

ANALYZING THE EFFECTS OF A PERFORMANCE PAY PLAN ON MANAGER
PERFORMANCE IN AN ACCOUNTING FIRM

Sarah Curran McDaniel, B.S.

Thesis Prepared for the Degree of
MASTER OF SCIENCE

UNIVERSITY OF NORTH TEXAS

May 2007

APPROVED:

Cloyd Hyten, Major Professor
Sigrid Glenn, Committee Member
Richard Smith, Committee Member and Chair
of the Department of Behavior Analysis
Thomas Evenson, Interim Dean of the School
of Public Affairs and Community
Service
Sandra L. Terrell, Dean of the Robert B.
Toulouse School of Graduate Studies

McDaniel, Sarah Curran. *Analyzing the Effects of a Performance Pay Plan on Manager Performance in an Accounting Firm*. Master of Science (Behavior Analysis), May 2007, 57 pp., 6 tables, 14 illustrations, reference list, 21 titles.

This study examined the effect of a score card-based performance pay plan in a professional services firm. The plan was implemented in response to a decreasing trend in productivity and a desire for a formal incentive compensation plan. Performance of manager and senior manager accountants were analyzed across two departments over a five year period. A definitive account of the effects of the intervention is limited by the case-study design, but the data does suggest that the performance pay plans used did not adversely affect performances. Design limitations of the plan and future research are also discussed.

Copyright 2007

by

Sarah Curran McDaniel

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	iv
LIST OF FIGURES.....	v
Chapter	
1. INTRODUCTION	1
2. METHOD	10
3. RESULTS	19
4. DISCUSSION	28
APPENDIX	52
REFERENCE LIST.....	56

LIST OF TABLES

	Page
1. Scorecard Scores	46
2. Days in WIP/AR	47
3. Production	48
4. Realization	49
5. Practice Volume	50
6. Number of Employees	51

LIST OF FIGURES

	Page
1. Department Scorecard Scores	34
2. Individual Scorecard Scores	35
3. Department Days in WIP/AR	36
4. Individual Days in WIP/AR	37
5. Department Production	38
6. Individual Production	39
7. Department Realization	40
8. Individual Realization	41
9. Department Practice Volume	42
10. Individual Practice Volume	43
11. Employee Success	44
12. Firm Net Income	45
13. Firm Realization	45
14. Firm Bonus	45

CHAPTER 1

INTRODUCTION

The use of incentive compensation systems to motivate employees and influence performance is not a recent management innovation. Peach and Wren (1992) provided a history of incentive plans that spans centuries. Their analysis showed that the rise of the industrial revolution and emergence of factories increased demand for cost-effective ways to motivate workers to produce more. In response, piece-rate-pay was established in 1778 at firms such as Boulton and Watt, which used incentives to compensate workers in their engine works division. However, piece-rate pay systems slowly diminished in prevalence due to frequent abuses caused by the management practice of demanding ever higher piece-rate quotas for the same pay.

Nevertheless, new trends in the global markets made employee monetary incentive plans a renewed possibility in the early 1980s, among other variable pay plans such as gain sharing, profit sharing and group incentives. As global competition increased and the annual productivity growth rate decreased in the United States, alternative pay systems were increasingly turned to in an attempt to increase worker productivity (Bucklin & Dickinson, 2001).

Among the array of alternative forms of pay plans in business and industry, individual monetary incentives currently abound. Incentive compensation systems take various forms but an essential aspect is that the monetary incentives must be re-earned in each defined period (Kuhn & Yockey, 2003). "A survey of *Fortune 1,000* companies conducted by Lawler et al. (1989) revealed that 87% had some type of individual monetary incentive plan for some of their employees, with 49% reporting coverage for

one to twenty percent of their total work force” (Dickinson & Gillette, 1993, p. 10). The organization wants to establish the tightest link between pay and performance when the company’s goal is to improve production. The best way to achieve this goal is to use monetary incentives (Bucklin & Dickinson, 2001).

The introduction of hourly wages by Henry Ford made pay-for-time the compensation standard it is today (Abernathy, 2000). Yet, when an employee is salaried or paid by the hour, the amount of money received for employment-associated activities remains the same even if outside activities cut into work time (Dickinson & Gillette, 1993). On the other hand, incentive-based pay can increase an employee’s productivity through increasing the employee’s proficiency on the job. Dickinson and Gillette (1993) stated that the amount and duration of work performed is the result of the consequences obtained for engaging in those actions compared to the consequences for engaging in non-work actions. While management has little direct control over the consequences for non-work actions, they can alter the consequences for work actions in many ways including via monetary incentives.

By paying employees based on what they produce and the quality of the product, companies may see significant gains in item output and monetary profits. In a meta-analytic review of 45 studies ranging from 1965 to 2000, Condly, Clark & Stolovitch (2003) analyzed the effects of incentive systems. The meta-analysis inclusion rules were: the research was empirical, the studies took place after 1960 and before 2000, baseline and intervention data were recorded and incentives were used to improve performance. The authors selected nine factors for analysis: location, type of incentive, competition, program duration, teams versus individuals, mental versus manual work,

type of study, quality versus quantity and motivation outcomes. The reviewers found that the use of monetary incentives produced an average performance increase of 22% across settings and tasks.

Behavior analysts have conducted laboratory studies evaluating the effects of incentive pay systems on the performance of various kinds of simulated work tasks completed by adult humans (typically college students). Smoot and Duncan (1997) examined the effects of traditional hourly wages versus pay systems using three different levels of individual monetary incentives: positively accelerating, negatively accelerating and linear. The researchers discovered that all three types of individual monetary incentives increased productivity while hourly wages did not. Similarly, Matthews and Dickinson (2000) examined the effects of three different percentages of incentive pay (0%, 10% and 100%) on the time spent working compared to other available activities. The results confirmed that employees who received incentive pay demonstrated an increase in productive work time compared to employees who were paid as if they were salaried.

According to a review by Bucklin and Dickinson (2001), several factors contribute to the effectiveness of individual monetary incentive systems: the employee's performance is the basis for the incentives, behaviors are specified, incentives are assured (if the employee performs, the compensation will be received) and incentive pay is as immediate as possible. In well-designed incentive plans, employees know what is expected of them and how much progress they are making and pay is based on individual or collective performances rather than on the opinions of managers.

There has been considerable variation in organizational compensation systems, yielding different levels of success (Dixon, Hayes & Stack, 2003). Among the most complex and arguably most effective incentive plans are those that utilize a scorecard to tie pay to performance. Scorecards are collections of performance measures organized into a matrix, allowing computation of a score summarizing the aggregate level of performance during the time period used to collect the data.

In 1986 the Objectives Matrix was introduced by Felix and Riggs, industrial engineers from the University of Oregon Productivity Center (Abernathy, 2000). Daniels (1989) integrated this concept within a scorecard that could be tied to a range of reinforcement systems. In 1990 Kaplan and Norton met with delegates from a dozen companies and developed the Balanced Scorecard which they publicly debuted in a 1992 *Harvard Business Review* article. This was later refined in their 1996 book, *The Balanced Scorecard: Translating Strategy into Action*. Abernathy (2000) reported trying many kinds of measures systems in search of a measurement tool capable of providing a solid basis for tying pay to performance, before eventually adopting the scorecard format. The performance pay system analyzed in this thesis used scorecards that included elements of the Objectives Matrix and the Balanced Scorecard.

Kaplan and Norton's Balanced Scorecard is comprised of four distinct categories to which specific measures can be adapted: financial, customer, internal business processes and learning and growth. Measures in each of these four areas allow the company to objectively discern how well business units and individuals are performing in order to create external value for the customer and increase internal capabilities. Kaplan and Norton's (1996) rationale for choosing the four measurement categories

was to encourage companies to expand their focus beyond only financial measures to include metrics that would help them maintain success over the long term. For example, the learning and growth category was designed to encourage tracking of employee development as well as strategic growth of the organization as a whole. Similarly, customer-oriented measures encourage companies to focus on doing the things that will keep their customers happy and doing business with them over the long term.

Abernathy (2000) designed the Total Performance System, which is comprised of scorecards for measuring performance, effective performance management practices and profit-indexed incentive pay. The performance scorecard is the foundation of Abernathy's Total Performance System and consists of four components: two to seven employee measures that ensure the organization's objective evaluation of each employee's improvement in key areas, a base (the current performance level), a performance goal and priority weights assigned to each measure. The Total Performance System also distributes a percentage of the company's profit tied to each employee's individual scorecard score via profit-indexed performance pay. The role of the manager in this system is to focus on strategic decision making and optimization of worker performance through performance troubleshooting and reinforcing employee behaviors necessary for achieving long term results.

Continuous improvements, cost reductions and exceeding customer expectations must be the goal of every employee in order for a business to remain competitive (Kaplan & Norton, 2001). Most employees are not aware of their organization's big picture and often wonder where their position fits in to the company's mission as a whole. This leads to employees maintaining a limited scope of their job and not looking

beyond the immediate task (Malott, 2003). Present actions can be linked with future goals through a well-designed scorecard (Kaplan & Norton, 1996). Scorecard-based performance pay systems can unite the organization's goals with the employee's goals through directed measures and compensation for achieving results critical to the organization's long-term success.

Several studies have evaluated the effectiveness of scorecard-based pay for performance systems. It should be noted that a major limitation to scorecard-based performance pay studies is the lack of experimental control (i.e. they are mainly controlled field studies or case studies; Dixon et al., 2003). Still, evidence from this research shows that scorecard-based incentive systems are effective in improving or sustaining employee and organization performance.

Abernathy (2001) evaluated the effects of the Total Performance System on the productivity of 4,289 employees of 12 companies across 5 industries (manufacturing, retail, banking, publishing and distribution). In developing each organization's Total Performance System, the companies first created a performance scorecard for the organization as a whole that depicted the businesses' overall strategy and values. Then, performance scorecards were developed for each department in a cascading pattern from top to bottom (i.e. CEO to mailroom employees). Among the twelve companies, the performance scorecard was assigned to either teams, individuals or a combination of both depending on the organization's structure and preference. The performance scorecards were then distributed to every employee on a monthly basis so they could track their own and their company's performance. Summary data showed that average performance measures increased by over 33% across the 12 companies during the first

year. In addition, the data showed that performance improvement was greatest in organizations where the employees had the most direct influence over the scorecard measures.

Porter (2002) analyzed the effects of a performance pay plan on measures of productivity among 78 employees across 3 departments in an accounting firm. These employees were staff and senior level from the tax, audit or accounting services departments. The previous compensation system consisted of annual payouts based on the employee's productivity as measured by accumulated charge hours. Productivity had been decreasing under this plan so management decided to revise it. The modified performance-based pay system consisted of three components: base pay, objective bonus pay and subjective bonus pay. The base pay component was the employee's salary which remained constant despite performance. The objective portion of the employee's bonus pay began when an employee reached or exceeded 91% of their charge hour goal and was paid out two times a year. In addition, a subjective bonus based on how an employee was rated by management was paid out once a year. Productivity under the new system improved in two out of three departments, but the study also revealed that the new system seemed to encourage productivity improvements in the first half of the year, followed by reductions in productivity in the last half of the calendar year.

Shelton (2005) extended Porter's (2002) study by examining performance data under subsequent revisions to the pay plan in the same accounting firm. The baseline incentive system for Shelton's study was the production only performance-based pay system implemented during Porter's study. The compensation system evaluated by

Shelton was scorecard based and included a higher incentive pay opportunity. The scorecard had five components: Base, goal, weight, conversion scale and score and included five measures: participation in continuing education, professional development, employee's available time to work, client satisfaction and production. These measures were weighted at 5%, 5%, 10%, 20% and 60% respectively. Production was weighted heavily due to the production-indexed component of the performance-based pay system. Employees who reached 91% of their production goal were eligible for an incentive payout. The incentive bonus was calculated as follows: the employee's production was multiplied by his/her share of productivity, the result was multiplied by the scorecard score and the result was divided by 100. Incentive bonuses were paid twice a year.

Data analyses showed that productivity levels remained near goal levels in both the baseline phase and in the revised pay plan, despite the fact that productivity was not the sole focus of the revised pay plan (which included other metrics in addition to productivity). Under the scorecard-based plan, scorecard scores improved or remained high throughout the 3 years they were in effect, suggesting that the system was effective in motivating improvements or continued high performance in areas included on the scorecards. However, some problems with the scorecard system were also noted. The staff accountants and senior accountants had little control over the amount of work available to them, and thus may not have been able to improve their productivity significantly. A version of the scorecard-based performance pay plan was also initiated for management-level employees in the same time period. Preliminary data analyzed by Morales, Hyten & Porter (2003) suggested that the more complicated management-

level plan was having a positive effect on the firm as a whole, but no detailed analysis had been conducted that also examined individual performance.

The current case-study evaluated data collected at the certified public accounting firm described above, over a five-year period from 2000 to 2004, and included data collected on 17 managers and senior managers in the audit and tax departments. The impact of the scorecard-based performance pay plan implemented for managers (excluding partners) extends previous research by Porter (2002) and Shelton (2005), who studied the effects of incentive pay arrangements on the performances of lower-level employees of this firm. The performance pay plan in the current study was comprised of a base salary, subjective bonus payout, a percentage of the employee's collections and an objective bonus payout based on the employee's scorecard score and the profitability of the manager's department. The plan shared many features with the Total Performance System developed by Abernathy (2000), including the use of scorecards indexed to profit; however, this company paid out bonus money annually rather than on the monthly schedule used by Abernathy. The inclusion of the subjective bonus plan also distinguished this company's plan from that advocated by Abernathy. Nevertheless, a thorough analysis of performance data may be helpful in understanding the effects of complex incentive pay plans in field applications.

CHAPTER 2

METHOD

Organizational Setting

This study was conducted in a mid-sized regional certified public accounting firm in Dallas, Texas. The firm employed between 80-100 people across a number of departments. The audit, tax and accounting services departments were the three largest revenue-generating departments. This study concentrated on the performance of managers and senior managers in the two largest departments: audit and tax. All full-time employees in both departments were salaried. The audit department's services included financial services, operational and compliance audits, risk mitigation strategies and resolutions, performance measurement forecasts and projections, feasibility studies, Securities and Exchange Commission and other regulatory services, due diligence, internal control reviews, profit and inventory analyses and budgetary and cash flow analyses. Services of the tax department included entity selection; tax controversy services; corporate, partnership and individual tax planning; counseling and preparation; international, federal, state and multi-state tax services; sales tax, franchise tax and payroll tax services; wealth preservation, trust and personal financial planning services; retirement and estate planning; estate administration, including estate tax strategies; tax implications of transactions; representation before tax authorities and tax fraud.

Participants

The audit and tax departments were structured into five tiers of employees: staff, senior, manager, senior manager and partner. The first tier, staff accountant, was the

entry-level position in the firm. These employees charged a low billing rate and were responsible for low-level accounting. Senior accountants, the second tier, had higher billing rates and more responsibility, along with some supervision over staff accountants. Manager and senior manager tier accountants were responsible for their own client projects (billable work) along with overseeing staff and senior accountants. Partners, the top tier of the firm, were responsible for bringing in new business, billing clients and overseeing the most complex accounts. Equity partners were also co-owners of the firm (it is a Limited Liability partnership). The current study focused on the performance of manager and senior manager accountants.

Procedure

The Chief Financial Officer designed and implemented a new performance pay plan for the staff and senior accountant tiers of the accounting firm in 2000 in response to a decreasing trend in productivity at that job level. A plan was also developed for managers and senior managers so that the entire firm below the partner level would have a formal incentive compensation plan. Prior to implementation of this new plan, managers and senior managers were sometimes awarded end-of-year bonuses based on judgments by the partner group. There were no formal criteria for these discretionary bonuses and the amounts were fixed. Some managers received \$3,000 and some senior managers received \$5,000. No formal feedback accompanied this award. Archived data on the performance of individual managers from this time period were limited. The details of the performance pay plan and two subsequent variants are described below.

Performance Pay Plan Version 1

This compensation system was in effect from 2000 – 2001. It consisted of a base salary, subjective bonus payout, a percentage of the manager's collections and an objective bonus payout based partly on the manager's scorecard score. Base salary is the amount of money an individual employee is guaranteed to make that year regardless of performance. Salaries for managers were negotiated at hiring and determined by the going market rate as well as individual qualifications. Throughout all performance pay plans, managers could continue to negotiate base salary raises as they had before.

Scorecard

The employee's objective bonus payout was based partly on the employee's scorecard score at the end of the year. The scorecard was created to ensure employee bonuses were tied to a mix of relevant performance measures across areas thought to be important to the short-term and long-term success of the firm. The scorecard was comprised of six components: measurement categories, metrics in each category, weights, conversion scale, base and goal performance and the score. Example scorecards and computations are shown in Appendix A.

In the scorecards, the base represents a reference level for each measure (sometimes called a baseline, although it may not reflect an actual baseline level of performance). The goal represents the desired performance level for each measure. The conversion scale had thirteen intervals that ranged from -20 to 110, representing different levels of performance (110 being the highest level of performance). The conversion scale offered a standardizing mechanism so that measures with different

dimensions or different levels could be compared using a common scale. Scale intervals intersected with the line items in the scorecard (e.g., production) to produce a matrix of cells. A given level of performance on a particular measure was recorded in a cell, which yielded a conversion scale number for that cell. The weight given to each measure indicated its relative importance for the organization's strategic thinking and focus and was also used in determining an employee's scorecard score. The sum of the weights always equaled 100% (or 1.00). The score for each measure was calculated by determining the appropriate conversion scale score and then multiplying that score by the weight for that measure. Each of the scores were then summed to compute the employee's total scorecard score.

Version 1 scorecards consisted of four metrics for managers and five metrics for senior managers. These metrics were production, days in work in progress (WIP) and accounts receivable (AR; this measure tracked the average time to complete a client job from the beginning of work until the bill was paid by the client), realization, percent of budget and practice volume for senior managers. Production was the percentage of the goal amount of dollars accumulated through billable work. Work was billed in charge hours, which were then multiplied by the employee's billing rate to convert time to a dollar value of the work. In the Version 1 plan, production was not capped on the scorecard, meaning that levels exceeding the 110% of goal would contribute more points to the score. This was not optimal, but was the result of a compromise decision by the executives in the firm. Realization was the percentage of billable dollars that were actually billed to the customer. The goal for the realization metric was 90%, meaning that writing off 10% of the work accumulated to a client account would be

acceptable. Realization is a kind of indirect quality measure in that efficient and effective use of time should result in a higher percentage of billed hours. Days in WIP/AR was an average count of the number of days elapsed from starting a job until the client paid the bill. Reducing this measure would improve cash flow for the firm. Percent of budget measured the year-end performance of each department relative to production goal levels (including staff accountants, senior accountants and all managers in that department). Practice volume was the dollar value of fees generated by accounts managed by senior managers and was designed to encourage senior managers to build their own books of business.

The weights accorded each metric were different for managers and senior managers. In the Version 1 plan, the weights for managers were: Production 50%, days in WIP/AR 15%, realization 15% and percent of budget 20%. The weights for senior managers were: production 35%, days in WIP/AR 10%, realization 10%, percent of budget 30% and practice volume 15%.

Objective bonus payout

In the Version 1 plan, payouts were calculated using a formula that included some risk. This pay at-risk element used a base salary adjusted downward by a certain amount (10% for managers and 20% for senior managers) as the base to which bonus pay was added. This required that individual and department performance were high enough allowing employee's to earn their salary back with an increased upside in potential gains. This system was designed so that managers could, given maximum performance, earn 25% of their base salary in bonus compensation; senior managers could earn up to 40% of their base salary. Payouts were indexed to department

profitability. Department profitability was measured as the net income of a specific department, taken as a percentage of the gross revenue of the department (yielding a profitability percentage). Department profitability percentages yielded profit modifiers via a sliding scale in an indexing table. This modifier was multiplied by the employee's adjusted base salary to yield a bonus opportunity. The share of the bonus opportunity earned by the employee was determined by his/her scorecard score. In the example presented in Appendix A, the salary was reduced by 10% and then 10% of that adjusted salary (\$6,750) was multiplied by the 1.75 modifier obtained from the indexing table based on the department's target net income (profit). This yielded an earning opportunity (\$11,812) of which the employee earned 93.5% (their scorecard score), yielding \$11,044. That figure plus collections was added to the adjusted base salary for a total pay of \$88,545. That payout was \$13,545 above the base salary of \$75,000 and represented an 18.1% incentive over base salary paid. This method of calculating bonus payouts is called profit indexing (Abernathy, 2000) and is intended to reward employee actions and results that lead to high scorecard scores and high department profitability.

Collections

Managers and senior managers could earn additional bonus money based on collections for their accounts (3% of the collected revenue). This was intended to encourage managers to follow up with clients to insure that outstanding bills were paid.

Subjective Bonus

The subjective bonus was an end-of-year payout based on partners' ratings of the manager's performance. The subjective bonus was created to monetarily reward

key performance dimensions not addressed in the objective portion of the compensation system. The survey for the subjective bonus payout consisted of ten dimensions: technical knowledge, non-technical knowledge, administrative compliance, performance on special projects, marketing efforts, client service, alignment with the firm's mission, leadership skills and special recognition. Each dimension was then rated using a four-point scale. The amount of money in the manager bonus pool was 1% of the firm's net income before payments to the partner group. Monies were allocated to managers based on their subjective rating scores.

In 2000, data were collected for 3 managers and 1 senior manager in the audit department and 3 managers and 2 senior managers in the tax department. In 2001 data were collected for 1 manager and 3 senior managers in the audit department and 1 manager and 3 senior managers in the tax department.

Performance Pay Plan Version 2a

A revised plan was implemented for both managers and senior managers in the calendar year 2002. The plan included new scorecard designs and other changes (see Appendix A). The new scorecard included a new scheme for grouping measures into four categories: learning and growth, internal/operational, client service and financial. These categories were based on similar groupings of measures described by Kaplan and Norton (1996).

The learning and growth category for managers and senior managers focused on professional development. The learning and growth metric was called employee success and was designed to measure how well the employees supervised by the managers and senior managers performed their jobs and developed their skills.

Employee success was comprised of five measures: percent of participation in firm activities, percent of available time to work, cross-training, percent mentee achieved goal and employee charge-hour goals reached. This measure was given a 15% weight on the manager scorecard and 10% on the senior manager scorecard.

The internal/operational category focused on the internal operations of the firm and what the employee did to increase the efficiency of these operations. The internal/operational metric for managers and senior managers was the average number of days in work in progress plus accounts receivable (WIP/AR). This was weighted at 15% for both manager levels.

The financial category concentrated on measures that directly affected the firm's revenues. These metrics were production and realization (weighted at 35% and 15% for managers and 35% and 15% for senior managers, respectively) and practice volume (weighted at 10% for both managers and senior managers).

The last category, client satisfaction, was created to evaluate whether external clients were satisfied with the firm's work. The client satisfaction metric was based on an annual client satisfaction survey completed by a sample of external clients. The results of this client satisfaction survey reflected general perceptions of the firm and were used as the client satisfaction metric (20% weight) on all scorecards.

This version of the incentive system also capped the production measure so that 110% of goal was the maximum allowable level. Capping was intended to balance the scorecard and encourage employees to improve their scores in other metrics in order to earn a higher scorecard score overall. The at-risk pay element of the Version 1 plan was eliminated in the Version 2a plan because it was seen as unnecessary. A new

indexing table was constructed, whereby department profitability was indexed to modifiers ranging from 4% to 28%. The manager's base salary was simply multiplied by the modifier indexed to their department's profitability to yield the earning opportunity. The manager's scorecard score in percent was then multiplied by the earning opportunity to compute the bonus dollars to be paid out at the end of the year. Managers and senior managers could still receive bonus dollars from their collections and from the subjective pay system as described in the previous version of the plan. Data for the new plan were collected for 2 managers and 4 senior managers in the audit department and 2 managers and 4 senior managers in the tax department.

Performance Pay Plan Version 2b

This version of the incentive plan was in effect in 2003-2004 and differed from Version 2a in one way: the modifiers in the profit indexing table were adjusted. Two new bands were added to the profit indexing table to decrease the step size between different percentages of department profitability. Profit percentages of 52.2% and 57.5% were added, resulting in the increased incentive pay of two base pay modifiers of 6% and 10%, respectively. Appendix A illustrates this change. This change made it easier for managers to earn more bonus money because the plan was sensitive to smaller increases in department profitability. This adjustment was made because department profitability tended to remain at approximately 50%, and was harder to improve than initially anticipated. In 2003 data were collected for 2 managers and 3 senior managers in the audit department and 1 manager and 4 senior managers in the tax department. In 2004 data were collected for 2 managers and 1 senior manager in the audit department and 1 manager and 4 senior managers in the tax department.

CHAPTER 3

RESULTS

Scorecard scores, days in WIP/AR, production and realization percent, percent employee success and practice volume were measured and compared from January 2000 through December 2001 (Version 1 plan), January 2002 through December 2002 (Version 2a plan) and January 2003 through December 2004 (Version 2b plan). The data are shown by department/level and on an individual employee basis by department (audit or tax) and level (manager or senior manager). Tables 1- 5 show the individual participant data displayed in Figures 1- 5. Figures show average measures by manager level in each department across years, as well as individual data by year. Employee numbers were assigned to protect the confidentiality of the participants.

Scorecard Scores

Figures 1a.1, 1b.1, 1c.1 and 1d.1 depict the average scorecard score per year for each department/level. Figures 1a.2, 1b.2, 1c.2 and 1d.2 show each individual employee scorecard score from 2000 to 2004.

Audit Department Managers

Figure 1a.1 shows that from 2000 to 2004 mean scorecard scores for audit department managers increased from 83 to 95, a 15% improvement overall. Figure 1a.2 and Table 1a show the scorecard scores per year for each manager in the audit department. Employee 1's scorecard score remained high during the employment period of 2002 to 2004. Employee 4 showed a 56% increase in scorecard scores, from 55 in 2000 to 86 in 2001. Employee 5 earned a scorecard score of 96 in 2000, then was promoted to senior manager in 2001. From 2002 to 2004, Employee 13's initial

scorecard score was 82, followed by 2 years of scores in the low 90s. Employee 14's scorecard score was 98 in 2000, and in 2001 the employee was promoted to senior manager. In sum, audit managers who were in the position for more than one year showed improvement in scorecard scores.

Audit Department Senior Managers

In 2000 and 2001 the average scorecard scores for senior audit managers were 79.5 in 2000 and 88 in 2001; however, scores decreased in 2002 under the Version 2a plan. Mean scores increased again under the Version 2b plan (although the perfect score in 2004 reflects data from the sole senior manager that year). Figure 1b.2 and Table 1b show the scorecard scores per year for each senior manager in the audit department. Two employees (5 and 14) had been managers in 2000 and each showed a lower scorecard score after being promoted to senior manager. The employees (12 and 17) with the two lowest scorecard scores left the firm after one year.

Tax Department Managers

Figure 1c.1 shows mean scorecard scores for tax managers in the low 90s under the Version 1 plan, followed by a decrease under Version 2a and subsequent recovery under Version 2b. Managers with scorecard scores below 85 left the firm after only one year; two of those managers worked under the Version 2a plan. Those with scores above 85 remained with the firm or were promoted.

Tax Department Senior Managers

Mean scorecard scores for tax Department senior managers were generally below the scores of tax managers. The senior manager (8) with the lowest score left the firm after one year of employment. Those who had previously been managers (16 and

21) fared worse as senior managers, as judged by scorecard scores. The highest mean score was obtained in the second year under the Version 2b plan, but this was below the mean for the tax managers.

Days in WIP/AR

Figure 2 (a through d) and Table 2 shows data for days in WIP/AR. The graphs use an inverted scale of 200 to 0 days. Using this scale, a high bar on the graph means fewer days, which translates into better performance.

Audit Department Managers

This measure was weighted at a constant 15% across years for the managers. Figure 2a.1 shows that under the Version 1 plan, this measure did not approach goal levels. In 2002-2004 (Version 2a and 2b) this measure attained goal level once and was closer to goal than in 2000 and 2001. Figure 2a.2 and Table 2a show the days in WIP/AR per year for each manager in the audit department. Only Employee 1 regularly approached goal levels on this measure, although Employee 13 improved in the final two years (2003 and 2004).

Audit Department Senior Managers

The weight for this measure on the scorecard increased from 10% in plan Version 1 to 15% under Versions 2a and 2b for senior managers. Under the Version 2 plans, means for this measure attained or exceeded goal levels. Individual performance was largely consistent with the mean performance levels.

Tax Department Managers

Figure 2c.1 shows that mean days in WIP/AR for managers in the tax department approached goal only in 2000; mean performance was far below goal for the remaining

years for this group. Individual data showed that performance approached goal levels only for managers 16 and 21 in 2000.

Tax Department Senior Managers

Figure 2d.1 shows that senior tax managers as a group approached goal levels more consistently across all plan versions than did the tax manager group. Mean performance was lowest in 2003, with three of four senior managers showing worse performance than in the previous year. Nevertheless, the performance of the tax senior managers was below that of audit senior managers on this measure for the last three years.

Production

Production was measured from 0% to 130%, with higher percentages indicating better performance in approaching goal levels for dollars of work potentially billable to the clients. Production percent is shown along the y-axis of the graph. Production of 100% was considered goal performance; thus, production levels could and did exceed goal levels. Figures 3a.1, 3b.1, 3c.1 and 3d.1 depict the average production percent per year for each department/level. Figures 3a.2, 3b.2, 3c.2 and 3d.2 show each individual employee's production percent. Production data were available from archived files for the 1999 year (under the old discretionary bonus plan prior to the Version 1 performance pay plan) for Employee numbers 5, 7, 14, 16, 21, 30 and 31; therefore, a comparison can be made between the effects of these very different pay plans on production data.

Audit Department Managers

The mean production level in 1999 was 86.6% of goal, the lowest level observed for this group under any compensation plan. Mean production under the Version 1 performance pay plan, weighted at 50% for managers, exceeded or was just below goal. The weight for production was reduced to 35% in subsequent scorecards, yet production levels approached or exceeded goal for this group.

Figure 3a.2 and Table 3a show production per year for each manager in the audit department. Two managers (5 and 14) improved their production levels substantially in 2000, and they were both promoted to senior managers in 2001.

Audit Department Senior Managers

Figure 3b.1 shows that the 1999 production level for Employee 30 was 66.9% of goal, the lowest level seen among this group. In 2000, under the Version 1 performance pay plan, production increased to 86% and this person was promoted to partner the following year. Senior audit managers exceeded goal levels of production every year after 2000 with the exception of 2002. As shown in Figure 3b.2 and Table 3b, three new senior managers (6, 12 and 17, each hired from outside the firm) performed well below goal levels in their first year and these low numbers decreased the mean for 2002.

Tax Department Managers

Figure 3c.1 shows that the average production for managers in the tax department was 85.8% in 1999 and improved to 89% under the Version 1 performance pay plan in 2000. Thereafter, the average for tax managers approached or exceeded the goal production level every year.

Tax Department Senior Managers

Figure 3d.1 shows that mean production levels for this group never exceeded the goal level, unlike the managers in the same department. Production levels changed little from 1999, though an increasing trend in average production appears in the last two years under the Version 2b plan. Figure 3d.2 and Table 3d show that the increasing trend in production per year occurred for Employees 7, 16 and 29 in the last two years. Employee 21, however, showed a steadily declining trend in production levels from 2001-2004. Employee 8 produced the fewest production dollars in the first year of employment and was not retained thereafter.

Realization

Realization was measured on a scale of 0% to 100% with 100% indicating that all of the chargeable hours produced by the employee were billed to clients. The goal level was 90%. Realization was weighted at 15% for managers and 10% for senior managers. Realization data were available from archived files for the 1999 year (under the old discretionary bonus plan prior to the Version 1 performance pay plan) for Employees 5, 7, 14, 16, 21, 30 and 31.

Audit Department Managers

Figure 4a.1 shows that mean realization percentage was below goal in 1999 and under the Version 1 plan, but trended closer toward goal levels in the last two years. Improvement trends were also evident in the individual data for Employee 1 and 4, as well as for Employee 5 and 14 who continued to improve realization after promotion to senior managers.

Audit Department Senior Managers

Senior manager 30 had 82% realization under the discretionary bonus plan in 1999; in 2000 (under the Version 1 performance pay plan) realization increased to 88%, only 2% from goal level. Mean realization for this group attained or exceeded goal level from 2002 - 2004. The high realization for the group was from Employee 26 (97% in 2004), whose realization had been increasing across three years of employment from a low of 68% (an improvement of 39 points).

Tax Department Managers

Figure 4c.1 shows that average realization for tax managers was below goal at 88.5% in 1999. Mean realization percentages exceeded goal level in every year under the performance pay plans. The peak in the mean (98% in 2001) was due to Employee 16 whose performance had been steadily improving across three years.

Tax Department Senior Managers

Figure 4d.1 shows that the lowest mean realization was 91% in 1999. Senior managers were the only employee group to start above goal in realization in 1999 under the old bonus program. Individual data show that this was due to Employee 31 who scored 94% realization in 1999. This employee was promoted to partner two years later. Senior managers continued to exceed goal levels under the performance pay plans with even higher mean realization levels. Realization for Employee 7 went from 88% in 1999 to realizations 101% and 99% in the years 2002-2004, an increase of 11-13 points.

Practice Volume

Practice volume was measured from \$0 to \$400,000. This measure of the senior manager's book of business was weighted at 15% on senior manager scorecards in the

Version 1 plan, and only 10% under Version 2a and 2b. Figures 5a.1 and 5b.1 depict the average practice volume dollar amount per year for the audit and tax senior managers. Figures 5a.2 and 5b.2 show each department's individual employee practice volume dollar amount. This measure proved to be the most variable among employees and performance was so far below goal levels for most senior managers that the base levels on the scorecards (the performance level that yielded 0 scorecard points) was reduced from \$100,000 in Version 1 to \$50,000 in Version 2a and 2b so as not to penalize those with low numbers in this measure. This floor prevented negative points from accumulating in the scorecards. This decision was made because building a book of business proved to be harder for senior managers than thought originally, even though a large book was considered a prerequisite for becoming a partner. Only two senior managers (30 and 31) exceeded even \$300,000 of business, and those employees were promoted to partner in 2001.

Employee Success

Employee success, the rollup index of several measures of staff accountant and senior accountant performance in the departments, was measured from 0% to 100%. This measure was only recorded on Version 2a and 2b scorecards and was weighted at 15% for managers and 10% for senior managers. Figures 6a.1 and 6b.1 depict the employee success percent per year for each department. Employee success is a department level measurement; managers and senior managers received the same score on their scorecards for this measure. It can be seen that the employee success measure improved across the three years within each department. In the audit department, this measure attained goal level in 2004.

Firm-wide Measures

Figures 7, 8 and 9 show three measures reflecting outcomes at the level of the entire company. These measures are worth examining because they may be, in part, due to performance changes that occurred under the performance pay plans. These measures reflect the contribution of all departments and all levels of employees. It is important to note that performance pay plans with a different structure were in effect for senior accountants and staff accountants (described in Shelton, 2005).

Figure 7 shows the net income (before payments to the partner group) from 1993-2005. This measure is a firm-wide profitability measure. Profits increased substantially in the years 2001-2005 over prior years. In terms of personnel, the firm actually became smaller from 2002-2005 (going from 99 FTE to 81 FTE) so the increase in profits was not a simple function of more professional staff.

Figure 8 shows firm-wide realization through 2005. Realization improved in 2000 and remained above the 90% goal level thereafter. With high realization percentages, more work was billed to clients, increasing net income as shown in Figure 7.

Figure 9 shows average annual dollars paid out in bonuses to all professional staff (from senior accountants to senior managers). Payouts showed an increasing trend with large increases in 2004 and 2005. This timeframe includes a year (2005) not included in Figures 1-6. The Version 2b performance pay plan was in effect for managers and senior managers from 2003-2005, with its revised indexing table that resulted in increases in bonus dollars at some levels of department profitability.

CHAPTER 4

DISCUSSION

Two primary questions may be answered by the current data. First, did the plans improve performance and, second, were there differences in effects of the different plan types? Regarding the first question, a definitive account of the effects of intervention is limited by the case-study design. Even if additional baseline data (prior to implementation of the Version 1 plan) had been available, the AB research design limits interpretations. Large and consistent differences between measures from the baseline and any of the performance pay plan versions might have increased the ability to attribute changes to the plans; however, no such outcomes were observed.

In addition, several potential confounding variables exist that preclude strong conclusions. For example, employee turnover (resulting in an ever-changing pool of people working under the plans, some new and some more experienced), practice or learning effects for multi-year incumbents, changing client bases, variations in the nature of work, other compensation plans in effect for other personnel or changes in policy or procedures within departments all may have contributed to the observed changes in performance.

In addition only one year of true baseline data was available for only production and realization data at the level of the individual. The cumulative effect of these design limitations preclude drawing strong conclusions about the effects of the performance pay plans versus the previous discretionary bonus plans. Future investigations might use withdrawal, a multiple baseline or a group comparison design to isolate the effects

of the performance pay plans sufficiently to determine their effects relative to conventional compensation plans.

Although design factors limit interpretations of the current results, the firm-wide data showed that substantial improvements in company profitability were correlated with the implementation of the performance pay plans. These data are consistent with an effect of a plan designed to improve production and realization; performance metrics known to be drivers of profitability. Improvements in these two measures would result in increased revenue for the firm and, as long as costs were efficiently controlled or held constant, net profit measures would increase.

Firm-wide realization data showed a sustained increase in realization percentage after the performance pay plans went into effect. In fact, the individual and group mean realization outcomes showed that this measure improved either immediately or across the years of the performance pay plans. Managers and senior managers were the only groups held accountable for realization as part of a performance pay plan (it was not a part of the staff and senior accountant performance pay plan).

Production measures also showed improvements over 1999 levels for both departments by 2003-2004. Improvements in these performance metrics may have contributed to improved profitability of the firm. The chain of evidence is not complete though, because the performance of the partner group during these years was not analyzed and may also have contributed substantially to the firm's overall improvement. Furthermore, the problem of attributing the improvements in company outcomes to improvements in performance measures is compounded by an inability to convincingly relate those performance improvements to the performance pay plans themselves.

Do the data from the managers and senior managers reveal new information about scorecard-based performance pay plans in design or operation? There were few apparent differences between the Version 1 and Version 2 plans on the measures examined. It is true that the best performance levels across the measures were seen most often under the last plan (Version 2b); by 2004, five years after initial implementation and after several adjustments, performance across most measures was very high. But, in some cases performance measures had been trending upward for several years. It is possible that the later versions of the performance pay plan were superior to Version 1, but sequence effects also may have contributed to the observed improvements. In other words, Version 2 may have been more effective because Version 1 preceded it. A research design utilizing counterbalanced sequences might permit a better analysis of such potential order effects. Because changes in the pay plans were developed in response to changing organizational priorities, and were not implemented according to a research design, this comparison was not possible.

There were differences in the performances of the employees in the two departments, as well as between performances of the managers and the senior managers. The scores of audit managers, as a group, steadily improved more than any other group. The single highest scorecard score was produced within that same department by Audit Senior Manager 26. The tax department fared less well in many measures, and their senior managers produced the lowest average scorecard scores. Differences between departmental performance data may reflect differences in the nature of the work (i.e., conducting audits versus completing individual tax returns) or, because production data was the high-value data that was low for tax senior managers,

it may reflect differences within the departments in how chargeable work was allocated to different job levels. In any case, departmental differences suggest that performance pay plans need to account for unique properties or practices of different business units and either adjust the plans or department practices in order to assure the best fit between incentive plans and the contexts in which they are implemented.

In general, managers often had higher scorecard scores than senior managers. This may be due to the addition of the Practice Volume metric on the senior manager Scorecard. Under the Version 1 plan, performance on this metric was so poor that it subtracted points from scorecard totals for most senior managers. Under Version 2, performance remained so low that Practice Volume did not add points to the scorecard for most people (subtraction of points was blocked by the Version 2 design). A measure yielding a pattern like this across years indicates that it may be beyond the control of the performers or that performers don't have the skill sets to affect it (Abernathy, 2000). In any case, steps should be taken to address the causes of the poor performance or the metric should not be included on the scorecard.

The Version 2 scorecards included the rollup employee success metric, a measure that improved substantially across its three years in effect. Because it was a subsidiary scorecard with 70% of its weight emphasizing production-related measures for the staff and senior accountants, this improvement may reflect improved production management by the managers and senior managers in each department. However, employees who were directly responsible for production in those departments were also operating under their own incentive pay plans (analyzed in Shelton, 2005) and, thus, it is difficult to attribute improvement to the actions of the managers and senior managers.

In addition, there is no direct evidence of specific steps taken by managers to promote performance improvement at the lower levels in their departments. Records of management actions were not produced, so it is not possible to link changes in managerial practices to the outcome data presented here.

The Version 2b plan also made it possible for managers and senior managers to earn more bonus money for smaller changes in department profitability. This may account for the firm-wide increase in average bonus dollars seen in Figure 9. This adjustment was made to increase payouts and thus attract and retain good employees in an industry where there is intense competition for professionals. It was deemed a reasonable change because no department had been able to improve its profitability (as measured by the particular net income metric) to projected levels. It is not clear whether that failure represented problems with the profitability metric, or with the failure of actions taken to improve department profitability.

The firm-wide data indicated that the company did well financially while the performance pay plans were in effect. Did individual employees fare so well? Bonus dollar data showed that employees earned increasing amounts of bonuses, especially while Version 2b plan was in effect. But the plans may have influenced employment decisions for people as well. Several instances in which new hires who performed poorly in their first year did not continue their employment with the firm suggest that the plans may have selected against low performers. It cannot be determined from the available records whether these employees resigned or were terminated by the firm. Those employees who performed poorly in their first year but remained with the firm showed improved performance. It may be that performance pay plans have complex

effects on hiring and retention decisions made by employers as well as employees. For this reason, it would have been desirable to have obtained opinions about the plans from the participants in this study.

Data from Shelton (2005) regarding the performance of staff and senior accountants (below the levels of the managers and senior managers) also showed high levels of production in the years between 2000-2004. Staff and senior accountants operated under two different performance pay plans, but both emphasized production heavily. These findings, together with the data in the present study, suggest that, at a minimum, the performance pay plans used in this firm did not adversely affect measured performances. It is possible that the plans were responsible for the high performance levels observed, but a definitive conclusion awaits further, more controlled analysis. Conducting such research in business settings is difficult given the many real-world contingencies that impede the use of powerful experimental designs. Case studies of the type presented here may nevertheless be useful because they document how multiple aspects of performance change over time. Perhaps future researchers may look to these studies to assist in identifying useful measures and analytic methods to use in more controlled comparisons.

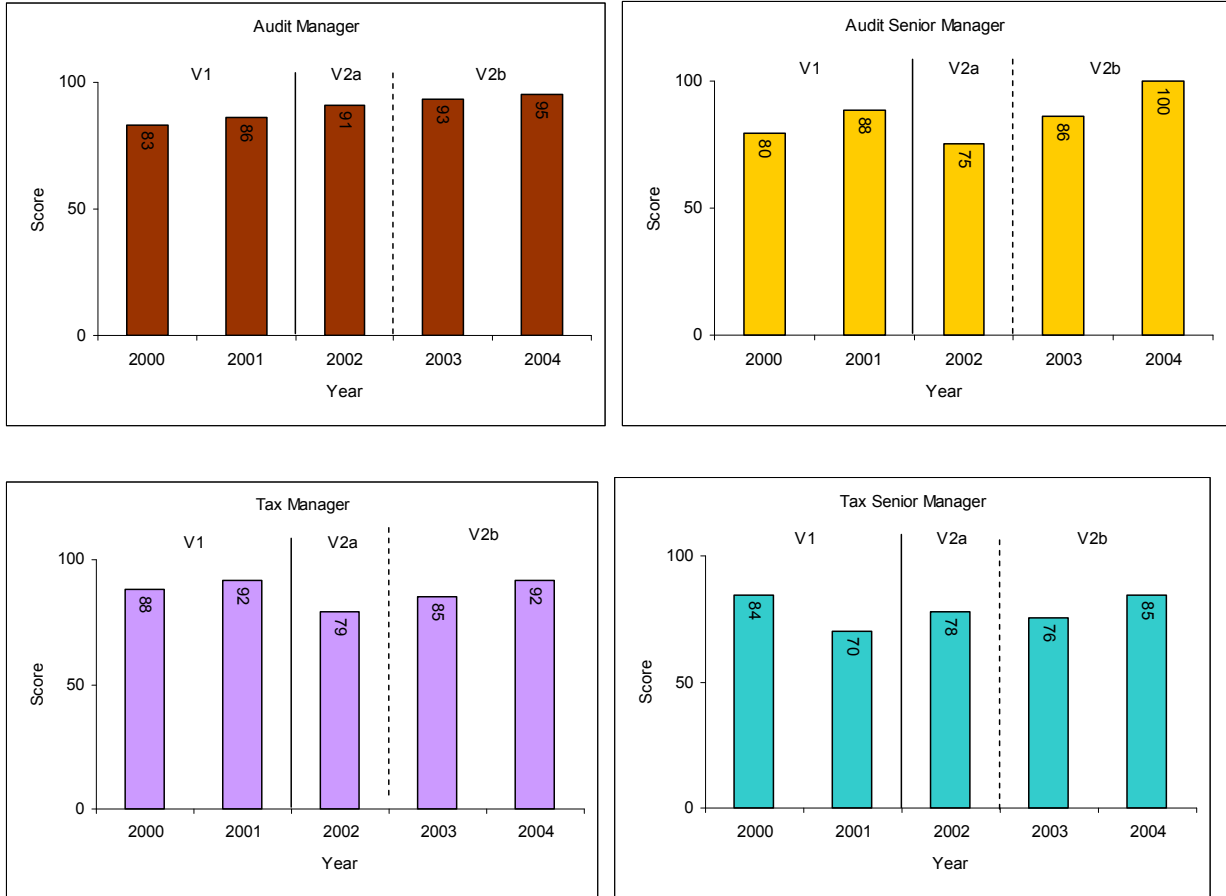


Figure 1. Average scorecard score per year for audit/tax managers/senior managers.

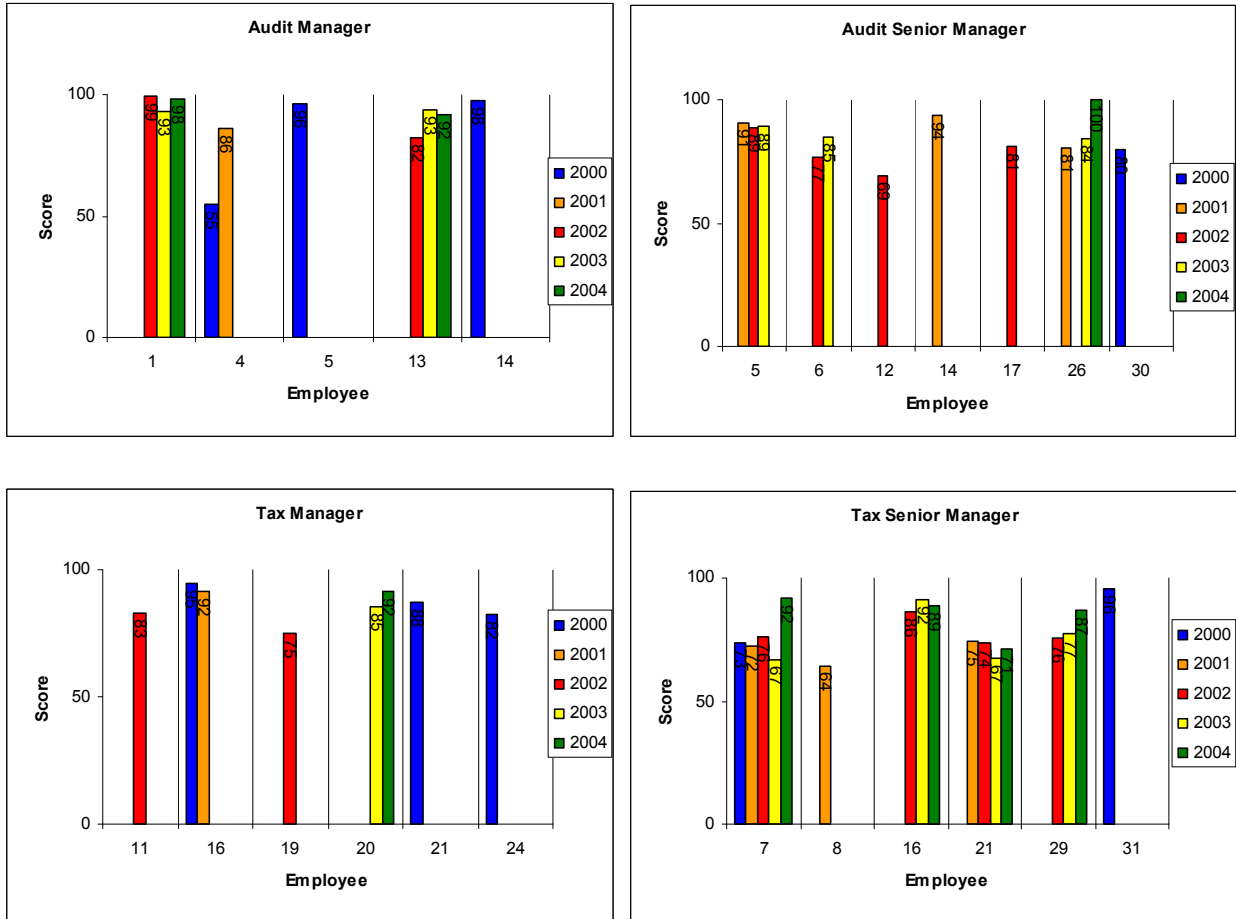


Figure 2. Scorecard scores per year for each audit and tax manager/senior manager.

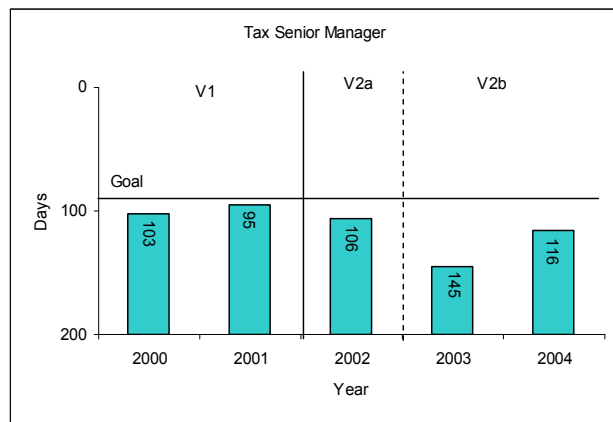
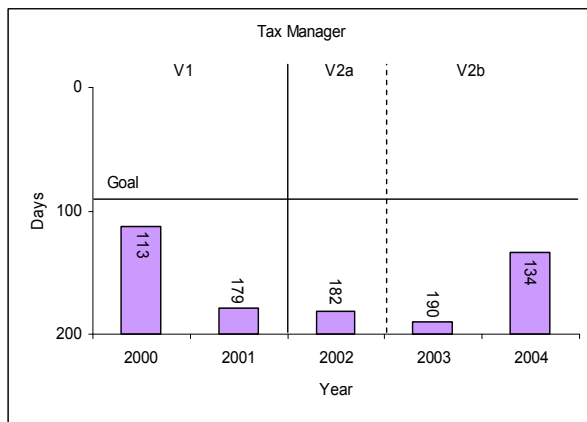
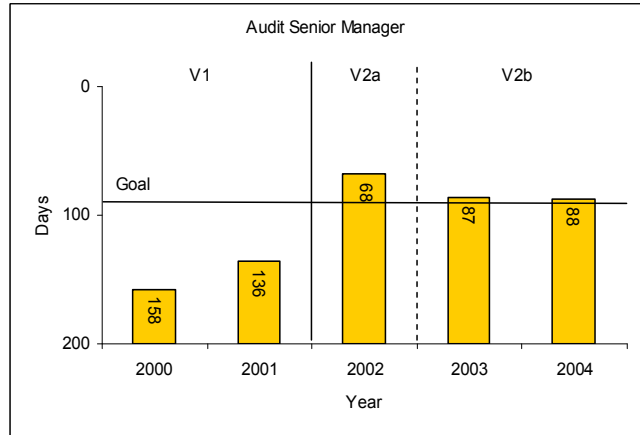
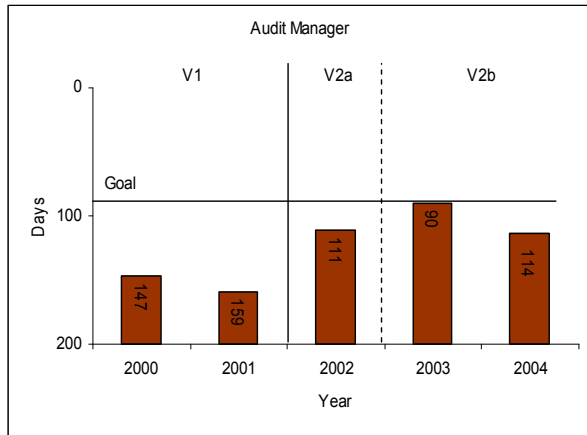


Figure 3. Average days in WIP/AR per year for audit/tax managers/senior managers.

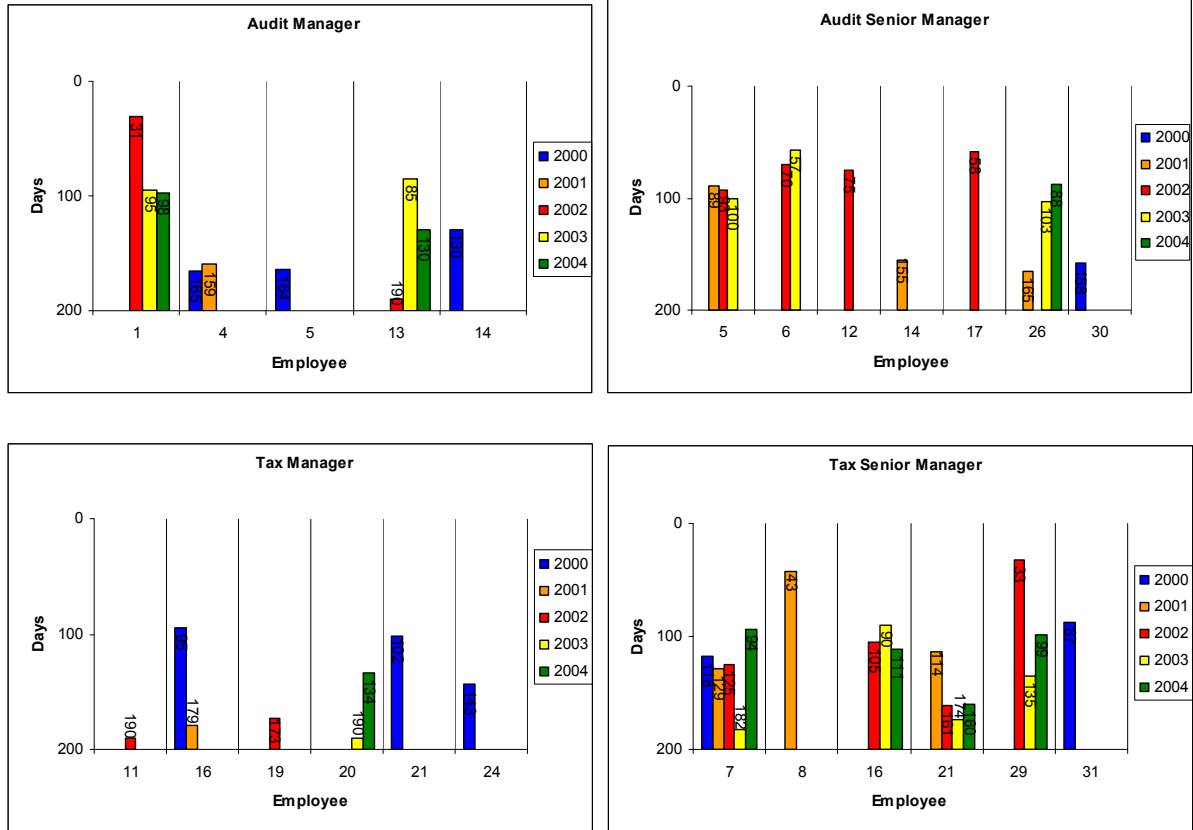


Figure 4. Days in WIP/AR per year for each audit and tax manager/senior manager.

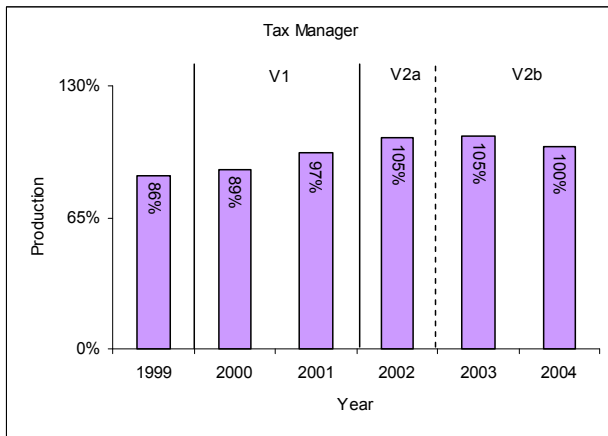
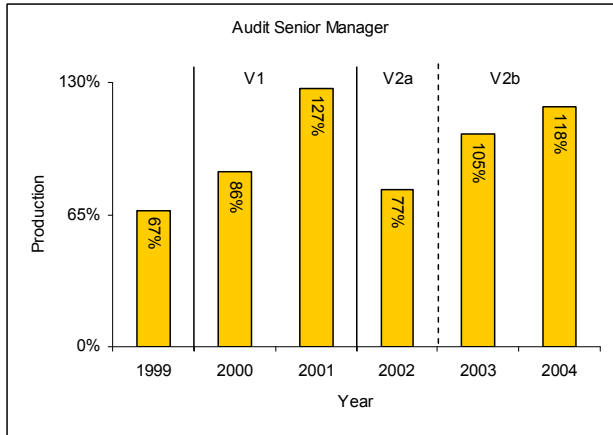
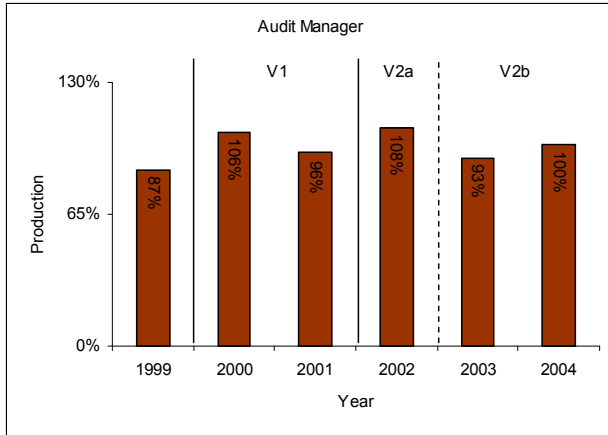


Figure 5. Average production per year for audit/tax managers/senior managers.

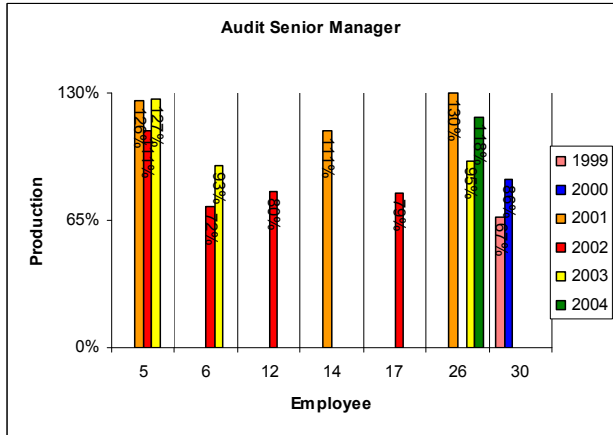
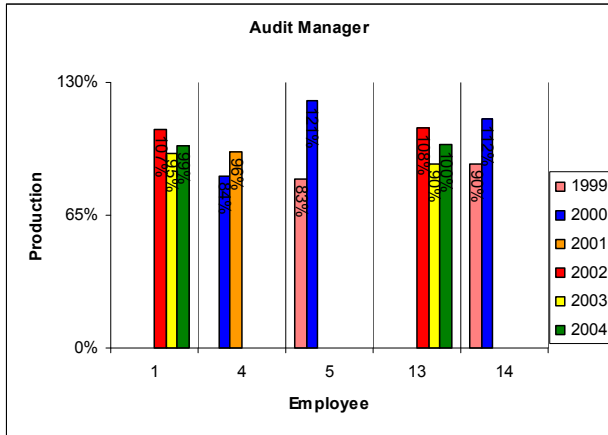


Figure 6. Production per year for each audit and tax manager/senior manager.

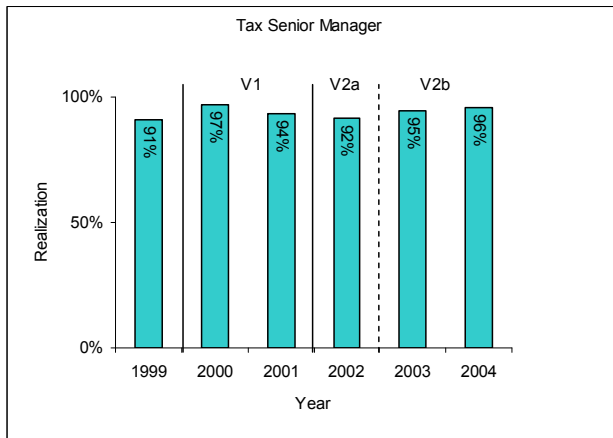
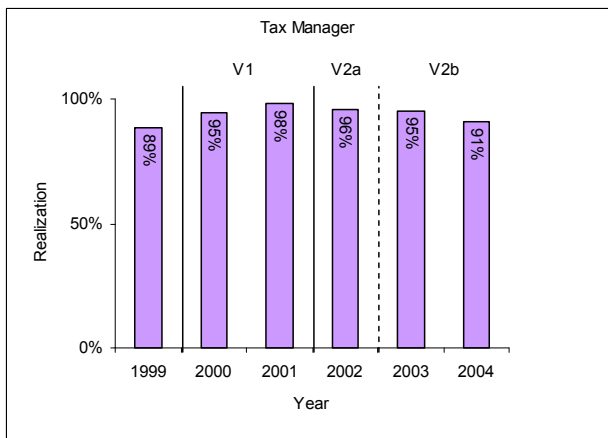
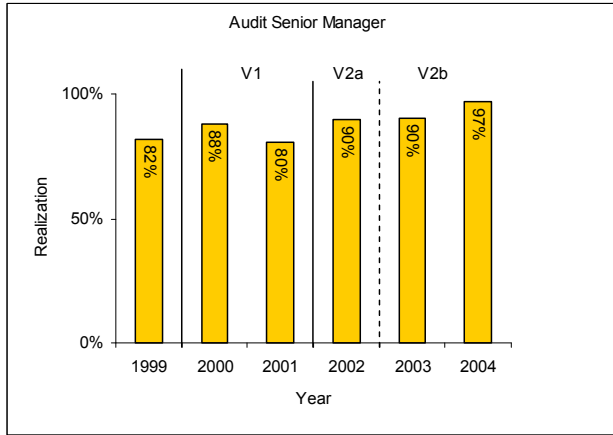
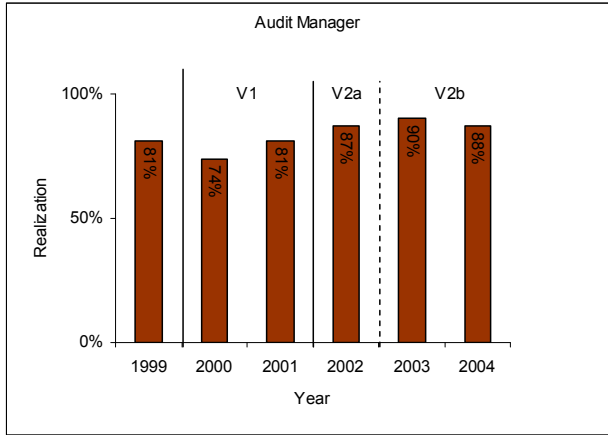


Figure 7. Average realization per year for audit/tax managers/senior managers.

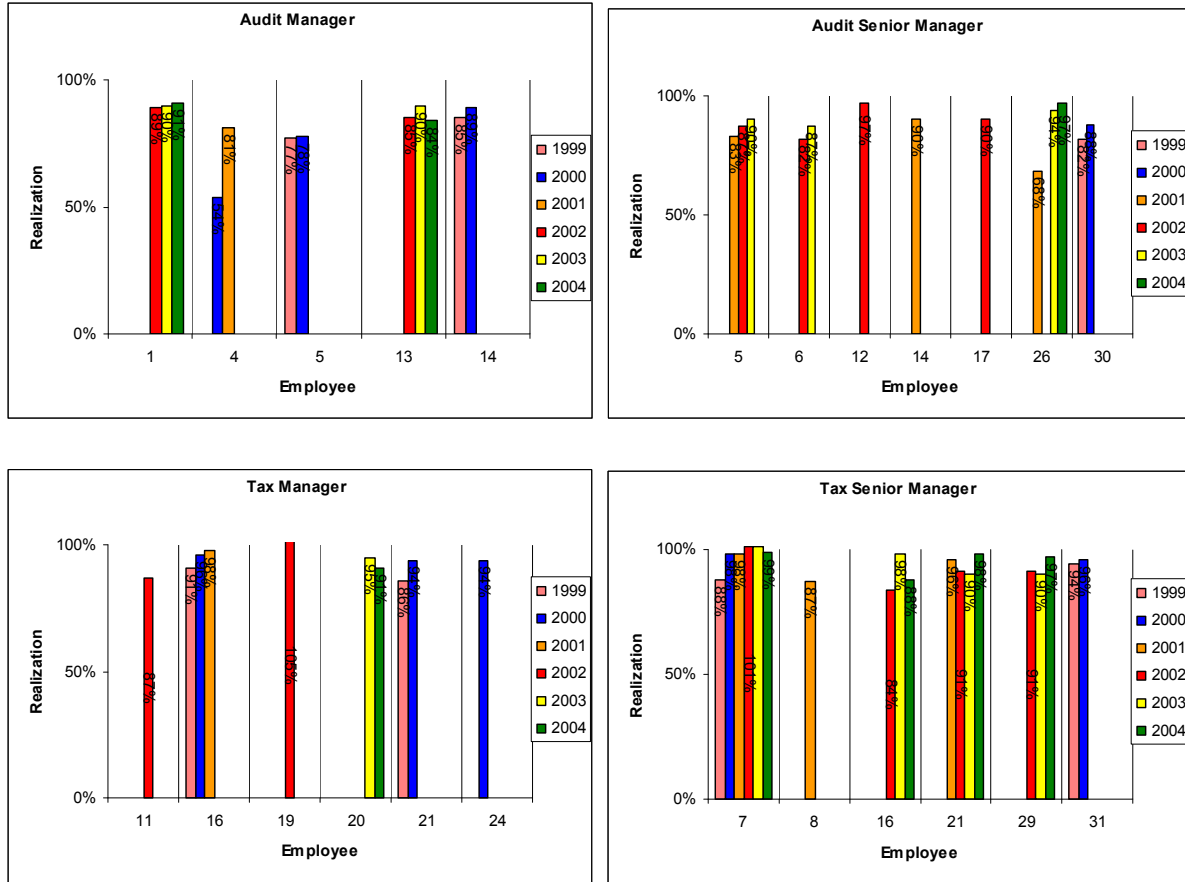


Figure 8. Realization per year for each audit and tax manager/senior manager.

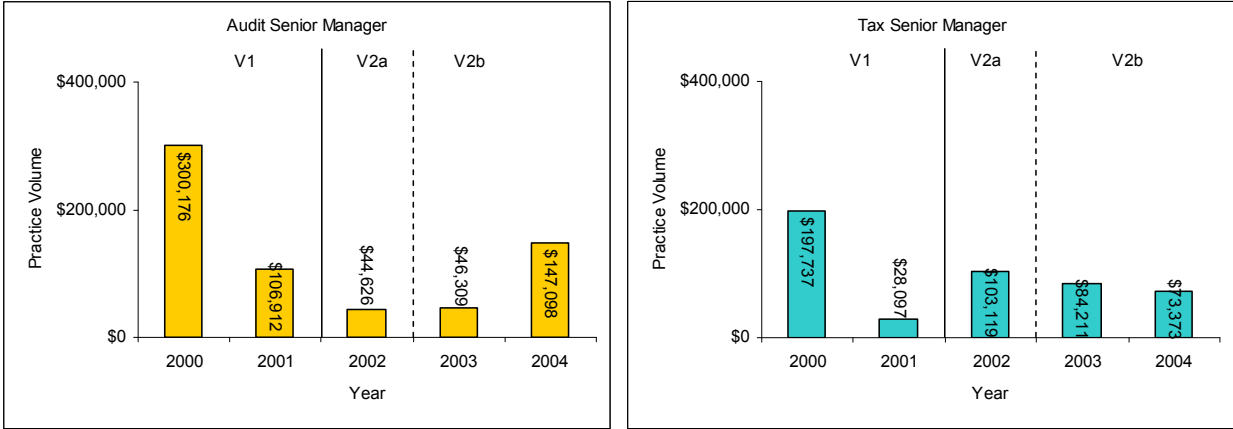


Figure 9. Average practice volume per year for audit and tax senior managers.

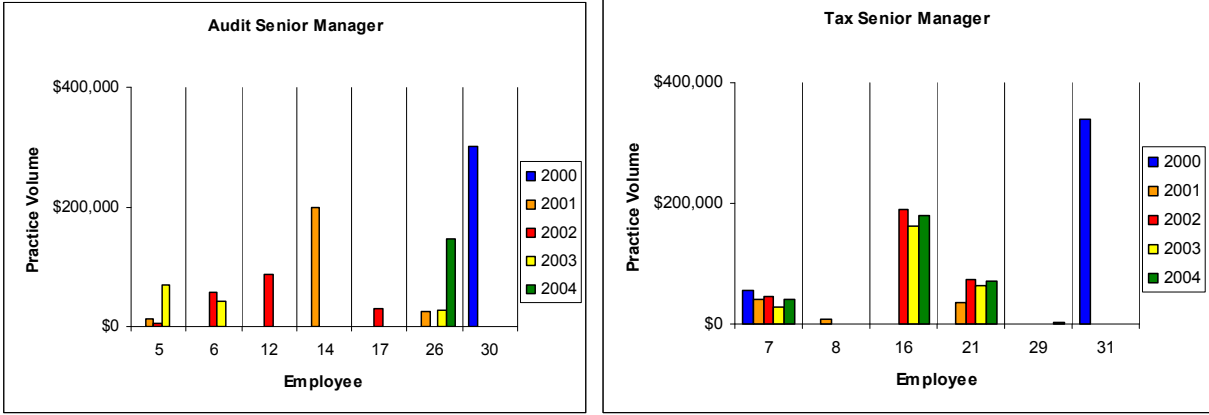


Figure 10. Practice volume per year for each audit and tax senior manager.

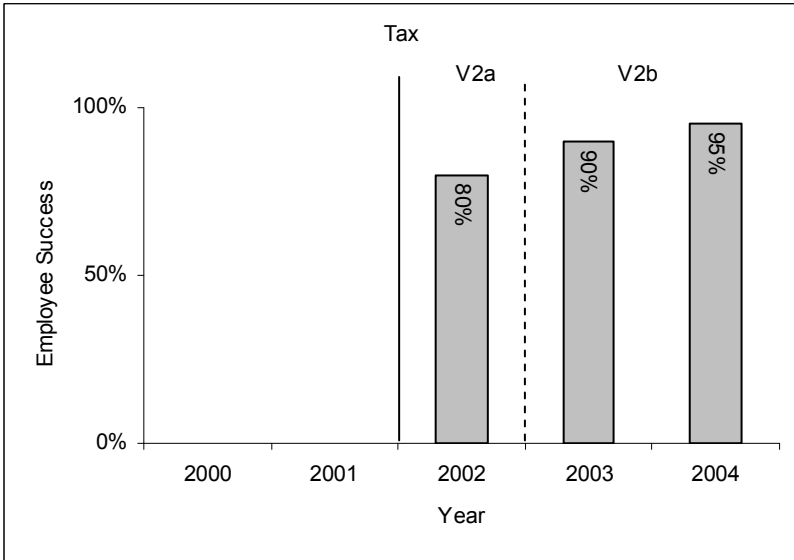
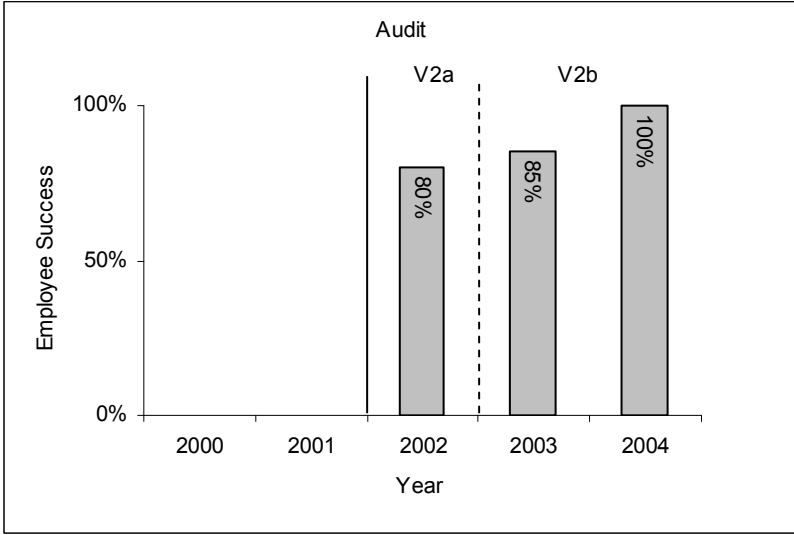


Figure 11. Employee success per year for the audit and tax departments.

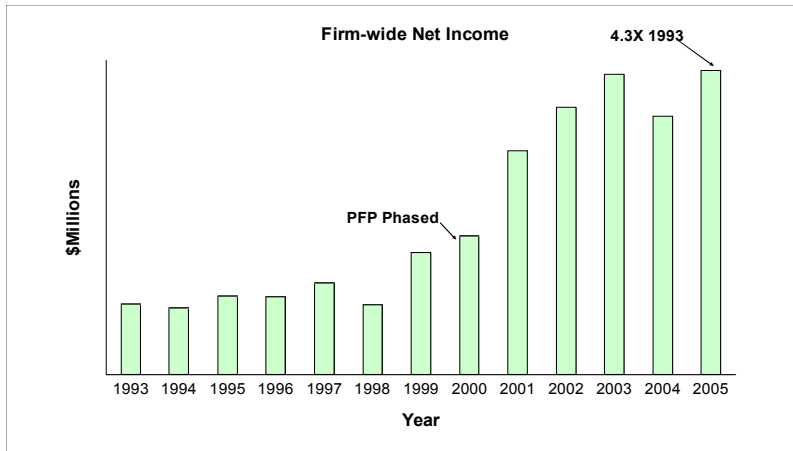


Figure 12. Net income per year for the firm.

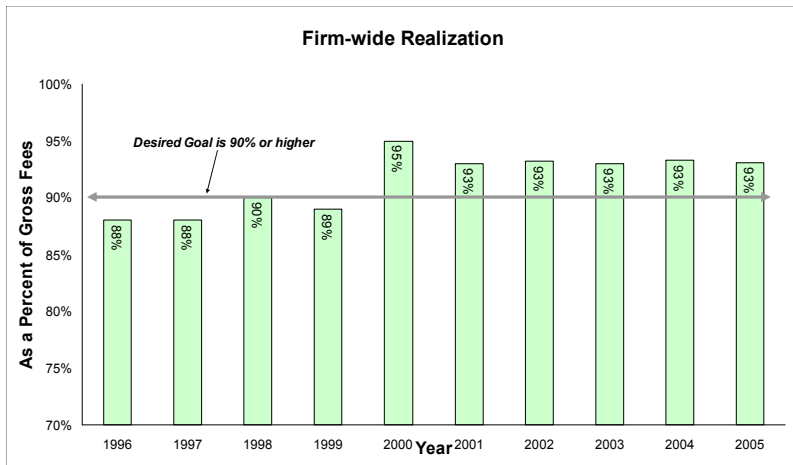


Figure 13. Realization per year for the firm.

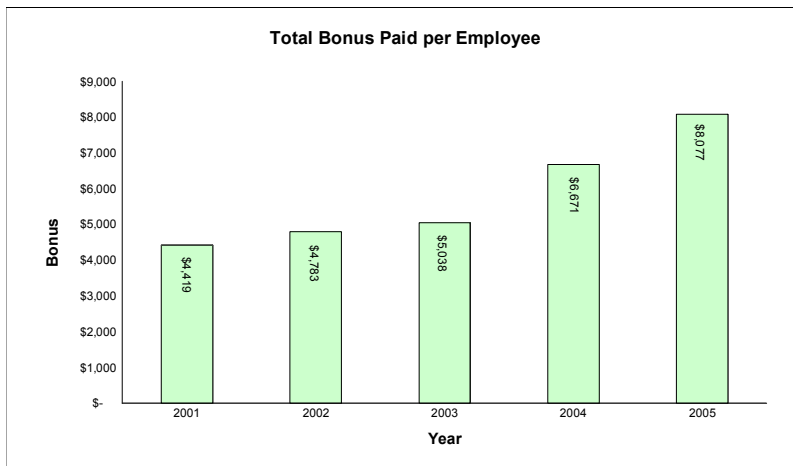


Figure 14. Average total bonus paid to each employee per year.

Table 1

Scorecard Scores per Year for Each Audit and Tax Manager/Senior Manager

Audit Manager Scorecard					
Year	Employee #				
	1	4	5	13	14
2000		55	96		98
2001		86			
2002	99			82	
2003	93			93	
2004	98			92	

Audit Senior Manager Scorecard							
Year	Employee #						
	5	6	12	14	17	26	30
2000							80
2001	91			94		81	
2002	89	77	69		81		
2003	89	85				84	
2004						101	

Tax Manager Scorecard						
Year	Employee #					
	11	16	19	20	21	24
2000		95			88	82
2001		92				
2002	83		75			
2003				85		
2004				92		

Tax Senior Manager Scorecard						
Year	Employee #					
	7	8	16	21	29	31
2000	73					100
2001	72	64		75		
2002	76		86	74	76	
2003	67		92	67	77	
2004	92		89	71	87	

Table 2

Days in WIP/AR per Year for Each Audit and Tax Manager/Senior Manager

Audit Manager Days in WIP/AR					
Year	Employee #				
	1	4	5	13	14
2000		165	164		130
2001		159			
2002	31			190	
2003	95			85	
2004	98			130	

Audit Senior Manager Days in WIP/AR							
Year	Employee #						
	5	6	12	14	17	26	30
2000							158
2001	89			155		165	
2002	93	70	75		58		
2003	100	57				103	
2004						88	

Tax Manager Days in WIP/AR						
Year	Employee #					
	11	16	19	20	21	24
2000		95			102	143
2001		179				
2002	190		173			
2003				190		
2004				134		

Tax Senior Manager Days in WIP/AR						
Year	Employee #					
	7	8	16	21	29	31
2000	118					87
2001	129	43		114		
2002	125		105	161	33	
2003	182		90	174	135	
2004	94		111	160	99	

Table 3

Production per Year for Each Audit and Tax Manager/Senior Manager

Audit Manager Production					
Year	Employee #				
	1	4	5	13	14
1999			83%		90%
2000		84%	121%		112%
2001		96%			
2002	107%			108%	
2003	95%			90%	
2004	99%			100%	

Audit Senior Manager Production							
Year	Employee #						
	5	6	12	14	17	26	30
1999							67%
2000							86%
2001	126%			111%		143%	
2002	111%	72%	80%		79%		
2003	127%	93%				95%	
2004						118%	

Tax Manager Production						
Year	Employee #					
	11	16	19	20	21	24
1999		95%			87%	
2000		99%			84%	83%
2001		97%				
2002	127%		82%			
2003				105%		
2004				100%		

Tax Senior Manager Production						
Year	Employee #					
	7	8	16	21	29	31
1999	85%					87%
2000	85%					96%
2001	86%	66%		94%		
2002	83%		87%	92%	63%	
2003	91%		90%	90%	89%	
2004	106%		92%	88%	93%	

Table 4

Realization per Year for Each Audit and Tax Manager/Senior Manager

Audit Manager Realization					
Year	Employee #				
	1	4	5	13	14
1999			77%		85%
2000		54%	78%		89%
2001		81%			
2002	89%			85%	
2003	90%			90%	
2004	91%			84%	

Audit Senior Manager Realization							
Year	Employee #						
	5	6	12	14	17	26	30
1999							82%
2000							88%
2001	83%			90%		68%	
2002	87%	82%	97%		90%		
2003	90%	87%				94%	
2004						97%	

Tax Manager Realization						
Year	Employee #					
	11	16	19	20	21	24
1999		91%			86%	
2000		96%			94%	94%
2001		98%				
2002	87%		105%			
2003				95%		
2004				91%		

Tax Senior Manager Realization						
Year	Employee #					
	7	8	16	21	29	31
1999	88%					94%
2000	98%					96%
2001	98%	87%		96%		
2002	101%		84%	91%	91%	
2003	101%		98%	90%	90%	
2004	99%		88%	98%	97%	

Table 5

Practice Volume per Year for Each Audit and Tax Manager/Senior Manager

Audit Senior Manager Practice Volume							
Year	Employee #						
	5	6	12	14	17	26	30
2000							\$300,176
2001	\$11,581			\$200,000		\$25,000	
2002	\$3,867	\$56,558	\$87,990		\$30,089		
2003	\$69,502	\$41,054				\$28,370	
2004						\$147,098	

Tax Senior Manager Practice Volume						
Year	Employee #					
	7	8	16	21	29	31
2000	\$55,118					\$340,356
2001	\$41,500	\$8,008		\$34,784		
2002	\$45,249		\$189,660	\$74,449	\$0	
2003	\$27,763		\$161,347	\$63,524	\$0	
2004	\$40,957		\$180,160	\$70,147	\$2,229	

Table 6

Employees Working In Each Department/Level across Years

Department	Employee #	2000	2001	2002	2003	2004
AUDIT	1			M	M	M
	4	M	M			
	5	M	SM	SM	SM	
	6			SM	SM	
	12			SM		
	13			M	M	M
	14	M	SM			
	17			SM		
	26		SM		SM	SM
	30	SM				

Audit Manager TOTAL each YR.		3	1	2	2	2
Audit Manager NEW per year		N/A	0	2	0	0
Audit Manager SAME from last year		N/A	1	0	2	2

Audit Senior Manager TOTAL each YR.		1	3	4	3	1
Audit Senior Manager NEW per year		N/A	3	3	1	0
Audit Senior Manager SAME from last year		N/A	0	1	2	1

Department	Employee #	2000	2001	2002	2003	2004
TAX	7	SM	SM	SM	SM	SM
	8		SM			
	11			M		
	16	M	M	SM	SM	SM
	19			M		
	20				M	M
	21	M	SM	SM	SM	SM
	29			SM	SM	SM
	31	SM				

Tax Manager TOTAL YR.		2	1	2	1	1
Tax Manager NEW per year		N/A	0	2	1	0
Tax Manager SAME from last year		N/A	1	0	0	1

Tax Senior Manager TOTAL each YR.		2	3	4	4	4
Tax Senior Manager NEW per year		N/A	2	2	0	0
Tax Senior Manager SAME from last year		N/A	1	2	4	4

*Highlighted field denotes a Manager who was promoted to Senior Manager

APPENDIX
EXAMPLE SCORECARDS AND COMPUTATIONS

VERSION 1

MANAGER			Base								Goal			Weight	Score
Measures	-20	-10	0	50	60	70	80	85	90	95	100	105	110		
Production	40%	45%	50%	60%	70%	75%	80%	85%	90%	95%	100%	105%	110%	0.50	45.00
Days in WIP & A/R	240	180	165	150	135	120	110	105	100	95	90	85	75	0.15	12.00
Realization	50%	60%	65%	70%	73%	75%	80%	83%	85%	88%	90%	93%	95%	0.15	16.50
% Budget-Dept	40%	45%	50%	60%	70%	75%	80%	85%	90%	95%	100%	105%	110%	0.20	20.00
														1.00	
														Score	93.50

SENIOR MANAGER			Base								Goal			Weight	Score
Measures	-20	-10	0	50	60	70	80	85	90	95	100	105	110		
Production	40%	45%	50%	60%	70%	75%	80%	85%	90%	95%	100%	105%	110%	0.35	31.50
Days in WIP & A/R	240	180	165	150	135	120	110	105	100	95	90	85	75	0.10	8.00
Realization	50%	60%	65%	70%	73%	75%	80%	83%	85%	88%	90%	93%	95%	0.10	11.00
% Budget-Dept	40%	45%	50%	60%	70%	75%	80%	85%	90%	95%	100%	105%	110%	0.30	30.00
Practice Volume	\$25K	\$75K	\$100k	\$150K	\$200K	\$250K	\$300K	\$325K	\$350K	\$375k	\$400K	\$425K	\$450K	0.15	15.00
														1.00	
														Score	95.50

YTD	
Department Actual	
Gross Fees	\$1,910,725
Fee Adjustments	(\$197,460)
Net Fees	\$1,713,264
Payroll Costs	(\$604,259)
CPE	(\$17,855)
Professional Activities	(\$4,828)
Other	(\$2,443)
	(\$629,385)
Target Net Income	\$1,083,879

Target Net Income Modifier		
TNI% of Gross Fees	Target Net Income	Modifier
33%	\$630,539	0.00
40%	\$764,290	1.00
45%	\$859,826	1.25
50%	\$955,362	1.50
55%	\$1,050,899	1.75
60%	\$1,146,435	2.00
62%	\$1,184,649	2.25
64%	\$1,222,864	2.50
65%	\$1,241,971	2.75
66%	\$1,261,078	3.00

Salary Computations									
Salary	Adjusted Base Salary	Basis	Modifier	Score	Payout	Collections	Total Pay	ICP	% earned over base pay
\$75,000	\$67,500	10%	1.75	93.5%	\$11,045	\$10,000	\$88,545	\$13,545	18.1%

VERSION 2a

MANAGER																		
Measures	Level	-20	-10	Base										Goal			Weight	Score
				0	50	60	70	80	85	90	95	100	105	110				
Learning & Growth																		
Employee Success	Dept	40%	45%	50%	60%	70%	75%	80%	85%	90%	95%	100%	105%	110%	0.15	12.00		
Internal / Operational																		
Days in WIP & A/R	Ind	240	180	165	150	135	120	110	105	100	95	90	85	75	0.15	12.75		
Client Service																		
External Client Service	Firm	40%	45%	50%	60%	70%	75%	80%	83%	85%	88%	90%	92%	95%	0.20	19.00		
Financial																		
Production	Ind	40%	45%	50%	60%	70%	75%	80%	85%	90%	95%	100%	105%	110%	0.35	29.75		
Realization	Ind	40%	50%	60%	65%	70%	73%	75%	80%	85%	88%	90%	93%	95%	0.15	12.75		
															1.00			
															Score 86.25			

SENIOR MANAGER																		
Measures	Level	-20	-10	Base										Goal			Weight	Score
				0	50	60	70	80	85	90	95	100	105	110				
Learning & Growth																		
Employee Success	Dept	40%	45%	50%	60%	70%	75%	80%	85%	90%	95%	100%	105%	110%	0.10	8.00		
Internal / Operational																		
Days in WIP & A/R	Ind	240	180	165	150	135	120	110	105	100	95	90	85	75	0.15	13.50		
Client Service																		
External Client Service	Firm	40%	45%	50%	60%	70%	75%	80%	83%	85%	88%	90%	92%	95%	0.20	19.00		
Financial																		
Production	Ind	40%	45%	50%	60%	70%	75%	80%	85%	90%	95%	100%	105%	110%	0.35	36.75		
Realization	Ind	40%	50%	60%	65%	70%	73%	75%	80%	85%	88%	90%	93%	95%	0.15	15.00		
Practice Volume	Ind			\$50K	\$75K	\$100K	\$150K	\$200K	\$250K	\$300K	\$350K	\$400K	\$425K	\$450K	0.10	9.00		
															1.00			
															Score 101.25			

Salary Computations - YTD			
Base Pay		\$72,500	
Dept's Direct Profit		55%	
Modifier		8%	
Earning Opportunity Score		\$5,800	86.25
Bonus Earned		\$5,003	
Total Collection \$		\$14,385	
Bonus after Collections		\$19,388	
Total Pay		\$91,888	

Target Net Income Modifier		
TNI% of Gross Fees	Target Net Income	Modifier
50%	\$2,083,431	4%
55%	\$2,291,774	8%
60%	\$2,500,117	12%
62%	\$2,583,454	16%
64%	\$2,666,791	20%
65%	\$2,708,460	24%
66%	\$2,750,129	28%

VERSION 2b

Target Net Income Modifier		
TNI% of Gross Fees	Target Net Income	Modifier
50.0%	\$1,811,068	4%
52.5%	\$1,901,621	6%
55.0%	\$1,992,174	8%
57.5%	\$2,082,728	10%
60.0%	\$2,173,281	12%
62.0%	\$2,245,724	16%
64.0%	\$2,318,166	20%
65.0%	\$2,354,388	24%
66.0%	\$2,390,609	28%

REFERENCES

- Abernathy, W. B. (1996). *The sin of wages*. Memphis, TN: PerfSys Press.
- Abernathy, W. B. (2000). *Managing without supervision: Creating an organization-wide performance system*. Memphis, TN: PerfSys Press.
- Abernathy, W. B. (2001). An analysis of twelve organizations' total performance system. In L. J. Hayes, J. Austin, R. Houmanfar, & M.C. Clayton (Eds.), *Organizational change* (pp. 240-272). Reno, NV: Context Press.
- Bucklin, B. R. & Dickinson, A.M. (2001). Individual monetary incentives: A review of different types of arrangements between performance and pay. *Journal of Organizational Behavior Management*, 21(3), 45-137.
- Condly, S. J., Clark, R. E. & Stolovitch, H. D. (2003). The effects of incentives on workplace performance: A meta-analytic review of research studies. *Performance Improvement Quarterly*, 16(3), 46-63.
- Daniels, A. C. (1989). *Performance management*. Tucker, GA: Performance Management Publications.
- Dickinson, A. M. & Gillette, K.L. (1993). A comparison of the effects of two individual monetary incentive systems on productivity: Piece rate pay versus base pay plus incentives. *Journal of Organizational Behavior Management*, 14(1), 3-82.
- Dixon, M. R., Hayes, L. J. & Stack, J. (2003). Changing conceptions of employee compensation. *Journal of Organizational Behavior Management*, 23 (2/3), 95-116.
- Frisch, C. J. & Dickinson, A. M. (1990). Work productivity as a function of the percentage of monetary incentives to base pay. *Journal of Organizational Behavior Management*, 11, 13-33.
- Kaplan, R. S. & Norton, D. P. (1996). Using the Balanced Scorecard as a Strategic Management System. *Harvard Business Review*, 74(1).
- Kaplan, R. S. & Norton, D. P. (2001). Marked impact. *People Management*, 7(21).
- Kuhn, D. M. & Yockey, M. D. (2003). Variable pay as a risky choice: Determinants of the relative attractiveness of incentive plans. *Organizational Behavior and Human Decision Processes*, 90, 323-341.
- Malott, M. E. (2003). *Paradox of organizational change*. Reno, NV: Context Press.

- Matthews, G. A. & Dickinson, A. M. (2000). Effects of alternative activities on time allocated to task performance under different percentages of incentive pay. *Journal of Organizational Behavior Management*, 20(1), 3-27.
- Morales, B., Hyten, C. & Porter, M. (2003, May). A multi-level performance measurement and pay for performance system: Design and organizational impact. In B. Cole (Chair), *Building performance systems in an accounting firm: Five years of strategy and projects*. Symposium conducted at the annual meeting of the Association for Behavior Analysis, San Francisco.
- Oah, S. & Dickinson, A. M. (1992). A comparison of the effects of a linear and an exponential performance pay function on work productivity. *Journal of Organizational Behavior Management*, 12(1), 85-123.
- Peach, E. B. & Wren, D. A. (1992). Pay for performance from antiquity to the 1950s. *Journal of Organizational Behavior Management*, 12, 55-26.
- Porter, M. (2002). *An evaluation of the effects of a performance pay plan on productivity of employees in a professional services firm*. Unpublished master's thesis, University of North Texas, Denton, TX.
- Riedel, J. A., Nebeker, D. M. & Cooper, B. L. (1988). The influence of monetary incentives on goal choice, goal commitment and task performance. *Organizational Behavior and Human Decision Processes*, 42, 155-180.
- Shelton, B. S. (2005). *An evaluation of two performance pay systems on the productivity of employees in a certified public accounting firm*. Unpublished master's thesis, University of North Texas, Denton, TX.
- Smoot, D.A. & Duncan, P. K. (1997). The search for the optimum individual monetary incentive pay system: A comparison of the effects of flat pay and linear and non-linear incentive pay systems on worker productivity. *Journal of Organizational Behavior Management*, 17(2), 5-75.