levels. This has resulted in an annual savings of $45,000.

FUTURE STUDIES

While the study revealed that a CTO program would be successful, in the short run, there is a need for longitudinal study to determine if and when the program will cease to become effective. More specifically, further research is needed to determine if a CTO program be sustained over a long term (6-12 months). In addition, it would be important to ascertain whether a short term CTO program could result in permanent productivity gains. Another area which deserves additional study revolves around developing effective CTO programs for groups of employees performing disparate functions.

POST CTO SURVEY RESULTS

On the following scale of 1 to 10, please rate how you feel about the CTO program in your area.

1	2	3	4	5	6	7	8	9	10
Dislike Very Much				OK					Like Very Much

	# of Surveys Submitted	Total Score	Average
Sales Audit (Groups A,B,C,D)	24	209	8.7
Reporting & Control (Groups E,F)	14	78	5.6
Customer Accounts (Groups G,H)	10	53	5.3
GROUP TOTAL	48	340	7.1

1. Do you feel the program was fair to all groups ?
_____ YES _____ NO

	# of Surveys Submitted	% YES	% NO
Sales Audit (Groups A,B,C,D)	24	87.5	12.5
Reporting & Control (Groups E,F)	13	46.2	53.8
Customer Accounts (Groups G,H)	7	71.4	28.6
GROUP TOTAL	44	68.4	31.6

To your group? _____ YES _____ NO

	# of Surveys Submitted	% YES	% NO
Sales Audit (Groups A,B,C,D)	22	86.4	13.6
Reporting & Control (Groups E,F)	13	46.2	53.8
Customer Accounts (Groups G,H)	10	60.0	40.0
GROUP TOTAL	45	64.2	35.8

For the department? _____ YES _____ NO

	# of Surveys Submitted	% YES	% NO
Sales Audit (Groups A,B,C,D)	19	68.4	31.6
Reporting & Control (Groups E,F)	11	45.5	54.5
Customer Accounts (Groups G,H)	6	50.0	50.0
GROUP TOTAL	36	54.6	45.4

2. Was there anything you did not like about the program?
_____ YES _____ NO

	# of Surveys Submitted	% YES	% NO
Sales Audit (Groups A,B,C,D)	18	38.9	61.1
Reporting & Control (Groups E,F)	12	33.3	66.7
Customer Accounts (Groups G,H)	10	70.0	30.0
GROUP TOTAL	40	47.4	52.6

3. Aside from your own feelings, do you think the program was an overall success? _____ YES _____ NO

	# of Surveys Submitted	% YES	% NO
Sales Audit (Groups A,B,C,D)	23	100.0	0.0
Reporting & Control (Groups G,H)	12	83.3	16.7
Customer Accounts (Groups E,F)	9	55.6	44.4
GROUP TOTAL	44	79.6	20.4

4. In your opinion, did you fellow group members pull their fair share of the work load?

	# of Surveys Submitted	%	
Sales Audit (Groups A,B,C,D)	23	34.8	Definitely
		65.2	More Often than Not
		0.0	Frequently did not pull their own
		0.0	Never

	# of Surveys Submitted	%	
Reporting & Control (Groups E,F)	13	69.2	Definitely
		30.8	More Often than Not
		0.0	Frequently did not pull their own
		0.0	Never

	# of Surveys Submitted	%	
Customer Accounts (Groups G,H)	10	70.0	Definitely
		30.0	More Often than Not
		0.0	Frequently did not pull their own
		0.0	Never

	# of Surveys Submitted	%	
TOTAL	46	52.2	Definitely
		47.8	More Often than Not
		0.0	Frequently did not pull their own
		0.0	Never

Table One
Auditor Productivity

	Groups				
	A	B	C	D	TOTAL
Number of employees in group	7	9	7	10	33
Benchmark audits per hour[1]	1.56	1.49	1.57	2.18	1.72
Average audits per hour[2] during test period up to reaching the CTO goal.	2.12	1.69	2.20	2.49	2.13
Percent change in productivity from benchmarks.	36.00	13.40	40.10	14.20	23.80
Average audits per hour[3] during test for entire work week.	1.41	1.75	1.86	2.49	1.95
Post test audits per[4] hour.	1.91	1.78	1.87	1.99	1.89
Average number of CTO hours earned per auditor	4.25	2.06	4.18	2.89	3.35
Percent change of post test compared to benchmark	22.40	5.30	19.50	-8.70	9.90

1. Benchmark audits per hour: The average number of audits performed on a per hour basis by each group over a nine week period prior to the beginning of the first test week.

2. Average audits per hour during test period up to reaching the CTO goal: The average number of audits performed on a per hour basis by each group during the eight week test period. This measure was from the beginning of the week until the CTO goal was reached during the same week.

3. Average audits per hour during test for entire work week: The average number of audits performed on a per hour basis by each group for the entire work week. This measures productivity up to and subsequent to CTO goal achievement.

4. Post test audits per hour: The average number of audits performed on a per hour basis for a four week period subsequent to the test.

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