RECORD OF SOCIETY OF ACTUARIES
1977 VOL. 3 NO. 2

EFFECTIVE PRODUCT MANAGEMENT

Moderator: ROBERT D. SHAPIRO. Panelists: RODNEY R. ROHDA, BRADLEY D. LEONARD, YVES LANEUVILLE

1. What does "Effective Product Management" mean?

2. How do we organize internally for effective product management?

3. How do we establish objectives for a product line and integrate these objectives with overall company goals? How are product line results measured and evaluated?

4. How do we coordinate company activities with respect to initial design and delivery of new products and the subsequent follow-up for modification and change?

MR. ROBERT D. SHAPIRO: The approach we plan to take in our discussion of effective product management involves a study of the hypothetical XYZ Life Insurance Company. The company's individual product lines consist of a life line, an annuity line and a health insurance line. The hypothetical 1976 Summary of Operations, which is not intended to be an actuarial demonstration, is presented for purposes of facilitating discussion.

Each panelist will assume the role of product manager for one of the company's three individual lines. He will work from the financial results that are exhibited in this Summary of Operations, describe the experience which has led to these results, and offer some planning alternatives.

MR. RODNEY R. ROHDA: In focusing on the 1976 Summary of Operations for the individual life line, it is easy to see that the bottom line net gain of $6.5 million is quite respectable. Also, in comparing it with the bottom lines for annuities and health we note that the gain from life actually represents most of the total gain.

Product Line History. Given that the last year end results are really quite good, what trends can be seen by comparing the results of the life line for the last five years?

A. The growth in investment income has been somewhat impeded by the growth in the policy loan account.

B. The benefits paid have been edging up at a faster than ideal pace due to the increase in surrenders.

C. The growth in expenses has outstripped the growth in premium income.

Despite these items, we had an acceptable net gain from life for 1976. Because of this, should I as the individual life line of business manager receive a special bonus this year, and can I in planning my own time devote more to other activities since my line is running itself and doing so well? The answers to both of these questions might be no.

XYZ LIFE INSURANCE COMPANY

1976 SUMMARY OF OPERATIONS FOR INDIVIDUAL LINES

(Amounts in 1000's)

	Life	Annuities	Health	Total Company
A. 1976 Analysis of Operations				
1. Premium Income	$100,000	$30,000	$10,000	$140,000
2. Investment Income	50,000	8,000	2,000	60,000
3. Total Income	$150,000	$38,000	$12,000	$200,000
4. Benefits Paid and Reserve Increase	$ 70,000	$31,000	$ 9,000	$110,000
5. Commissions and Expenses	45,000	4,000	5,000	54,000
6. Dividends Paid	21,000	2,000	--	23,000
7. Total Outgo	$136,000	$37,000	$14,000	$187,000
8. Net Gain before FIT	$ 14,000	$ 1,000	$(2,000)	$ 13,000
9. FIT	$ 7,500	$ 500	$(1,000)	$ 7,000
10. Net Gain after FIT	$ 6,500	$ 500	$(1,000)	$ 6,000

B. 1976 Year-end Financial Position

1. Assets..$1,000,000
2. Liabilities.. 960,000
3. Surplus.. 40,000

Other Company Characteristics

1. Stock company with large par line
2. Operations in 45 states outside of New York and in Canada
3. Agency force of 250 career agents and 150 personal producing general agents (PPGA's)
4. Special asset figures: 18% in policy loans in 1976 (up from 14% in 1975)
   No separate account business

The Summary of Operations obviously lumps the results for new business as well as that which was in force prior to the beginning of the year. I, as line manager, can take neither credit nor blame for the investment income and the mortality results which flow from our loyal longtime policyholders. However, these items constitute the bulk of the 1976 Summary of Operations.

Without question my comrade here who manages the health line can be judged on his 1976 results and their trends over the past five years. A group line manager, if he were on this panel, could be similarly judged. On the other hand, to judge the individual life line it is necessary to focus on those things which the manager can truly control and on those problems which, if not rectified, will eventually erode this line.

It is fairly common to see members of company top management express their goals in terms of increase in new sales (it used to be face amount but gradually managers are realizing the importance of premium) and overall net gain. While one or both of these goals may be communicated to groups like the field force, the Board of Directors, and company employees, it is necessary to set other goals for the individual life line of business manager.

I submit that in the past, the conditions for this line have been such as to foster lax line management. Mortality and interest improvements have carried us through in great fashion. When these started to slow in the past two to five years, we began to see such actions as switching from net level premium reserves to modified reserves. This helped to keep operating gains at their "normal" levels. But if improvements in mortality and interest rates are leveling off and if we have already cashed the modified reserve trump card, what do we do next? Under these circumstances, we might now be in an environment to really see what the manager of individual life can do!

Problems and Objectives. What are the basic problems on which the individual life manager must focus and on which his goals must be set?

1. Persistency

   Companies in general have seen persistency erode in the past few years and XYZ Company is no exception. Why is it happening? Competition is one answer. Another might well be that life insurance is showing symptoms of a product in a throwaway society. Families move and families change and their life insurance might get left behind. What can we do about it? First, all concerned individuals within the company have to become aware of the problem, and goals have to be set for turning the worsening persistency around. I feel that one of the most direct ways of focusing on the problem is to make agent and manager compensation far more responsive to the persistency levels of their business.

2. Policy Loans

   Since policy loans are a contractual right, it cannot be said that they are bad per se. However, they can be a severe problem to a company that prices its products without regard to anticipated loan levels. We have evidence that minimum deposit is becoming an even more popular merchandising technique. The XYZ Company in studying its experience notices that minimum deposit business is relatively more persistent during the early policy years. However, its line of business manager has the gnawing fear that its persistency is going to be substantially worse than for non-minimum deposit business as the block ages. Also, substantial sales of minimum deposit business which require rather extensive year-in and year-out special handling to keep it in force runs into a conflict when the agent who sold it leaves the company. The XYZ Company is building a block of high administrative cost business which will be with it for a long time.

To deal with policy loans it is certainly necessary to assume loan utilization rates when pricing a product. Also, if it is true that the way to an agent's heart is through his pride and pocketbook, agency awards and compensation tied to the agent's loan utilization rates certainly seem to be worth consideration.

3. Expenses

The analysis of the XYZ Company expenses in the past five years has shown them to be on the rise but certain conditions today indicate that they will increase even more in the future. An increasing number of the products the company offers have their basis on tax savings of one form or another--IRA, Section 79, and pensions. The higher the proportion of this business on the books, the more the company is building a burden of future administrative expense and the potential for higher lapses when the alleged tax savings fail to match what the policyholder thought or was told they were going to be.

Another expense pressure focuses on underwriting costs. Can the company really afford to continue to get the type of medical information it now requires in its underwriting? I suspect that to control this it will become increasingly more important to rely more on the field underwriter and lay underwriters in the office, and less on the opinion of outside doctors.

Another expense item relates to the research and development costs of new products and the ongoing administrative expenses of these products. XYZ does not have any separate account business. The reason for this is that back in the late 1960's when many of their competitors were getting into the variable annuity business, the XYZ's individual life line of business manager drew up a simple forecast of the expected volume of variable annuity sales, the profit margins from this volume and the front end and ongoing expenses. Guess what the result was? Even based on what now appears to have been an overly optimistic sales forecast the line would never break even. Consequently, the company stayed out of this field. The results which have unfolded reinforce the merits of this forecasting technique and each new product proposed to the company is subject to this analysis.

What then are in my estimation some general guidelines for effective product management within the XYZ Company?

1. It is necessary to focus on goals upon which management can effect a change.

2. The nature of goals must vary according to the nature of the business.

3. Once goals have been agreed upon they should be communicated to all who should know about them, and the actual results after the fact should be compared with these goals.

QUESTION FROM FLOOR: As a product line manager, I assume that you are responsible for profit in the line. Since, as you have said, profit as shown in the statutory statement is not appropriate as a performance standard, how would you set the performance standard for the individual line?

MR. ROHDA: Perhaps the ideal approach would be a system of performance appraisal which separately evaluates existing and new business. However, it is difficult to set goals under such a system, particularly when the goals for new business may be negative numbers.

Instead of considering one bottom line figure, a method of identifying component goals and component problems can be more valuable in line management. If goals are set in terms of persistency improvement, expense control or loan utilization, progress can be monitored and evaluated on a continuing basis.

QUESTION FROM FLOOR: As manager of the individual life business, are you experiencing a trend toward term insurance? If so, what steps are you taking to insure that you can run your operation according to your standards?

MR. ROHDA: I will submit that most line of business managers, excluding those in companies that have historically been big in term insurance, are really dealing with a very big unknown right now. Many have come out with high-minimum, competitively priced term insurance, hoping to make it easier for agents to become established with young clients who cannot afford permanent insurance. Hopefully, these clients will someday convert this term insurance into permanent insurance.

What some managers have discovered, however, is that the consumer approach to the purchase of high-minimum term insurance may resemble that of casualty insurance. The consumer who buys from one company this year may find next year that his agent is no longer with the company, but that a very satisfactory term product is available through a new agent. This situation may cause problems with regard to overhead expense and agency compensation systems.

I have no specific solutions to the problems involved in adjusting to a predominantly term environment. One possible approach would be to build term products with automatic conversion to ordinary. In the future, there will be agency compensation problems which must be faced, and the industry will have to deal realistically with the nature of high-minimum term insurance.

MR. BRADLEY D. LEONARD: Before I begin a discussion of XYZ's health product line, I would like to offer the following definition:

> Effective product management is focusing on the right product, at the right time, and in the right manner; with due regard to where you have been, where you are, and where you are going.

History of Hypothetical Health Product Line. I will begin with the history of XYZ's health line. Let us assume it began in the early 1960's out of the desire to provide a well rounded portfolio to existing agents, recruit new agents and increase the premium base. Although beginning as a commercial hospital and disability line, a multiplicity of products has developed and currently, most sales are on guaranteed renewable (GR) hospital and non-cancellable (NC) disability, which was introduced in 1972. Since then there has been minimal support activity. The pressure of changing health regulation, agent pressure for new products and profitability setbacks brought about the assignment of a health product manager late in 1976. Although 1976 losses are partly due to a more accurate allocation of expenses to health, morbidity losses are particularly acute in the hospital line.

Although the company is not in the group business and has no plans to enter it, management has decided to remain in both health lines for primarily the same reasons as originally. The health product manager's assignment is to make the health line viable.

Product Line and Corporate Objectives. Specific line goals are as follows:

Hospital Line - This is to be treated as an accommodation, stressing rate adequacy and quality of benefits, with proper controls to limit its growth as a percentage of new business.

Disability Line - Strive to market more aggressively, but on a sound basis. Try to integrate more with life sales.

General objectives that should guide the XYZ health product line managers include:

1. A self-supporting product line - A marginal expense approach is not acceptable and profit objectives should correspond to the risk. It is not desired to accrue large profits, but it is essential to minimize the potential of large losses and the resulting additional burden on surplus.

2. Competitive quality products - This points toward continued GR and NC renewability, which is consistent with the agency feedback. Each product should be as consumer oriented as possible, with price second in importance to benefits. The health line should present the company in a favorable light to agents and the public.

3. Simplicity - It should be as easy as possible for an agent to assimilate health products into his or her sales portfolio and easy to administer and maintain in a rapidly changing regulatory climate. The corporate objective is to focus agent attention on life sales while still providing other needed products. A non-participating line is consistent with this goal and helps temper the higher cost arising from the first two goals.

Current Problems

1. Existing products are underpriced overall and are not equitable by class of risk. Disability income is overpriced in

the most desirable professional market and underpriced elsewhere. Rate increase activity is long overdue.

2. Hospital sales are increasing rapidly due to low rates, even though benefits are also low. A growing trend is seen toward personal producing general agent (PPGA) health only producers; that is, agents who utilize us as a health product outlet and place life and annuity business elsewhere.

3. Disability income sales are relatively stable. Loss ratios indicate only a modest loss position. At current rate levels, potential losses in the blue collar market and an inability to penetrate the professional market is a concern. A tightening of underwriting limits, including a $12,000 minimum income, is a corrective step already taken to help control the overinsurance problem.

4. The quality of business is dropping. The incidence of first year claims is rising and cases of misrepresentation are rising.

5. Persistency is poor, both first year and renewal.

6. A greater quantity and quality of statistical data needs to be captured and output for review.

Management Approach to Problems. There is most definitely a delicate balance to be sought. Aside from the basic goals of profit, quality and simplicity, a product manager must consider the time constraints, agent reaction, other company priorities, limitations of surplus, impact of agent compensation and recognition methods, and agent retention and recruiting. In particular, the product line managers must work together to build a compensation system that encourages the kind and quality of business consistent with corporate objectives.

As a first step, activity should begin toward getting the unprofitable products off the market and instituting a rate increase program. Thus, product development should begin immediately. Taking existing products off the market prior to introduction of these new products is not generally practical, but can be done on a piecemeal basis. For example, unpopular plans and riders may be discontinued.

Prior to the release of new products, the following interim steps might be considered.

1. Analyze paid loss ratios by agent and agency (however, draw conclusions carefully, taking into account fluctuation and distribution of business). Alert claim department to report recurring problems from a given agent. Solicit help from the agency division to help these agents improve the quality of their field underwriting. As a last resort, discontinue product line for that agent.

2. Assure that premium and claim information entering data files is sufficient. Participate in revision of claim forms. Request necessary reports.

3. Reduce hospital commissions to the level anticipated in new products to reduce influx of this business, and reduce impact of this negative feature upon introduction of new products.

4. Introduce premium mode restrictions on hospital. Require at least a semi-annual premium, except allow check-o-matic if another life or annuity policy is in force or applied for on that mode.

5. Introduce a requirement to limit the mix of hospital business in a given agency. Allow a reasonable grading-in period and encourage its use by the ordinary division to stimulate other sales. This should improve the overall quality of business and eliminate the hospital-only producer.

The hospital portfolio should be condensed to one comprehensive major medical with various deductible and room and board options, and continuation of a hospital income policy. Although guaranteed renewable, reserve the right to change rates by state. Incorporate as many mandated coverages and other features as possible and price for it. Incorporate conservative underwriting guidelines.

The disability portfolio should continue as non-cancellable only. Drop all other products, except an overhead expense policy or rider. Price policies to compete more favorably in the professional market, including increased issue limits. Assure rate adequacy throughout. Use a modified residual disability concept which will be fair, but less risky and easier to understand and sell than a fully residual policy. Simplify approach to programming of benefits, and strive for integration with all other income type benefits.

Integration with life sales could be encouraged by a special disability rider attachable to life or term policies which is priced to reflect better morbidity and persistency and lower expenses. Introduce some new wrinkle such as a To Age 60 income feature with only 2 or 3 elimination periods. This will also minimize the early retirement risk. Allow it only on better occupational classes and incorporate all of the regular features including programming of benefits, but make no rider options available. Recognize that this will only be approved in some states. Pay the normal life commission scale, which results in greater initial acquisition cost, but a lower present value cost. It is hoped that this low premium, high commission product will be the source of increased sales (and thereby increase life sales).

Finally, incorporate simplified language into all health products, but recognize the limitations, especially with major medical.

This has been a set of hypothetical conditions and one product manager's approach to bringing about achievement of corporate goals. I have set out only an initial course of action and the need for constant re-evaluation is without question.

QUESTION FROM FLOOR: It is now year end 1977 and you are to review your product line with the President of the XYZ Company. You have had one year to implement your strategies. On what criteria do you want to be judged?

MR. LEONARD: A summary of the actions that had been taken, as well as their timing, should be considered. In addition, items such as incidence of first year claims and misrepresentation, where results can be seen rather quickly, could be studied on a current basis. In the short run I would want to be judged on a combination of sales results and a study of various components, including trends in persistency and claims, and distribution of business by class and line. The Summary of Operations is not appropriate to use without further breakdowns and supporting analysis, especially over such a short time frame.

QUESTION FROM FLOOR: Assume that after the 1977 year end review, your president comes to you and says he would feel much more comfortable out of the health business, provided that he can see that the same commission earnings would be generated by field force, and also that the same overhead expense-bearing capability would be maintained. He approaches the annuity and the life product managers to see just how they would expand their areas to cover the loss of the health business. How would you react?

MR. LEONARD: Whether this action should be taken would depend on the corporate goals. If these goals can be satisfied by maintaining the present premium base, and if this can be done in such an alternative manner at less risk, the action may make sense from a corporate point of view.

As health product line manager, I would feel obligated to point out the other ramifications of discontinuing the health business. Agents would have to go elsewhere for health products, and they would be exposed to the portfolios of other companies. Most companies that have health lines also want life business. I would try to defend the potential for making the health line profitable. One possibility would be to discontinue the hospital line in states that are potential volatile risks, such as California, where the punitive damage risk can be unpriceable.

Finally, I would emphasize that the health product line is established, and correction of its defects may be preferable to venturing into new, unproven product lines.

MR. YVES LANEUVILLE: I feel lucky to have been appointed to discuss the annuity line, which displays such good results in the exhibit.

After you have heard my comments and the history of the line, its current results, the company's objectives, the current problems and proposed solutions, I will let you judge whether or not we have a situation of effective product management.

History and Current Results. One can see that, when annuity revenues are about 80% premium but only 20% investment income, the line is far from being mature and that it is undergoing rapid expansion. In the year illustrated, premiums represented as much as 25% of the assets held under the line at the beginning of the year. I will talk later on the problems caused by this annuity new business boom.

Was this boom desired, or at least expected? Frankly, yes. The sales success is obviously attributable to a revision to a more competitive single premium immediate annuity rate basis, and to the introduction of single and flexible premium accumulation plans for deferred annuities which have attractive cash values before maturity.

Objectives. This leads me to discuss the company's objectives.

1. The first deals with the natural concern about company growth. The objective is to increase your share of the market where your product is in demand, and where there is incredible sales potential; that is, in the retirement or other tax sheltered annuity field.

2. It is also desired to attract back the savings dollars lost by clients who favor term insurance over permanent life. Having built a talented Investment Department, you are concerned about using its capabilities to its fullest extent, now and in the future.

3. You want to provide your sales force with a complete line of products from pure insurance to pure savings.

4. You want to improve your retention of proceeds through settlement annuities.

5. You want to innovate, and put the company's name somehow in the front scene of this competitive environment. Annuities are one occasion, as annuity buyers usually shop around for the best deal; hence a competitive annuity rate basis is a marketing investment. Hopefully they will think about the company when looking for other life insurance products, too.

Current Line Problems and Proposed Solutions. Such benefits, as you can expect, do not arrive without compensating problems. I will now touch on some typical ones.

1. Writing new annuity business, with premiums based on current new money interest rates, involves valuation surplus strain. There is obviously a limit to expansion. It goes without saying that a sales quota at some point in the future, or reversion to a less competitive rate basis, would be very disturbing to the sales force after the good years. I cannot offer a solution to multiply the surplus available for this purpose, but I suggest that the rules of the game be communicated early to the agency division, to prevent later surprises and to see that their marketing thrust does not divert from your basic insurance products in favor of annuities.

2. Another problem is in the area of quotation services and policy administration. Turn-around time is the problem: typically, your agent complains that he lost a sale because he didn't have the quote the same day; your applicant for an immediate annuity contract complains that after a month he has not received his first monthly installment check; the actuary is disappointed with the time the administrative machinery takes to implement a rate change when there has been a critical interest rate variation reported for new investments. It is likely that you will soon find that you can no longer live with the resources you had before the expansion. Due to the variety of plan, age, sex, guaranteed period, deferral period, etc. it is not practical to include all possible rates in the

company's rate manual; computerization of quotation services hopefully hooked with modern telecommunications devices to reach your remote offices is step number one. Then you must have a look at your policy issue and annuity payment routines to insure that they will withstand the increased work load and give you the flexibility required.

3. Expense is another problem. It will be fine if your current resources are sufficient to live with the expansion of the line, in that, when expenses are related to increased volume, the unit cost will reduce; but it is likely that you will be facing problems as mentioned a minute ago, requiring investments in developmental expenses. A typical situation is that the company introduced a competitive rate series which followed from pricing with marginal expense treatment, but can no longer afford this practice with the size of operation such as in our slide example. The solution here is obvious: the price must be rectified before severe antiselection.

4. The next problem is not the least. We have not considered investments yet. If the influx of annuity premiums was sudden, this was probably initially a nuisance to your Investment Department and the increased cash flow was probably placed in short term securities, thereby ruining your long term holding and yield assumptions in your pricing. The cash inflow of annuity premiums is directly related to competitiveness of the rates; hence you are putting your investment fellows in a difficult position when they are preparing cash flow estimates or planning for commitments. When attempting to match assets and liabilities, you will probably have to command an asset mix for your annuity line which is different from that provided by your total company's investment annual or quinquennial plans. This difficulty must be overcome in discussions between the actuarial and investment divisions. In the best interest of the line, you aim at matching liabilities and benefit outflow patterns. Furthermore, if you write a lot of deferred annuities with cash values you should be concerned about reinvestments and liquidations in unfavorable periods of interest rate fluctuations, and accordingly include a risk charge in your price. I do not mean to minimize here the extent and complexities of such studies.

5. Related to investment performance and yields are dividends, another critical problem. The newer series of annuity products was based on new money interest rates for competitive reasons. If these new plans are non-participating, your problem stems from the pressure for equal treatment on the participating line; if they are participating with a special dividend class the pressure will be for improvement of dividends for the older generation of policies. The inconsistencies are almost inevitable and the extent of the problem will be evidenced by increased policy replacements with dissatisfied clients asking for a switch at no cost, and agents asking for commission on the replaced policy if the latter proves to be more advantageous to the client. The solution that I prefer is just neutrality; that is, no change prohibition but no

incentive for switching. For example, no loading or discounts to policyholders nor commissions to agents on the transaction.

6. Finally, just a few words on the trend to lower commissions on new annuity products. You have to be concerned with your sales force future earnings. It is not too bad when you add a new product to your portfolio that is highly in demand in the market and that has a competitive price; chances are that it will sell once your agents have realized the merits of "sell more at a lower coefficient of difficulty". Commission consistency between the various lines of business is also a topic that will soon be actuality.

Conclusion. To conclude I wish to make only one remark: Efficiency in product management is a natural consequence when everyone pulls in the same direction. A common decision of a group is so much easier to implement than having to step on someone else's toes. What I consider essential is good communications. The problems I described above could have been avoided to a certain extent but will definitely find a solution with improved communications between the actuaries and the agency personnel, the investment personnel, the policy administration personnel. In short, speak but also listen.

QUESTION FROM FLOOR: This is supposedly a stock company and yet the one financial exhibit that we are able to see is a statutory statement. It seems to me that the management of a stock company, if they were restricted to looking at a single financial statement, would prefer to look at a GAAP statement. I would like to have the panel comment on this.

MR. SHAPIRO: The purpose of the exhibit is really just to present some illustrative figures for the three lines, and to form a simple basis for discussion. If we were looking for ways to evaluate performance, we would have to worry about other analyses such as obtaining both statutory and GAAP results, and breaking these results further into those created by existing business and those created (or expected to be created) by future business. We should also look at the present value of future profits in each case. I think we agree that the statutory statement alone is seriously deficient as a base for analyzing performance.

MR. ROHDA: I feel that some of my comments with regard to the fact that the inforce block should not be lumped with new business are to a certain extent as true for a GAAP basis as for statutory. For the purpose of making a line of business manager responsible for results, a GAAP statement may not be significantly better than a statutory statement.

QUESTION FROM FLOOR: Do you think that the 4% surplus/asset ratio of the XYZ company is adequate? There are many companies with ratios in the 6% to 8% range.

MR. ROHDA: Is 4% an adequate surplus to assets ratio? Perhaps another way to ask this question would be: Is the 6% to 8% ratio of the companies that you have cited excessive, or is it in fact the norm and the desired level, while 4% is inadequate? In considering this question, it is necessary to look at the nature of the business of the company involved, the company's past experience, and its reserve approaches. If a company has a very high quality block of business and an extremely low reserve interest rate assumption, with a full net level premium reserve basis, a surplus figure in the 7% to 8% range is likely conservative. In the past when gains were often substantial, there was really no need to consider what might be the desired surplus level. Now that some of those days have passed, many of us will be asking: What is a realistic surplus level? I submit that that answer will be a lower figure than the surplus ratios that have been seen historically, particularly among a lot of the larger companies.