Living Case:

TECHNICAL DATA

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Introduction

> "…Since 1981, Technical Data has demystified the financial markets with timely interpretation of trading, activity, sentiment and data. It's a difficult task in a world overrun with new products and technology, but it's a challenge we're particularly suited to face. That's why more than 18,000 traders, sales professionals and money managers in 60 countries rely on Technical Data's online market information to make their investment decisions…"[1]

Technical Data, part of Thomson Financial Services, a leading provider of proprietary financial information products, produces and sells fifteen different on-line publications, providing live, on-line fundamental and technical analysis of major news and financial market developments, for traders around the world, around the clock. Services have been exclusively distributed via the Dow Jones Telerate network since 1992, and may be compared to pay-per-view cable television, live newswires or other optional subscription type services. Technical Data is the number one optional service provider on Dow Jones Telerate, the provider with the largest variety of products and it is also the oldest provider of on-line financial market analysis services. Its product span includes coverage of the foreign exchange, bond and capital Markets (Eurobonds, MTNs and Swaps), including short and long end coverage. Technical Data also offers complete coverage of Emerging Markets. Customers and potential customers include: financial institutions (dealing rooms) and major corporations with need for constant market updates and analysis.

Although Technical Data (also referred to as TechData) managed to sustain considerable growth periods during its initial years, it has been increasingly struggling in terms of a number of issues, including declining net sales, complete turnover in its staff over a period of less than two years and a rapidly changing industry setting. During the course of the following sections we will provide an analysis of Technical Data's business environment and sales related issues, including solutions to some of the key problem areas and lastly an implementation plan of how some of these changes may actually be put in practice.

Business Environment and Background Analysis

Competitive Advantages:
Although Technical Data does face an uphill struggle, it does have some key factors to its advantage. Currently it offers the widest range of products in the industry and has an organization in place with a wide array of analysts, whose expertise may be utilized in specialized sections on all products. TechData has a history of innovative product development, always expanding into new niche markets and/or changing existing products according to market feedback. It has a good reputation and is the oldest optional service provider with a solid core customer base. It also benefits from a certain amount of customer loyalty, which is generally very common in this industry. (Once traders are used to one provider they will likely remain with the same analysis provider, even if changing employers). Furthermore, Technical Data has a well established network of offices, sales and support staff, analysts, administration and marketing department, backed by a very strong and diverse parent organization. Its existing relationships with Telerate offices (management and individual sales/customer support/marketing) also give it a limited advantage over competitors competing to sell over the Telerate network (even if this relationship is by no-means being sufficiently taken advantage of, as discussed in later sections). This is further enhanced through some of the perks of the exclusivity agreement it entered into, which include joint Telerate/TechData advertising/promotions, special event appearances and advance access to data (including information about other optional service sales on Telerate). There also is a limited amount of package pricing with some Telerate products overseas. On occasion, Telerate may also compensate its sales people with higher commissions for TechData products, over and above what it may pay out for other optional service provider sales. Lastly, there are some associated cost advantages in terms of discounted Telerate equipment. Unfortunately, many of these advantages are not sustainable in the long run and are further undermined by a number of competitive disadvantages.

Competitive Disadvantages:
Technical Data is fighting an increasing number of battles in terms of retaining its customer base, let alone increasing its sales in net terms. Many of these struggles result out of some inherent disadvantages. Both its major competitors distribute their services over all available means, including Reuters, Bloomberg, Knight Ridder, etc., not restricting themselves to just one distribution channel. At the same time, Telerate, though officially tied to TechData does not always prioritize TechData in their sales efforts, very much depending on personal relationships in regional offices. Lack of access to complete information about clients or sales figures of competitors on other providers also represents a difficulty, besides the struggle to gain access to any statistics about this particular niche sector of the financial market. Client/prospect data is not readily available and maintaining an updated database of TechData customers, potential customers and/or Telerate customer details has been difficult due to the fast pace of this type of industry. (Though the same players / traders may remain within the industry, they may change employers virtually every year). Furthermore, TechData has no major copyrights or patents for its products and products, which are readily copied by competitors,

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[1] Technical Data Information page, part of the Dow Jones Telerate Europe World-Wide-Web Site (http://emea.telerate.com/)

particularly with the help of analysts and sales personnel, who often leave Technical Data to take up a position with one of its competitors, taking their specialized knowledge with them. Increased copying of TechData products by competitors is thus not all too surprising. In recent years there has also been a general increase in the number of niche products provided by all competitors. Due to Technical Data having changed its name on a number of occasions in recent years, it also suffers from some loss of brand name recognition, in addition to the fact that the name Technical Data is not as "catchy" as MMS or MCM (TechData's biggest two competitors). Lastly, TechData recently experienced a widespread turnover among its staff, particularly among the sales and analyst organization, leaving many positions vacant, territories uncovered and making it particularly vulnerable.

Key competitors / Substitutes:
Technical Data's number one competitor is MMS (Money Market Services from McGraw Hill): MMS has successfully managed to grow in size and products over the last few years. Their billing on Telerate is just behind TechData's. They also sell over other providers, including smaller sub-products on CompuServe, etc.. They have a very similar sales and analyst set-up to TechData's and they have hired many former TechData employees over the years. MCM (MC Carthy Maffei) is another competitor, though they have a much smaller selection of products. Nonetheless, they have a loyal customer base on the foreign exchange desks, in particular. Their customer base on Telerate is significantly smaller than TechData's and they do not have the same resources available as Technical Data. They have less offices worldwide, fewer analysts and less sales people. Furthermore, there are many other smaller providers concentrating on various niche segments of the financial markets. They are mostly specialized on one market area, or type of analysis, e.g. Elliott curves, black box trading systems, newswires, etc.. Unfortunately, Telerate have also fairly recently launched a number of world-wide newsrooms, providing free local news and analysis. Though Telerate's services are not as in depth as the services provided by Technical Data, they are still in direct competition, when it comes to the lower end of the market, for which these free services may now suffice.

Threats:
Technical Data is facing very serious problems going into the future. Foremost, it has to deal with the fact that the Telerate market is consolidating and shrinking in size. Telerate screens are being replaced with Reuters and/or Bloomberg screens, or simply being kicked out, directly affecting Technical Data through its exclusivity agreement. Furthermore, the banking industry is consolidating. There are continuously fewer banks and the remaining banks are merging their operations internationally to a smaller number of central locations (not as regionally spread out as before). At the same time, analysts, sales people and even management are leaving TechData to take on new responsibilities and/or to go to competitors to start new products for them similar to TechData products. Since its staff (analysts in particular) are a prime reason for people to become subscribers (subscribers are analyst loyal, more so than being product loyal) this represents an increasing problem. Also, with shrinking sales less money is being invested in the core foundations of the company (analysts and sales) further worsening the product and sales deterioration threat. Lastly, shortened on-the-job training periods, frequent product changes, new product introductions and page revamps have deteriorated the sales force quality in terms of their product knowledge and expertise.

Opportunities:
There are still a lot of opportunities for Technical Data and it cannot be neglected to mention that the financial sector industry is a multi-billion dollar industry, with millions of dollars being spent for information services every month. TechData is still ideally suited to cater to the world-wide needs of all major financial institutions and corporations, with much potential for further expansion into other niche markets and new product lines, including the possibility to use the existing structure to develop new product lines over other data distribution means, such as the Internet. There is a whole new market of private investors and other individuals interested in market analysis, which TechData may want to target. Similarly, Technical Data may actually use the recent loss of a major part of its US sales force to its advantage, as part of a complete management overhaul, leaving room for very much needed "fresh blood", new ideas, and strategies with little internal resistance against any revamping of the existing organization. Lastly, TechData can still build and grow from the exclusivity agreement with Dow Jones Telerate, which it has still not managed to take full advantage of in terms of sales and marketing in all areas. There are still a lot of possibilities in terms of packaging products with Telerate, placing more TechData sales reps directly in Telerate offices, as is increasingly done throughout Europe in addition to many other possibilities.

From the above list of problems, advantages, disadvantages and opportunities, it becomes clear that Technical Data is facing a very volatile market with virtually no security. Sales and cancellations are transitory and outside factors further complicate the situation. Designing an effective sales organization under such an environment is quite a challenge, which is why we decided to break this paper into different sections (1. Industry Background; 2. Structure; 3. Selection, Training, Measurement and Motivation; 4. Sales Force Size and Deployment; 5. Sales Forecasting; and 6. Goal Setting), each dealing with a particular problem area, all of which combined help create one new, cohesive, much stronger and better organized company, which will be ready to face its challenges well into the next century. For this purpose we conducted primary and secondary research, interviewing employees at Technical Data, analyzing company documents, as well

conducting background research into the industry Technical Data caters to. We also spent considerable time analyzing, discussing and researching the exclusive distribution agreement with Dow Jones Telerate (who are currently suffering from declining net sales and loss of market share themselves). Although our primary choice would have been to end the exclusivity agreement with Dow Jones, we were informed that this was a ten year agreement, which we would not be able to opt out of. As a result we had to keep this very important factor at the back of our minds in all the proposed changes. Nonetheless, we feel that the changes outlined below will bring the Technical Data sales organization back on track and will help it become an industry leader once again.

Structure

There are many problems with TechData's current structure. Most of those problems are related to the fact that many of the job functions are not well defined, and where they are, different incentive problems make people try to perform functions other than their own. This creates conflicts, duplication of efforts and misunderstandings, leading to inefficient selling activities.

These problems are observed at almost every level, making the reassignment of activities and the redefinition of roles an important issue. The main issues, which are going to be addressed are mostly related to the lack of communication and information sharing, largely stemming from on-going conflicts with Telerate, which also have a direct negative impact on the entire sales organization. In addition, we will advocate increased internal control mechanisms at the lower level, so as to avoid reps competing with each other by doing tasks not directly assigned to them.

The first issue regarding the conflicts between Telerate and TechData reps will be resolved through the introduction of a new function called 'Information Analyst', who will be in charge of gathering the information required by TechData's upper level management for strategic purposes, as well as by the sales force to establish more efficient calling plans and selling strategies. This Information Analyst is intended as a tool to open a new line of on-going two-way information sharing between both Telerate and Technical Data, helping them to build a closer relationship and allowing them to take advantage of the opportunities once recognized, when the two companies entered into an exclusivity agreement. Unfortunately, in the past, each sales rep and customer support was supposed to gather information such as new Telerate installations, contact names and numbers, sales potential and so on themselves, making them deviate from their main tasks (selling or supporting respectively). The information they gathered was incomplete, insufficient and most of the time useless. Worst, upper level management never got to see this information which made any strategic planning of selling activities particularly difficult.

The information the Information Analyst is supposed to obtain not only contains data, such as screens sold by Telerate, but also all sorts of other information pertaining to client's backgrounds, history, sales potential, budgets and needs. Furthermore, this information should include any plans Telerate might have in regards to particular clients, both in the short and/or long term, to allow TechData and Telerate to really start working together on individual accounts.

The second issue regarding the transgression of activities between customer support and sales reps is going to be resolved by redefining activities within each level and by creating new intermediate positions that will make it possible for upper management to concentrate more on strategic sales activities and less on day-to-day problems. This would also be made possible through the creation of the information analyst position, which will permit upper level management to gain easier access to vital information, while at the same time freeing up time, which they may have previously wasted when chasing after sales for information. The definitions of the actual and new activities, as well as the main issues addressed are outlined in Exhibits 1, 2 and 3 respectively. The charts of the current and proposed structures are shown in Exhibits 4 and 5 respectively.

Selection, Training, Measurement and Motivation

Technical Data currently has poor selection, training, measurement and motivational programs. This situation has seriously damaged its positioning with existing and potential customers. No formal programs have been implemented in these areas and the company's current policies do not follow any global or strategic vision. For example, the recruitment policies have established wrong profiles for potential employees, generating high turnover and lack of motivation. Meanwhile, there has been a huge lack of training, further increasing the differences in performances among employees, especially among the sales and customer support units. This situation has undermined both the internal and external relationships of the company. Finally, the incentives set for increasing the company's motivation have been wrongly established, creating confusion, lack of incentives and commitment towards the company's goals.

Currently, the selection policy for new sales reps highly encourages the recruitment of applicants with financial market background and experience in the financial markets. Skilled sales reps with high potential performance may on this basis

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be excluded from the selection process, simply because they may not have the required financial experience. This policy reduces the quality of the sales force selected, since the technical knowledge for selling products within the financial markets may easily be compensated for through a formal training program. The same cannot be said or done for the selling skills. Eliminating this requirement and focusing instead on relevant selection variables, such as sales experience and selling skills may solve this problem. A new, formal training program will be established in order to provide the sales force with the technical knowledge required for succeeding in the financial industry.

Also, the current promotion policy is not adequate because it establishes that all new sales representatives ideally begin his/her career path as a customer support executive, before being promoted to the sales unit after some period of time. This policy was based on the need for providing new sales reps with technical expertise about the products, before allowing them to move on to sales. Unfortunately, this on-the-job training policy assumed that sales and customer support reps were responsible for their own training without any formal support of the company. Since specific knowledge is required for selling and supporting customers, sales and customer support reps spent valuable time trying to individually achieve the knowledge/training, which the firm did not provide. This situation generated loss of valuable time, loss of productivity and inconsistencies about the topics to be learned, while also reducing the motivation among the sales reps because they "had to" work in a customer support in function, which did not fit with their aggressive, high energy and proactive personalities. This situation is going to be solved through the establishment of a formal and regular training program for the whole company, which considers a tailored training program for each unit, according to the specific functions performed by each one. In addition to this, all new sales reps are going to be allowed to directly join the sales unit, being trained in the uses and applications of the products as soon as they are hired.

The current annual evaluation process of the sales and customer support forces is based on the measurement of variables related to selection variables (selling skills, financial market knowledge, etc.), rather than on performance variables. Moreover, variables such as the number of calls, number of minutes on the phone and number of trials were used to measure the sales force on an on-going monthly basis. However, all these variables are useless for measuring the effort spent and/or final outcomes. Moreover, there was a lack of clear job definitions and the absence of a clear definition of the company's goals made it impossible to measure performance. As a result, reps did not perceive there to be a direct link between their effort and performance. For example, in order to increase the number of calls showing on the call log, most of the sales reps called their answering machines numerous times throughout the day. Also, their promotions were highly influenced by their "political" and "personal" relationships within the company. This situation weakened the instrumentality perceptions (perceived links between performance and rewards) among the sales reps, reducing their motivation, because their career advancements were highly dependent on factors beyond their control. This is going to be solved through the implementation of a new evaluation and promotion system based on objective and clear dimensions closely related to individual performance, job specific functions and the development of non-selling activities, such as variables measuring sales volume, quota achievement, in addition to meaningful ratios, such as the number of effective sales per calls.

Another measurement problem is that sales reps are currently measured based on their net increases in sales (sales minus cancellations). Sales are in US dollars and include new contracts, as well as upgrades. On the other hand, customer support is also measured based on the number of cancellations. This generates serious motivational problems because part of their compensation is tied to cancellations. The rationale behind establishing this system in the past was that there was no way to measure if renewals were made because of a good support job, or because they were going to happen anyway (renewals were simply considered to be an automatic process). On the other hand, cancellations were always assumed to happen because of a bad sales/support job. As a result, sales reps and customer support suffered a reduction in their compensations, being "punished" (or negatively rewarded) for each cancellation. At the same time, although a renewal might have meant that a cancellation was avoided (i.e. a job well done), they did not receive any reward for it. The result was that sales and customer support reps spent a maximum effort in order to keep the number of cancellations under control and thus not suffer any losses in income (i.e. avoiding punishment), not concentrating on their main job task, i.e. selling. Moreover, because customer support received commissions on the selling of upgrades and because sales reps had little incentive to sell them (because of their low commissions), customer support neglected their basic support activities in order to try to sell upgrades.

This latter problem is going to be solved by eliminating the reduction in compensation based on the number of cancellations and by eliminating commissions paid to customer support reps for the selling of upgrades. Customer support is going to be motivated to get the renewals through incentives based on bonuses related to the company's overall performance. In addition, since sales reps' activities are not going to include following up with customers after a sale, (which is now fully the responsibility of customer support), their incentives are not going to include rewards for doing this activity, but include a based salary plus commissions for selling activities.

Finally, another problem was that senior sales reps' salaries were much higher than those of junior sales and customer support representatives. Moreover, the salaries of customer support reps had a ceiling attached. This situation created

loss of cooperation and motivation within the sales and customer support forces. Furthermore, since customer supports knew that there was a limit to their potential incomes, they were only willing to spend minimum effort on their intended activities. Considering the compensation scheme, which was in place, the only way for them to earn a higher salary was to move up to sales. This provided incentives for customer support to obtain their promotions by undermining sales reps' results and basic backstabbing. This is going to be solved by reducing the difference in compensation between the two groups. A career path within the customer support unit is going to be implemented in order to allow the unit to increase its compensating incentives.

Sales Force Size and Deployment

Market Potential
There are approximately 18,000 Telerate screens installed in the US. Approximately 4,000 of those screens are to users that would have very limited or no use for the TechData products, reducing the market to about 14,000 screens. Of those 14,000 screens, TechData is currently serving 6,500 screens with at least some products. There is also market potential to sell additional screen products to virtually all users. Right now, the average sales per screen is approximately $208 a month, the potential billing per screen for TechData products is well over $1000 a screen per month if the products are sold individually, as a bundle all products are available for about $300 a screen. The estimated market potential for the current Telerate customer base is roughly $4,200,000 monthly, $50,000,000 annually. TechData sales are currently close to $16,200,000 or about 32% of the total potential market, even if no additional Telerate screens are installed.

The other spectrum of the market is made up of customers who do not currently have Telerate terminals. This market is estimated at about 5 times the size of the installed Telerate base or about 70,000 total screens. In the past, TechData has not seriously attempted to sell to this market segment in the US. We will attack this market. All high potential accounts within this market will be included in the sales force call plan for inclusion in a joint sales call with a Telerate rep. If there is great success in selling the high potential accounts, we will consider adding additional reps to increase calls and to start calling on the second tier of accounts, which are currently without Telerate service.

In the past, TechData and Telerate have not had a very good relationship in the US. Communication and cooperation has been disappointing to say the least. Telerate made minimal effort to emphasize TechData sales and it did not ask its sales force to focus on the selling of TechData products as an add-on to the terminal sale. The sales were not counted towards the Telerate rep quotas and no commissions were paid out for the sales in the US. In Europe, Telerate pays their reps standard commission rates for selling TechData products, the same rates as for terminal sales. Telerate receives 50% of our billing as a as a network/distribution charge. The associated costs for Telerate are minimal, actually allowing Telerate to earn more in net terms per TechData sale than for a sale of one of their own products. Similarly, the net revenue per sale for Telerate is higher than TechData's in net. This leads to a potential win-win situation for Telerate, theoretically encouraging closer cooperation between Telerate and TechData to work together to increase sales. We therefore feel optimistic that top management will be able to strike a deal with Telerate, which will result in the setting up of an incentive structure for Telerate sales reps to be paid for all TechData sales in their region. Under this new scenario we will set up a joint calling procedure. In the past, TechData has had their sales reps working out of either NY or Boston. We will have the sales reps located in the field, either working from the local Telerate office if space is available or working from home.

The call will be a team selling call with a Telerate sales rep; since without the Telerate screen sold we cannot deliver our products. The joint calls will serve to inform both the potential customers and the Telerate sales reps of the benefits of TechData's products. We will offer two months free service of TechData's product with the Telerate service. The free offer will offer an additional compelling reason for the customer to subscribe to the Telerate service. Our customer service reps will then come in during the two-month trial period to train the customers and to show them the many benefits of our service. The sales rep will ideally visit the client once at the beginning, once in the middle, and once at the end of the trial period to either sell the customers a bundled package of services, or just one or two products per screen.

Our estimated cost per rep is a total compensation package of about $50,000 per year. We estimate the overhead rate associated with the sales rep is approximately 100% or a total cost of $100,000 per year. Furthermore, we estimate that sales reps will require about 60% of their time for phone calls to clients, administrative work, travel and other non-selling time. We estimate a rep will spend about 800 hours a year meeting with clients and potential clients, the cost per hour being about $125.

Our estimate of the benefit of incremental revenue per sale for TechData is approximately 40% of the sales price. Telerate receives 50% of the sales price, and we estimate about 10% of the sales price is required for the direct costs of servicing and supporting the customer.

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Currently there are only 2 sales reps working for TechData down from a peak of 10 reps. The workload for the two reps is unmanageable trying to sell and service approximately 1,000 accounts. We plan to segregate our accounts by A, B, and C accounts. The type A and B accounts will be serviced by an sales rep and the C accounts will be serviced by an inside tele-marketing sales force. Furthermore, we will break the A and B accounts into 3 categories, the first category for current TechData customers, the second is for Telerate customers not receiving any TechData services, and the final category is potential customers not receiving Telerate or TechData services. We will also service large corporate accounts by the field organization and a corporate account rep.

We anticipate an A account will be a customer or a potential customer with over 30 screens, or a potential billing of $30,000 monthly. About 10% of the US accounts, or 100 accounts, are A accounts and they currently represent about 50% of the total revenue of TechData. We feel the proper call plan for these accounts is 3 calls per month for 1 hour a call or a total of sales call time of 36 hours per account yearly. The total time required for the group is 3,600 hours. We feel that along with the new bundled selling approach, the call plan will result in about a 20% increase in net sales to this account group, an increase of $1,620,000 to $9,720,000. The incremental profit from the increased sales is approximately $648,000. The incremental selling cost is estimated to be $450,000. There is a declining value of the additional time and we estimate at this level of service we are at about break even between incremental cost and incremental profit. Once the new structure has been in place for 6 months, we will compare the sales and costs to our estimates and either add more selling time to the group or deploy some of the selling time to areas generating a higher return of profit.

We estimate there to be approximately another 50 type A accounts, representing 2,250 Telerate screens not serviced by TechData. Our call plan for this group will be one call per month for 1.5 hours per call, or a total of 18 hours per account. The total call time required for the group is 900 hours. We estimate this to be a longer selling cycle of approximately 3 to 6 months. Some of the milestones will be the reps meeting with the traders on the floor, the rep meeting with the decision maker in the information services area, the rep installing a 2 month no charge TechData system, and finally signing the customer up for a monthly plan for multiple screens or products. We will monitor the progress in these accounts in the early stages primarily on the basis of how the process is coming along and later as to the revenue being generated from these accounts. We estimate the monthly billings from this group will average $50 per screen, or $112,500 monthly. We expect the billings to be brought on between the 6th and the 12th month of the effort for an estimated 1998 billing from this group of $337,500, or profit contribution of $135,000 compared to a selling cost of $112,500.

The final group of type A customers are those not subscribing to Telerate or Technical Data services at all yet. There are approximately 750 of these customers. The associated selling process and sales calls will be done in joint cooperation with the Telerate sales rep. We estimate that we will be able to have a sales call on approximately ½ of these accounts. The initial sales call will be approximately 1.5 hours long. Total TechData rep time involved being somewhere in the range of 560 hours. Of the accounts receiving an initial sales call, we anticipate that we will be able to have a second call lasting for about the same 1.5 hours with ½ of the accounts or 187 sales calls. Total TechData rep time involved being somewhere in the range of 280 hours. The next step in the process would be a third call of about 3 hours, ideally being followed by the customer signing up for the Telerate service and accepting the TechData products on a 3 month trial basis for no charge. The TechData service reps would then go to train the customer on the TechData products and once again if all goes well, the customer will sign up for the TechData service on a permanent basis. In 1998, we feel that the billings we can potentially receive from this group will be minimal. We will therefore evaluate the reps based on the process, rather than the final outcome. We will also consider either adding time or taking time away from the effort based upon the early returns of the process. The total rep time required to service all the A accounts is 7,080 call hours.

In order to cover 80% of TechData's total potential billings we have to call on 30% of the total customers. The next 20% of the customers are those with a potential of 7 to 30 screens per account. There are 200 of these accounts, representing 2,000 active screens and $4,860,000 in annual revenue. The expected call plan on the B accounts is 2 calls per month, 30 minutes per call. The time required to call upon the accounts is 12 hours per year or a total of 2,400 hours. The expected sales increase from this group is approximately 15% of sales or $729,000 and $291,600 in incremental profit compared to selling costs of $300,000. The expected net sales increase will come from a combination of selling additional screens and services to customers, as well as stemming the tide of cancellations.

The next group of B customers are those customers subscribing to Telerate, but not currently receiving Technical Data's services. We will start a test program of calling upon these accounts. The initial returns for calling upon these accounts are not very attractive but we feel it is important to do some test calls to see if our assumptions are accurate. There are approximately 100 of these customers representing about 1,000 Telerate screens. The call plan for these customers will be one call per quarter for about an hour. The time required to call upon the accounts is somewhere in the range of four hours per year, or a total of 400 hours for the group. We estimate the monthly billings from this group will average $25 per screen (the average is derived from an average screen billing of $200 per screen on the Telerate service and we expect to sign up one customer for every eight we approach), or $25,000 monthly. We expect the billings to be brought on between the 6th and the 12th month, for an estimated 1998 billing from this group of about $75,000. The profit contribution

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from this group should be about $30,000 compared to a selling cost of approximately $50,000. We feel the investment will be worthwhile if the accounts subsequently stay with the service and we are able to increase the level of average monthly billing for the group. We will not expand the test of joint calls to customers not currently receiving Telerate service into the B accounts until the A process is underway and we can judge initial results. The total time required to service the type A and B accounts is 9,880 hours or a staff level of approximately 12 sales reps.

An inside telemarketing sales force will service the 700 C accounts. The total sales in the C group is currently around $3,200,000. Based upon the reduced selling effort, our goal would be to at least maintain the sales at the same level. The reduced selling effort will hopefully be offset by the advantages of easy access to the sales department. We feel one inside sales rep can effectively cover 250 accounts, based upon this estimate we will need a total of 3 inside sales reps.

In addition to the inside and field sales reps we are going to have an additional classification of accounts, which are comprised of corporate accounts. These accounts are the corporate office of banks like Chase or Citibank. We are currently serving many of the branch offices of these accounts, but we do not have a master agreement with the institutions, allowing the customers full access to our products on a national, or international basis. We feel that this will be the best way to offer the greatest value to our customer, while also being in step with the consolidation currently underway in the banking industry; one-stop-shopping, reducing both our costs and our customers costs. We can offer our full array of TechData products to all their employees for one fixed fee for the organization as a whole. We estimate there to be about 20 of these national accounts. The estimated selling process will be a 1 to 3-year selling cycle and represents a new account target area for TechData. It is estimated that we can increase total revenue from the accounts concerned, while also being able to reduce cancellations and creating more stability and less volatility from these accounts. At the same time it offers the customers a better value. There will be two enterprise reps calling upon about 10 accounts each. For the first year the reps will be judged upon how the are progressing in the process of signing up new accounts.

Sales Forecasting

The ability to determine accurate sales forecasts for TechData in the United States is clouded by several issues. TechData suffered from the cardinal sins of sales forecasting. In the past sales forecasts have been built very subjectively, and they were more "goals" than forecasts. In addition little or no input was sought from the sales force. Rather the approach was to look into a crystal ball. There is no fast and easy answer to the forecasting dilemma, especially in light of all of the changes in territory, sales force structure, and compensation. The main determining factor to an accurate forecast is sales potential. How is, and how will, sales potential be determined? On the one hand, TechData can only sell its products to accounts which have a Telerate screen in place. On the other hand, that may mean that a vast number of traders, brokers, or other potential users of TechData, remain unpenetrated. We will begin this analysis by making the supposition that the TechData sales potential is directly and exclusively influenced by the number of existing active Telerate screens in the marketplace. We will also examine joint Telerate/TechData sales calls which would look more at the ultimate potential of TechData sales as described earlier. Another reason to look at joint Telerate/TechData sales would be if the profits from such joint calls created a more favorable picture for TechData. For the time being we will use the number of active Telerate screens as the key factor in determining TechData sales potential.

The market potential estimates along with the prior year's revenues have been discussed in an earlier section of this case analysis. With that determination of potential in place we would have ideally liked to solicit feedback from the sales force regarding their estimation of a forecast. Because of the many changes in territory alignment and sales force structure happening concomitantly, we will not rely on any sales rep input for the coming year in our forecast. Note however, that this will be a key component in the following year's forecast. Based on the changes outlined in the territory analysis, including the identification of high potential accounts and a more motivated and appropriately compensated sales force, along with joint TechData/Telerate sales calls, a 17% increase to $19 million in sales will be forecast. We will certainly begin to accurately track sales and seek to gain estimates from the sales force in the future so that a more quantitative analysis may by performed to generate the sales forecast for the following sales year. This forecast, along with the goals will be explained in detail to all of the sales organization. Even though we are not soliciting direct input to identify these forecasts and goals, feedback from the sales force will be encouraged.

Goal Setting

Technical Data has an almost unlimited potential as far as goal setting is concerned. While there is plenty of opportunity in TechData, it would be prudent in this analysis to concentrate only on the Corporate Relations and the sales reps. Goals for the customer support reps will certainly be created but will not be discussed in this analysis. The goal setting model should contain a component of sales volume, and also include some activity-based component. A point of confusion currently for TechData is exactly what do we want our sales people to be doing? All of the desired activities should be

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directly related to sales or the compiling information which would prove valuable to TechData in determining the potential of the marketplace as well as useful tools for more purposefully directing future activities of the sales force. Management will seek this type of information from the sales force in the future as we rely on their input in making the 1999 sales forecasts. Reliable and timely documentation of activities should be used to access compliance by the sales force, and a portion of the sales incentive program should be tied to these activities.

Sales volume is fairly straightforward. With territory potential determined, a sales rep will be expected to achieve at least 85% of goal. This would be based on three criteria. First and most importantly is bulk packaging of products. When products are bundled, the potential of retaining a customer is enhanced over selling a single product. In addition, monthly billings are increased by that bundling factor. Administratively, as well, this is a much more desirable situation for TechData. The second criteria would be based on new to TechData customers as well as incrementally increased sales to major accounts. Lastly, would be sales as related to joint TechData/Telerate sales calls. Each of these goals should be weighted to count for 1/3 of the incentive compensation. For achieving greater than 85% (with no ceiling) the rep would receive incrementally higher percentage incentives. Some activity based goals as a subset of the joint TechData/Telerate sales calls would include: meeting with the traders on the floor, meeting with the decision-makers in the IS group, trial installations, culminating in a bundled product sale. The sales manager needs to communicate these forecasts and goals to the sales force in an effective manner and monitor compliance. Timely and useful feedback should be cornerstones of the goal model.

Compensation

The compensation package previously installed by Technical Data was unfair, demotivating and difficult to understand. Salaries for senior sales representative were low, when compared to the rest of the industry. However, when compared to Technical Data's internal sales and support organization they were perceived as too high (i.e. due to the high discrepancy between the entry level sales positions and the more senior level sales positions). This two-fold problem lead to the loss of experienced senior sales representatives to competitors, while demoralizing other members within TechData's sales division. Furthermore, commissions were paid to customer support people at the expense of Sales Representatives. For instance, the support team was paid commission to sell product upgrades to existing customers. The cancellation of a TechData product by the customer to accommodate the newly acquired upgrade resulted in the loss of income by the Technical Data sales representatives. Sales reps viewed this as a punishment perpetrated upon them by their own people and completely sanctioned with reward by TechData's current compensation package. In fact, TechData predominately hired sales representatives from within the customer support area, the idea being that customer support people had a solid product knowledge, very much neglecting that support and sales people typically have very distinct character traits and that the different positions had been created once to serve very different purposes. Technical Data was willing to forego candidates with selling experience or personality characteristics, like enthusiasm, organization and high persuasiveness for technical aptitude. The current compensation package sent mixed signals. It rewarded one group at the expense of another group, thereby creating ill will throughout the entire organization.

The compensation package we propose will reinforce the desired corporate objectives for TechData. We will institute a new package, which clearly defines sales and support roles and functions. As a result of the distinctive redefinition of job functions, we will also remove any ambiguity, which may in the past have led to internal competition. The sales organization will be more motivated and united to work towards common objectives. The current competitive market conditions and the new internal culture will help to serve as long term catalysts for change. At the same time, top management will begin to address and reward the sales force for four key sales targeted areas. These are: Increasing total sales, increasing sales of bundled products, increasing multiple user contracts and increasing sales to new accounts.

Company sales objectives, account management policies, and current performance of the sales force are known factors. This information along with demographic variables, job experience, psychological variables and personality traits will be further analyzed to determine the impact of these variables on each sales person's expectations, instrumentalities and valences for reward, in accordance with corporate strategy.

The components of the sales incentive program will consist of a base salary, commissions, bonuses and incentives programs. The core component of the incentive program is the base salary and will be made available to all Customer Support Managers, Customer Support staff, Sales Representatives, Sales Managers, Directors, and Telemarketing.

The sales force will consist of four distinct career groups. Each segment will have an opportunity for advancement and will be given clear guidelines on how to best achieve a career path, which will lead them from entry level telemarketing positions all the way to top management positions. There are four distinct positions, which will make up the sales organization. These are: Inside Telemarketing, (which will consist of entry level people, who exhibit the enthusiasm and

organization for selling over the telephone); Tier 1, (candidates will include new hires such as recent college graduates, and candidates with little or no selling experience. Successful inside telemarketing people will also be considered for an outside Tier 1 sales position.); Tier 2 (candidates will be comprised of individuals with experience within TechData's industry of real time financial information, people with selling experience in related financial fields and internal customer support personnel wishing to grow within the Technical Data Corporation and exhibiting a sales persona); and lastly Corporate Sales people, (which will be comprised of Senior TechData sales people, or individuals with industry experience as well as many years of selling experience). A chart of the proposed sales structure and the corresponding base pay is shown in Exhibit 6.

Sales
Commissions will be paid to all sales representatives for sold net new business contracts. The new business payoff is calculated on a percentage of monthly gross revenue as compared to plan. In any given month at 100% of plan the selling representative can expect to earn 50% of the total new revenue for that month (see EXHIBIT 6 - Net New Commission Plan). Additionally, 1% commission will be paid monthly to all Telemarketing, Tier 1 and Tier 2 sales representatives on existing billed monthly revenue. A Tier 1 territory monthly billing of $125,000 will garner a monthly commission of $1,250. An additional incentive for the sales force to sell contracts that consolidate company usage under one contract bill to either at the renewal date or at the beginning of a net new contract will garner an additional 1% commission for a total of 2% commission paid monthly. Our rationale to offer the additional 1% commission on contracts that consolidate under one bill will contribute to our corporate efforts to keep cancellations to a minimum. (Please refer to Net New Monthly/Yearly payoff at 100% of plan- Exhibit 6.) Commissions will be paid by the 15th of the following month after which the sale occurred.

Sales Incentives
Our analysis of each sales person's expectations, instrumentalities and valences for reward indicated that quarterly non-monetary incentives were quite successful at Technical Data. Therefore, we will continue to offer trips, merchandise and other non-monetary incentives to the sales team on a Quarterly basis. Perhaps the first 1998 incentive could be a repeat of a similar competition the year before, called "March Madness", which rewarded the highest net and gross achievers (as a percentage of targets) over a three-month period with travel rewards. In addition the winner will be announced in a company wide memo from the President of the company, in addition to an award certificate, which the winner will also receive. The results of similar past promotions were astounding for TechData, in fact helped it achieve its highest gross sales months in history. We anticipate the yearly expenditure for such incentive programs to be $25,000 per annum.

Furthermore, to foster the existing Telerate relationship we will introduce and continue to develop new joint-incentive programs for Telerate sales and support personnel, similar to the one described above. The rewards will be non-monetary and will be made available to different Telerate regions throughout the year. The first such program will be called "Winter Blast" and will run from December to February. It will reward the Telerate sales and support reps with the highest gross sales in their territory with a one week vacation to a sun spot in the Caribbean, in addition to a certificate and official winner announcement, sent out jointly by the Telerate and Dow Jones management. Besides fostering better cooperation between Telerate and TechData, we hope to encourage sales in an otherwise traditionally difficult time of the year. We will be coordinating and planning the exact implementation of these plans with Telerate management nearer the time.

Additionally, we will introduce new Bonuses for Directors and Sales Managers. These will be tied to meeting corporate objectives. Corporate Objectives are: Increasing the sales of bundled products, increasing multiple user contracts and increasing sales to new accounts. The base pay for each individual manager multiplied by 20% will result in the managers entitlement. The total available bonus will be paid at 100% of target. At 85% of target, a bonus of equal to 5% of total available bonus will be paid. An additional 5% bonus will be paid if any of the corporate objectives exceed 100% of target. All corporate objectives must be at 100% of target before the additional bonus of 5% is paid for anyone of the targets being over goal. Bonus for meeting corporate objectives will be paid biannually. (Please see EXHIBIT 6 - Manager's Bonus Plan).

Customer Support
Support Staff Managers and Support Personnel who meet corporate objectives of reducing the amount of cancellations over previous years will be eligible for bonuses. The rate of current cancellations versus active accounts will need to be reduced by 14% company wide. Each customer support representative will have individual as well as team targets to meet. Total Bonus will be calculated by multiplying base pay by 20%. The bonus structure for each individual will be split 60% for reaching individual targets and 40% payoff for reaching team targets. If an individual's plan year to date cancellations exceed target there will be an additional 5% bonus added to that individual's bonus. Bonuses for meeting corporate objectives will be paid biannually. (Please see EXHIBIT 7 - Customer Support Bonus Calculations.) We also hope to run additional non-monetary incentive programs for customer support, similar to the "March Madness" promotion described above. Prizes will be rewarded for lowest cancellations over a given period of time.

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Implementation, Conclusion and Summary of Recommended Solution

The implementation of the new structure, activities, and compensation program will be started immediately after our program is accepted by the Board of Directors. We anticipate being able to submit our proposals to the Board of Directors around September 1st. Upon acceptance by the Board, our first step in the implementation process will be to communicate our recommended agenda and expected timeline for changes to Technical Data's upper level management, who will at this time also be given the opportunity to give their added input. Management in turn will have one week to communicate the outline of the proposed changes to their respective Sales and Support managers. To avoid any unnecessary unrest and speculation about the proposed changes within the organization, the whole management team, including sales and support managers, will organize a company wide announcement, which will include an outline of the upcoming changes, some of the reasons for the changes and how each area of the corporation is likely to be affected. The tenure of the meeting will convey how each role is key in the shared success.

In the two weeks following the meeting, managers will schedule individual meetings with each and every member of the organization to clearly explain and discuss how these changes are likely to affect them, what changes in behavior may be required, what changes in their respective job roles may occur and what impact this may have on their respective salaries. In this context the new compensation and bonus plans will also be highlighted, though it will be pointed out that the new scheme is not going to take effect until January 1st, 1998. (The new compensation plan will take effect for beta test during 1997, and is scheduled for a full roll-out January 1st, 1998). Particular emphasis will be placed on explaining some of the key benefits for the various individuals, such as realistic and achievable targets, clearly defined job roles, career paths and/or possibly higher base salaries. During the following two weeks a new change team, made up of managers, analysts, as well as sales and support representatives will be formed. The team will be responsible for collecting and sharing questions, concerns and/or feedback about the change process and will represent a direct communication channel to and from upper management. During the same period employees will be given the opportunity to ask questions, assimilate, understand and accept the new direction chosen for Technical Data. Furthermore, the design and coordination of a new sales and support training program will be delegated to and be put in place with the help of Thomson University, the TFS internal training division (which is affiliated with the Forum Corporation).

Furthermore, the selection and recruiting of the staff to fill vacancies, such as for the newly created positions of the information analysts, based on the criteria outlined above, will begin immediately following the first announcement to the managers. While this is going on, there will be an initial information gathering period, which will make up the foundation for the restructuring of the work. In this context, it will be important to leave enough time, so that Telerate may be contacted and brought on-board with these changes. Facilitating the relationships necessary to gather the information, which will help implement Technical Data's rigid agenda will be crucial.

To help Technical Data achieve all desired changes within a reasonable timeframe, one of the TFS financial officers will be brought in temporarily to help in the implementation of the rest of the program, such as with territory alignment. That person will be responsible for running TerrAlign, or a similar product to finalize A, B and C accounts. By December 1st, we expect to have all territory changes finalized, which will then be passed on to the individual mangers, so that they can outline the proposed changes to their people one-on-one. In exceptional circumstances some changes based on extraordinary relationships, or so, will be at the managers discretion, though discouraged.

We anticipate this initial process to be near completion by December 15th, 1997. More importantly, we will continue to monitor Technical Data's progress from that point onwards, though, always trying to incorporate newest technological advances and feedback received through the change team. Such long run changes will, for example, include equipping managers and traveling sales people with laptops, setting up on-going (re-)training programs and so forth. Communication, appropriate goal setting and rewarding performance, all based on the company's objectives will be at the forefront of our concerns.

Given the proposed changes, we believe that Technical Data will be much better off facing the 20th century. We identified vital sales and support processes and are rewarding our staff appropriately for desired behaviors. Ambiguities are removed through the realigned job descriptions and the new compensation packages, including commissions, bonuses and incentive programs serve as reinforcements to our strategic goals. Furthermore, the creation of new positions and changes in the way TechData works with and through Telerate will strategically place the company in a position to use the exclusivity agreement to its advantage. Internally, the new change team will further help facilitate increased communication, paving the road toward the desired goals, higher profits and long run growth.

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EXHIBIT 1

Current Sales Structure

Managing Director US
- Coordinate activities within the US.
- Liaison among sales, marketing (competitors product, analyze market trends, update database) and analysts.

Sales Director
- Coordinate and control *Sales Reps* and *Customer Support Managers*.
- Responsible for the day-to-day sales operations.
- Coordinate weekly sales meetings with the sales force.

Customer Support Managers (one for NY and one for Other Regions)
- Coordination, evaluation and control of *Customer Support* executives.
- Inform *Sales reps* about potential businesses based on information collected through all of his/her *Customer Support* executives.

Sales Reps
- Maintain contact with Telerate in order to receive information.
- Get new businesses (new accounts) through "cold calls". They use an outdated database for this activity.
- Sell upgrades to existing customers.
- Chase after upgrades.

Customer Support
- Respond questions about the product from existing customers.
- Training of customers once a new sale has been done.
- Keep track of customers on a regular basis.
- Try to avoid cancellations during the contract period and achieve the renewal during the expiration period of the contract.
- Inform sales reps about potential upgrades for reps' customers.

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EXHIBIT 2

Problems and Proposed Solutions for the Current Sales Structure

Problem 1

Span of control of the *Sales Director*. He is involved in many administrative functions associated with the management of 11 *Sales Reps* plus 2 *Customer Support Managers*. He is neither looking for new business nor performing strategic functions such as analysis of competitors, relationships with key customers or looking for future strategic movement for the company.

Solution

Creation of a new position: *Sales Manager* (one for the NY region and one for the rest of the US). Advantages:

The *Sales Director* could have more time for strategic sales activities and coordination among *Sales Managers* and *Customer Support Managers*.
The *Sales Manager* could be more deeply involved with day-to-day sales activities, allowing proper assignation of tasks (especially when *Customer Support Managers* inform of renewals and/or updates needed).

Problem 2

Outdated database. Each *Sales Rep* has to look up their own information regarding clients and products of Telerate, so to search for new sales opportunities. This lack of information generates poor sales decisions and slows down reactions towards competitors' movements.

Solution

Creation of a new position: *Information Analyst*. Advantages:

Sales Reps can concentrate on selling efforts.
Avoid communication/information problems with Telerate.

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EXHIBIT 3

New Sales Structure

Managing Director US
- Coordinate activities within the US.
- Liaison among sales, marketing (competitors product, analyze market trends, update database) and analysts.

Sales Director
- Coordinate and control activities of the *Information Analyst*, *Sales Manager NY*, *Sales Manager Other Regions* and *Customer Support US*.
- Budget forecasting.

Information Analyst
- Daily contacts with Telerate to update, gather and tabulate different kind of information about existing and new Telerate customers and products for strategic purposes of senior management level.
- Serve as two-way information sharing between Telerate and TechData.

Sales Manager (one for NY and one for Other Regions)
- Coordination of the selling functions of the *Corporate Relations* (Top accounts), *Sales Reps* (type A and B accounts) and *Telemarketing* (Other Regions only).
- Communicate with the *Customer Support Manager US* in order to receive information about upgrades sales opportunities and about potential businesses.
- Require support for specific customers (mainly Top accounts) from *Customer Support Manager*.
- Control of the activities performed by the sales force.

Corporate Relations (one for the NY region and one for Other Regions)
- Get new businesses and sale upgrades focusing on Top accounts.

Sales Reps (one group for the NY Region and other for Other Regions, each headed by a Sales Manager)
- Getting new businesses through 'cold calls' and sale upgrades focusing on type A and B accounts. They are encouraged to make joint calls with Telerate's sales people.

Telemarketing US
- Same functions that *Sales Rep* but focusing on type C accounts.

Customer Support Manager US
- Coordination and control of activities of *Customer Support*.
- Inform to both *Sales Managers* about potential businesses and upgrades based on information collected through his/her *Customer Support* executives.
- Control of the activities performed by the *Customer Support* executives.

Customer Support (one group for the NY Region and other for Other Regions, headed by the Customer Support Manager US)
- Respond questions of existing customers about the use of the product.
- Training of customers once a sale of a new product has been made.
- Follow up with clients on a regular basis.
- Avoid cancellations.
- Sign renewals of contracts with existing customers.
- Provide feedback to the *Customer Support Manager.*

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Exhibit 4

TECHNICAL DATA'S CURRENT ORGANIZATION

```
                        Managing Director US

                           Sales Director

Sales Rep          Regional Customer        NY Customer            Sales Rep
Canada             Support Manager          Support Manager        NY

Sales Rep              Customer Support      Sales & Marketing      Sales Rep
Mid-Atlantic           Canada, Mid-Atl       Administrator          NY
                       Fixed Income

Sales Rep              Cusromer Support                             Sales Rep
IL                     IL, West                                     NY
                       Deriv's
                                             Customer Support
Sales Rep              Customer Support       NY                    Sales Rep
West                   Northeast,             Forex Specialist      Major Accounts
                       Southeast
                       Technicals            Cusromer Support
Sales Rep                                     NY, Latam             Sales Rep
Northeast                                     Emerging Mkt          NY
                                              Specialist

Sales Rep                                    Customer Support
Texas, Southeast,                             Japan
Latam                                         All Territories

                                             Customer Support
                                              Major Accounts
                                              Derivatives
```

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Exhibit 5

TECHNICAL DATA'S PROPOSED ORGANIZATION

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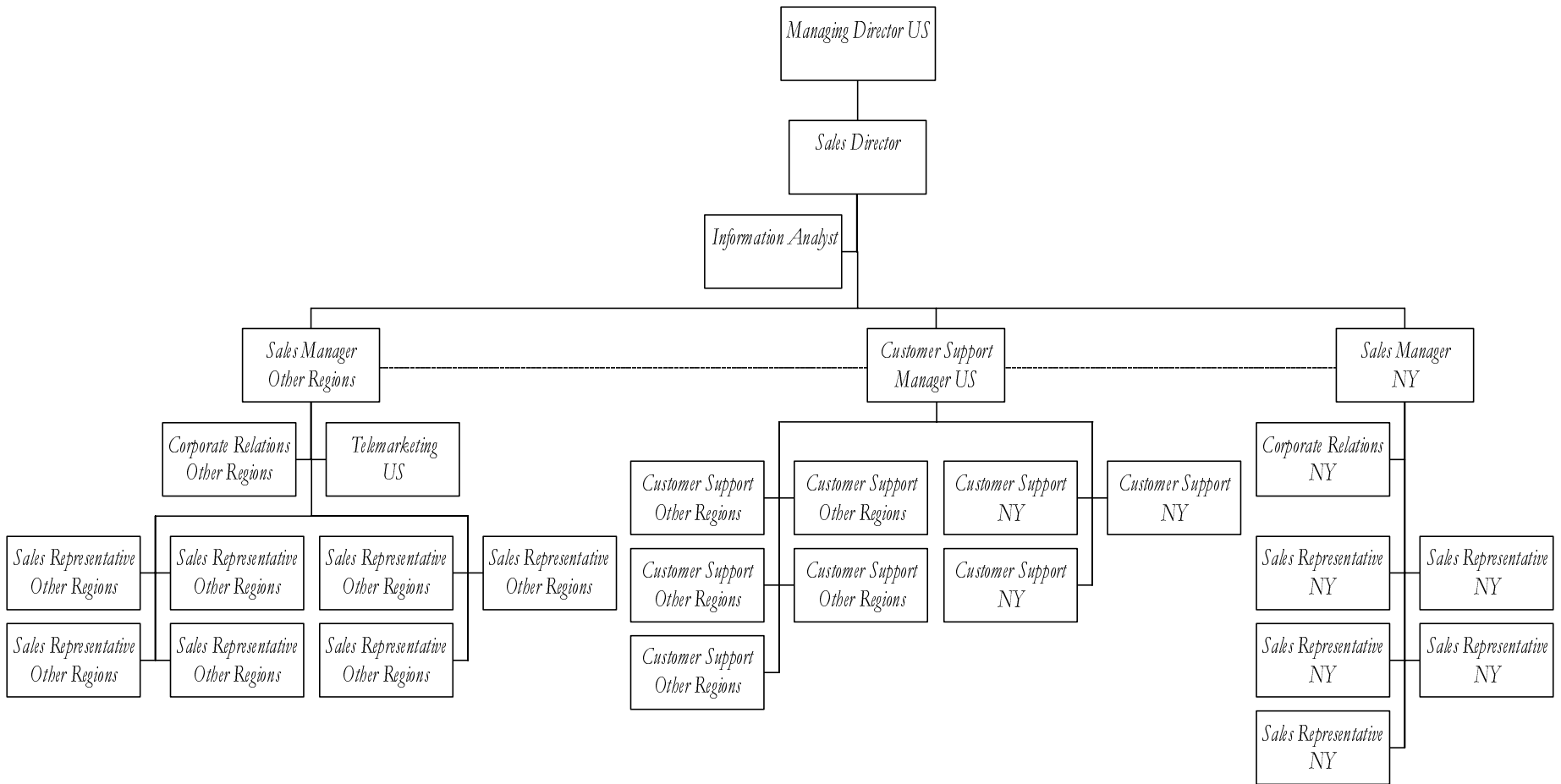
EXHIBIT 6

Salary and Commission Structure

Position	*Salary*	*Commission*	*Bonus*
Sales Tier 1	$ 24,000	yes	x
Sales Tier 2	$ 32,000	yes	x
Sales Corporate	$ 65,000	yes	x
Telemarketing	$ 12,000	yes	x
Sales Managers	$ 65,000	x	20%
Customer support	$ 26,000	x	20%
C. S. Manager	$ 45,000	x	20%
Information Staff	$ 30,000	x	20%
Sales director	$ 80,000	x	20%
Mgt. Sales U.S	$ 90,000	x	20%

Net New Business Commission Plan

Monthly Revenue	Monthly Commission
85% plan	40% sold revenue
100% plan	50% sold revenue
over	90% sold revenue

Net New Monthly / Yearly Company Pay-out at 100% of plan

Positions	New Monthly Salary	New Monthly Revenue	1% Monthly Commission	Anticipated Monthly Commission	Yearly Income
Tier 1	$ 2,000	$ 2,000	$ 1,000	$ 1,250	$52,000
Tier 2	$ 2,667	$ 2,500	$ 1,250	$ 2,000	$71,000
Telemarketing	$ 1,000	$ 1,500	$ 750	$ 585	$28,000
Corp. Sales	$ 5,416	$ 3,500	$ 1,750	x	$86,000

Manager Bonus Plan

Position	Salary	x 20% = Available Bonus on Plan
Sales Manager	$ 65,000	$ 13,000
Director	$ 80,000	$ 16,000
Director U.S.	$ 90,000	$ 18,000
Total	**$ 300,000**	**$ 47,000**

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EXHIBIT *7*

Customer Support Bonus Calculation at 100% of Plan

Position	Salary	Total Available Bonus	40% Team Bonus	60% Individual Bonus
CS Support	$ 26,000	$5,200	$2,080	$3,120
CS Manager	$ 45,000	$9,000	$3,600	$5,400
Information Staff	$ 30,000	$6,000	$2,400	$3,600

Projected 1998 Compensation vs. TECHNICAL DATA 1997

POSITION	#	SALARY	COMMISSION	BONUS
Sales				
Tier 1	8	$ 192,000	$ 189,000	x
Tier 2	4	$ 128,000	$ 156,000	x
Corporate	2	$ 130,000	$ 42,000	x
Telemarketing	3	$ 36,000	$ 48,000	x
Managers	2	$ 130,000	x	$ 26,000
Support				
C. Support	8	$ 208,000	x	$ 41,600
C. S. Mgt.	1	$ 45,000	x	$ 9,000
Info. Staff	1	$ 30,000	x	$ 6,000
Staff				
Sales Dir.	1	$ 80,000	x	$ 6,000
Mgt. U.S	1	$ 90,000	x	$ 8,000
NEW 1998	31	$1,069,000	$ 435,000	$ 96,600
OLD 1997	28	$ 987,754	$ 507,431	$ 45,000

TOTAL DIFFERENCE BETWEEN 1997 & 1998 PLANS: INCREASE OF $ 60,415 OVER 1997