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Navigating Through Stormy Seas

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Summary: During the 1980s, companies began repositioning themselves as "financial supermarkets" by broadening their products and services. During the 1990s, companies are now refocusing on "core competencies." Many companies are actively assessing the need to reposition current business, specifically, which businesses should be grown? Which should be divested? Which new ventures should be considered?

These strategic changes are of critical importance to actuaries and nonactuaries alike, regardless of their level/role in the firm. They can have a profound impact on future career opportunities within the company and the need for individuals to plan for change.

Strategic reposition can sometimes be impeded by personalities, perspectives, emotions, or politics. More structured approaches can be useful to provide a more analytical and complete framework to evaluate external opportunities and threats and to assess internal strengths and weaknesses. Putting all of the pieces together allows a company to establish corporate priorities, refine its strategic focus, execute its strategy, and measure and monitor progress. The session will describe the theoretical and practical aspects of several tools currently being used by a growing number of companies to assist in strategic repositioning.

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Mr. Richard K. Wong: During the 1980s we heard the term "financial supermarket," where companies tried to build on their core competencies and expand into other areas. In the 1990s we are seeing the opposite process, where companies are looking to refocus on their core competencies. It's a tough process, and it is never easy; you have personalities, politics, people, and different perspectives involved. This is why a structured approach to strategic planning is essential.

The goal is to provide you with some tools that are available for strategic positioning. We have two speakers who will each present a "best practice" approach. Mr. David E. Neve will speak first followed by Mr. John W. Boynton.

There is one company that is a financial supermarket that has really done well. It sells appliances, investments and insurance, and I have always had a place of special respect for it. General Electric (GE) seems to do exceedingly well in everything it does. GE uses a corporate-portfolio-analysis framework to allocate its capital. The Principal Financial Group uses this process. Dave Neve, an actuary with The Principal, will describe this tool.

Dave has spent most of his career in the corporate financial and strategic planning area. Recently he took a new position as the chief financial officer for the individual insurance operations. Dave is completing his term as the chairperson of the Society of Actuaries (SOA) Committee on Management and Personal Development, which is sponsoring this session.

Mr. David E. Neve: I would like to start by describing a tool that my company has just implemented to evaluate the relative attractiveness of each business that makes up the portfolio of businesses at my company. This tool is only one component, but a very important component of a rejuvenated and more focused corporate strategic planning process. I will first describe the tool in general terms and then go into the details of how we implemented this tool at my company.

If you are expecting this tool to be a complex, technical, actuarial model of some sort, you are going to be disappointed. This tool is simple and based on common sense. It is not terribly sophisticated. The real value of this tool is not in its sophistication, but in the focus and discipline that it brings to the company. It forces a company to look at external competitive information and point out implications for the future direction of the company.

What is this tool that I am calling corporate portfolio analysis? It is a tool used to prioritize the relative attractiveness of each business within a company for capital and human resource allocations. It attempts to provide a level playing field so we can analyze and compare the different businesses that make up a firm. Businesses

can be quite different, quite diverse. The basic success drivers of each business can be quite different. How does corporate decide which businesses are attractive, that we should stay in and perhaps grow rapidly, and which ones we should be divested, or perhaps keep on the track of slow growth? This is a tool that attempts to provide that information to corporate so that it we can deploy capital in an effective way.

This is not the only way you can do it. Obviously there are many different ways you can do this evaluation. This tool is an approach that I believe was developed by the Boston Consulting Group several decades ago. You will find it in strategic planning textbooks. I think it is part of MBA programs, and it is an approach that GE has been using for a number of years to assess their businesses. GE has quite a variety of different businesses and to compare the relative attractiveness of each is quite difficult. We have applied this at my company in the insurance area. It could also be used within a subgroup of a company, perhaps within a particular product line, to assess the relative attractiveness of products within that product line.

My presentation will focus on evaluating existing businesses within a firm to try to assess their relative attractiveness, but you could easily incorporate new opportunities or new businesses that you might want to enter by putting them into the mix and comparing those new businesses' potential attractiveness to existing businesses.

If you look at this definition, there are a couple of key words. First of all, it is a tool. It is just one bit of information. It does not drive all the decisions that could be made to evaluate businesses. It is not a perfect approach, but it gives some structure and discipline to the strategic planning process. Prioritize is another key word. The goal is to prioritize which businesses are doing well and which ones may need some help. The word relative is important, too. We need to gauge the relative attractiveness of the different businesses that make up the firm. Finally, the word allocation is an important concept. We are not just talking about using this tool for capital allocation, but also for human resources and information systems resources. Where should the firm deploy its resources—financial, human resources, and systems—to best position itself for success in the future?

We are all familiar with the portfolio theory that has been developed to determine the optimum mix of assets to maximize the return in a portfolio. Corporate Portfolio Analysis is the same thing, except we are talking about a portfolio of businesses that make up a company.

I would like to: define the purpose of this tool in strategic planning; describe the tool in general terms; discuss how we implemented this tool at The Principal; and summarize implications, limitations, and benefits.

First, why should a company go through this whole process? As Rich mentioned, it was not too long ago that many companies were looking to expand into different businesses. The term "financial expansion" was used a lot in my company—what new financial service business issue did we contemplate getting into? In recent years, I think most companies are trying to refocus and reposition existing businesses. Capital is becoming increasingly viewed as a very scarce resource to be used to maximize growth and return. Also, many companies are moving toward a higher performance standard. The past—putting out one-year projections, trying to be successful and moving along with status quo—is gone. Corporate management is pushing the organization to perform at a higher level and there is a need to put in tools like this to help point the ship in the right direction.

What are the objectives of this approach? First, it is to provide input into the capital allocation decision. This is an important tool that can help corporate decide where to put our capital. This is not the only input, but it can be an important component.

Second, it provides input into the development of an overall corporate strategy. My company did not have a formalized corporate strategy that tied everything together. We had a number of businesses and each had developed their own strategy. This tool, along with other things, can help provide some overall structure and provide input into developing a corporate strategy.

Third, this tool can be used to increase business unit accountability for their performance. It can help to create an environment where improved performance is encouraged, to indicate where there are gaps in performance and to provide more accountability to the various businesses of the firm.

Fourth, it forces a company to look externally—outside the company. At my company, we have historically been an internally focused company. We felt that if we did a good job, had a good product, executed well, had good, solid employees, designed products well, priced them right, had an effective distribution system—if we just did all the right things, we would be successful. We focused on doing things right internally and we did not really look at what other companies were doing, what their strategies were or what practices they followed. This tool forces a company to look outside the company, to compare for yourself, and to learn what is going on outside the walls of your own corporation.

I will describe how this tool works in general terms. It evaluates the attractiveness of a business in two dimensions. First of all, it evaluates the future market attractiveness of the industry in which the business is competing, i.e., the total market. The second dimension is the current competitive position of that business within the market or in the industry. This evaluation is based on a high degree of external

competitive information on the industry and other companies. It attempts to make this evaluation as objective and mechanical as possible, but you cannot eliminate subjective business judgment. It is also needed, because you need to interpret what the data mean. As Rich indicated in his opening remarks, this internal evaluation can easily be distorted by biases of management and the culture of the company. The process attempts to look at the data and come up with an objective evaluation to reduce or avoid some of the biases that may exist.

Here's a quick overview of the process that one goes through to begin this evaluation. First, you have to define the external competitive information that you are going to gather and analyze. (This assumes that you have your own management information systems in place.) Then, a score is developed for each of these two dimensions—the future market attractiveness and the current competitive position. You can devise your own scoring scheme, for example, a scale of 1–10 for each of these two dimensions. Then plot the results on a two-dimensional matrix, where the Y axis is the future market attractiveness score and the X axis is your the current competitive position score. This produces a scattered diagram of all the various businesses or planning units in your organization. It triggers a lot of discussion and analysis. Do you have the right mix of businesses? Which ones are your stars? Which ones are not stars? Hopefully it will indicate performance gaps or areas where improvements can be made.

Let's look at the criteria to evaluate future market attractiveness first. How do you go about scoring the future market attractiveness of a particular business (the whole market, not your own performance)? There are a number of quantitative and qualitative criteria measures that can be used. Some of these are things that you would come up with right away, such as profitability (both average and trend) and market growth (average and trend). Other examples of qualitative measures include market size and market volatility, a risk measure.

It's up to you to define how you'll measure each item. In the business I'm going to talk about, for example, in individual life and annuity, we found that premium growth could be used to measure the market growth. In other businesses, you might want to use different measures, such as fees generated or assets managed, to measure growth.

There is a whole spectrum of qualitative criteria concerning what could be used to evaluate the risk of the business. Is this an old, mature business? Is it rapidly evolving and changing? Are there new entrants coming into the market? What is the competitive intensity? Are there a lot of competitors or is it one that does not have a lot of competition? What is the regulatory climate? Is the market stable? What is the resource intensity? How much capital is required to support this

business? What is the degree of sophistication of human resources or other resources? These are given as examples of what a company might use to define the future market attractiveness.

Again, we are talking about future, not current, attractiveness. You may be in a market that is relatively attractive right now, but there may be trends that will make it more or less attractive in the future and that is what you are trying to assess.

The second criteria to evaluate is the current competitive position of a company within the industry. You might use measures such as market share, profitability, growth, and performance on key success measures. You must compare the performance of the business that you are evaluating to a set of top-tier performance standards. You will need to define what is meant by top-tier performance by selecting top-tier competitors and quantifying how you, the company, stacks up against them. Qualitative criteria, though some of these can be quantitative in nature, include performance on key drivers that make for a successful business.

After scoring both dimensions, you can plot results on a grid. The X-axis would be the current competitive position and the *Y*-axis would be the future market attractiveness. There is nothing magic about this grid, but a business' position on the matrix can provide some strategic insight into corporate strategy. For example, a business that is in the lower right corner would be very competitively positioned. Maybe it is a top-tier performer, but it is in a market that is not very attractive. There are a lot of different ways you could interpret this, but one of them might be to manage aggressively to increase short-term profits. A short-term focus may be important because this business may not be growing very rapidly, and you may want to reposition or restructure it for the future. Because you are competitively positioned, at least for the moment, take advantage of that while there is still a market and manage it aggressively.

If a business is in the lower left corner, you may want to get out of that business. It is a candidate for divestiture. These are merely suggested strategies. Each company has to come to its own conclusions. There is nothing magic about the score itself. As we go through this process, I want to emphasize that the objective here is not to come up with the right score. The real value of the process is the discussions that arise and the implications and analysis that follow by looking at the data and results.

As I indicated, each area of the grid does suggest a prescription for the future strategic direction of that particular business. It can assist corporate in establishing corporate investment priorities for both capital and human resource allocation. It provides insight on whether there is an appropriate balance or mix of businesses and hopefully it will identify where there are performance gaps. If I go through how

we have implemented this process at The Principal, hopefully it will become more valuable to you.

Let me now describe how we implemented this approach at my company. In splitting responsibilities between the corporate and the business units, the business units perform 95% of the work. Corporate developed the approach and educated the business units on its objectives and purpose. But the business units are the ones who must take ownership of the process, are really involved, and must have buy-in into the process. Obviously results are turned in to corporate and they look at it for review and analysis. But if this process is viewed as "something I have to turn in to corporate," then it probably loses its value. To work well, a business unit must view this as an important exercise that it would do for itself even if it wasn't required for by corporate, because so much value results.

We have a mixed bag at our company. There are some business units that have taken hold of this, used it, and see its value. Others are very skeptical about it and say, "I will only go through this because I have to; corporate requires it."
Until recently, my company did not think we needed a formal, strategic planning process. We had successfully increased capital with each business doing their own thing with varying degrees of success. When there was a need for capital or resource allocation, it was dealt with on an ad hoc basis. Someone would come to the chief executive officer (CEO) or to senior management with a business plan. If it looked like it would work, we would do it. We have concluded that this approach does not work any more. Capital is becoming an increasingly scarce resource. We need a more comprehensive decision-making process. I mentioned that we are also moving to a higher performance standard. We want to ensure that we are maximizing the use of all of our resources—human capital, finance capital, information systems resources—in a way that will let the organization grow and prosper effectively.

Several years ago, we hired an outside consultant to help us rejuvenate this whole process and develop a more effective corporate and business unit planning process. One of the key elements of that new approach was corporate portfolio analysis.
The overall objective of the corporate portfolio analysis at The Principal is to refine the corporate strategy over the long run to achieve the desired mix of businesses. Do we want to get out of some, grow others, keep others about the same? Over the next two to three years, we have some specific goals. First of all, we want to use this process and this analysis to understand the relative attractiveness of strategic business units and planning units within the portfolio of businesses for resource allocation decisions, to allocate capital to each of the businesses, to allocate human and other resources, and we also want to use this tool to identify and assess new

acquisitions, divestitures, and external sources of capital to implement this strategy or the implications that result.

As we explained this process to different business units, we made it clear that we were not anticipating radical changes immediately. We would phase in any dramatic changes slowly over time.

How did we go about implementing this? First of all, we refined the model to fit our needs. We defined the elements and the weights to score each of these two dimensions. We developed a scoring table that would produce a one-to-ten score for each measure. For example, a 5% return on equity (ROE) for the entire market profitability was scored at zero. A 10% ROE was scored at four. A 15% ROE was scored an eight. A semi-linear scale was used in between.

This scoring was based on our analysis of all of the financial services that make up the financial services industry. You may come up with a different basis or scale. Once we developed this approach and these tables, we launched a communication/ education plan among the strategic business units. We wanted to make sure they understood what we were doing. As I mentioned before, a major challenge was to get the strategic business units to buy in and see the value of this. Some were quite defensive or concerned that this would inappropriately measure their performance and might have negative implications. So it is very important that we work through what the objectives are and how it is going to be used.

We did a trial run using this data and scoring the different businesses in a very rough way in 1995. We have just completed this process a second time several weeks ago for 1996. We defined the future market attractiveness of all businesses in our firm by using four particular elements. Profitability could be defined a number of different ways depending on the business, but it gets weighted 40%. Market growth gets a weight of 30%. The market risk, defined as the volatility in earnings, gets weighted 20%. The size of the market gets weighted 10%. We would score each one of these on a scale of one to ten, then come up with an overall weighted score.

For the second dimension, current competitive position, we again chose four ways of measuring this. Profitability, as the business unit defines it, versus top tier gets weighted 35%. Growth versus top tier gets weighted 35%. The market share, as the business unit defines it, gets weighted 15%. And the performance on key success factors as defined by the business unit versus top tier gets weighted 15%. We had a range of scores on those four measures and then get the weight of each score to get the overall weighted average. As you can see, all of these measures are done not in isolation, but in comparison to top tier. A very important exercise is

defining who your top-tier competitors are. We are not talking about performance of a peer group, we are talking about top-tier performance. What do you view as top-tier performance, how do we stack up in our business relative to that? That definition of top-tier performance is the foundation of this whole approach to evaluate competitive position.

If you do not have good data or if you do not believe the results, you lose the integrity of the whole process. This is not an exercise that you can sit down and pull out your most recent bench-marking survey and complete quickly, or say, "I think profitability in our business is around 12%, and we are at 10%, so we will score it that way." The purpose is to do an in-depth study of top-tier performance to determine what is going on in the marketplace, and what all these dimensions are. The objective is not to come up with the right score. Whether you score yourself a five or an eight or a two is almost immaterial. The important thing is the process you went through to get that score and what implications are there for moving forward.

I was in an interesting position when we launched this approach process because I just recently moved into a new role within a business unit. I had spent about 15 years in the corporate area so I helped to develop and design this model at the corporate level. It is one thing to do it in theory, and I thought this was a great tool. As I went through the process of sitting down with each of the businesses, explaining this tool and trying to get their buy in, I jumped to the other side of the fence. About five months ago, I joined the individual insurance operation, and now I have to implement what I had helped design.

Now I'm going to describe the way we used this tool within the individual life and annuity business unit, which includes a number of businesses. I am not going to describe how every business unit did it, but only the way we did it.

First, we defined the planning units within our operation. By planning unit, we mean those units that have a specific strategic direction that is different from one another. We could have defined it a number of ways. We could have defined it by product, the classical way. We have a life line, an annuity line, and a disability income line. We did not want to do it that way. We could have done it by distribution system—career, proprietary distribution versus a brokerage versus alternative channels, but we did not do it that way either. We decided to define our planning units in terms of the markets that we served. We basically have two major markets, the personal market and the business market, which became our planning units.

Our goal was to get basic data on those two planning units. We defined our list of top-tier competitors for each of these two planning units. We tried to look at traditional competitors, nontraditional competitors, niche players, and new entrants. The tough part was gathering external competitive data by planning unit for the industry and for each of these top-tier competitors. We hired an outside consultant to help us gather this information.

This information is sensitive, fairly often proprietary and, in some cases, confidential. We could not call up Northwestern Mutual and ask "What is your strategy to reach this particular market?" We have to be careful about antitrust issues. But it is interesting that people are quite willing to talk to a third party about what they do, their business, and their functions. We got a fair amount of information on these competitors and the industry through the consultant, who was key in helping us find out information about different companies. We were trying to find best practices, differing strategic directions, priorities, and key drivers of success for different companies. They may not be drivers for our success, but we'll look at it and maybe we'll need to think differently.

Once we got all these data, we discussed the implications and results of this analysis with our strategic business unit management team, which consists of 10–12 people.

The consultant's role in this process will change after next year. One of the reasons we hired a consultant was to help build our competitive intelligence capabilities. We never had really done much of this, so the goal was to hire a consultant to help train us in how you go about getting this information, what techniques you can use, and what sources are out there. We would plan to have some involvement with a consultant for some time each year because there is some information you really have to have an outside party get for you. To the extent that we can gather as much of it we can internally, we will. However, there are some things you have to get outside help on, but we hope it will be in a more diminished role later on. We plan to rely less on consultants moving forward.

A consultant can provide added value in other ways, such as helping define the true ROE on some sort of generally accepted accounting principles (GAAP) basis or modified-GAAP basis of your disability income or annuity line. You can get some of this information on a total-company basis, particularly for stock companies. For mutual companies, we have a difficult time defining the true profitability of our company's businesses let alone defining what another company's profitability is. ROE for individual was one of the key measures that we did not know how to go after. There is some statutory information, but that does not tell you much. A consultant can help with other key success factors, such as product development

cycle time or agent retention. How long does it take for competitors to develop a product? How do other companies define agent retention? What are their results and how do they compare to ours? The consultant was key in helping us define the profitability measure.

Once we decided which data we wanted to go after, and we hired the consultant, we then had to score these two dimensions for each of the four measures. For market profitability, we decided on the average GAAP ROE over a three-year period. We are talking about the total market now. This is not looking at competitors, it is looking at the whole industry. We defined market growth as the three-year-growth rate of statutory premiums. The size of the market is defined to be the total statutory profit pool. Is this a $5 billion or $1-billion-profit industry? The whole point is to try to develop a somewhat level playing field across all businesses. These are things that every business can score.

Finally, we had to score the market risks of this business relative to other financial services. We could have done a lot of statistical analyses of variance of earnings and more sophisticated approaches. This first year we fudged a little bit and we used subjective judgment. For example, on a scale of 1–10, with high being less risk, we concluded that the disability income industry is maybe a three; the life industry with less risk is maybe a seven or eight; fixed annuities are perhaps a two; and variable annuities are maybe an eight. Then we scored or weighted each of those based on the size of each market and came up with an overall risk score.

This information was, of course, all based on historical data. This is the current market attractiveness. We are not so much concerned about the present; we want to know what is the future performance going to be? After talking among ourselves and with the consultant, we came up with a list of 14 significant environmental, competitive and customer trends that we think will impact the future. We took each of those trends and we tried to quantify the relative impact on each one of these four measures and then adjusted the actual results by the impact of these trends.

This is not rocket science, this involves a great deal of subjective judgment. For example, one of the trends was the movement towards nontraditional competitors entering the market. There was also deregulation, the growth of financial institution distribution channels, and the aging population to name a few more. We took each one of the trends and said it was worth determining whether its impact is either a positive two, a positive one, no impact or a negative one or negative two. For example, nontraditional competitors could hurt market profitability. We gave that a minus one. It is probably going to help the growth of the industry, so we gave that impact on growth a positive one. We said it is probably going to make things a

little more risky, so we gave it a minus one for risk. There was not complete agreement on the adjustments. Some of them were easy to agree on, but others were not. We tried to take an average or reach a consensus.

We did this for all of the trends to come up with a total impact on each of the four measures. On market profitability, for example, the net impact was a wash, so we did not make any adjustment. On growth, we concluded the net impact was going to be a positive, so we increased the three-year historical growth rate a little bit because of our analysis of these trends. We came up with scores on each of these four measures and then came up with an overall score.

For the individual life and disability income line, we scored the overall market attractiveness a 4.5 on a scale of one to ten. The net impact of the trends was a positive, so the 4.5 was less than if you looked at just the current competitive data.

If you say the net of all these 14 trends, let's say from plus two to minus two, produces a net one, what does that mean? It is a positive, but do you increase your ROE by 1% or 2% or 0.5%? This is not rocket science.

In this first year, we did not compare our trend assumptions with the ones used by other areas of the company. I think that would be a good thing to do. Although the trends admittedly could differ by business unit, for the pension business or group health, there would be some trends that would be common. We did not, at the business unit, initiate those kinds of cross-discussions with other business units.

Each business unit had several formal discussions with corporate to explain and discuss their results. Part of the role of corporate then is to discern whether these are comparable. Were these scores developed using radically different assumptions? If so, that would be adjusted for at the corporate level. In the future, we'll try to get a little bit more cross-strategic-business-unit input into some of these trends.

The future market attractiveness of the industry is important and somewhat sensitive, but does not involve an evaluation of your own company. It really does not involve evaluating yourself. The next dimension, which is your current competitive position, triggered much more discussion, particularly when you have to score yourself, turn this into corporate and possibly go back and change it if corporate ultimately says it does not make any sense.

We defined performance—how are we competitively placed? Do you believe the market is attractive at 4.5? How are we in that market? For profitability, we decided to use a three-year-average GAAP ROE, which is unavailable for many companies. We barely have GAAP ROE for our own company side. We still do not

have it finalized yet, so how can we get it for other companies? We had to rely on our consultant to help on that. We identified 12 competitors, including traditional competitors, niche players, and new entrants like some such as banks and stockbrokers. I think we had Chase and Merrill Lynch.

For growth, we used the three-year growth rate of statutory premiums. For market share, we used premiums. For key success factors, we used lapse ratio, expense ratio, agent retention, product development lead time, and several others. The first three are relatively objective—there is a number out there and you just have to find it. The key success factors are more difficult to get because of what they are. We had to define top-tier performance on each, and then, of those, define it on all four of the key success factors we expressed our result performance as a percentage of top tier. If we said top-tier performance on profitability was 15%, and say we are at 12%, that is 80%. We get an 80%, go into the table, and find that 80% is whatever the score is.

Corporate defined a "nine" as top-tier performance. If you are in excess of top-tier you got a ten. If you were at top-tier performance you got a nine and then it would grade down to zero. We went through that process and, as you can imagine, this generated a lot of discussion as we scored our performance.

In general, we used the same group of top-tier performers along all these dimensions. One company may have made top tier for their rapid growth. But their strategy to grow very rapidly may have hurt and they were willing to let profitability suffer to do that. Another company may have wanted to strengthen their profitability and would sacrifice growth, so their growth was horrible and they had great profitability. If you cherry picked and took just the top-growth companies and a different set of most-profitable companies, you probably would get a distorted result. We attempted to identify our group of competitors and averaged the performance of all of them on all of these measures.

The reason that we could not do this in all cases is because we did not have the data. We did not get profitability data for all 12 competitors. I think we ended up with six or seven that we felt had good results. The key here is only using data that has credibility. If the data is not good, you can have some good discussions. There is probably still some benefit in just getting people to talk about the key success factors and how we are doing, but it undermines the credibility of the process. To the extent you can get good data, I think it does build credibility.

Corporate basically said we want you to develop a profitability measure and we would prefer that it be ROE. We could have used statutory ROE or some other measure, but we were encouraged to use ROE in some form or another. We agreed

to use GAAP ROE because that is a new, consistent measure that is going to be developed.

How long did this take? We actually had the consultant under contract for about 12 weeks. We began gathering this data about three months before it was due. Long term, our goal here is not to limit the data gathering to a two- or three-month process that you start in June and you finish in October. The idea is to make it part of the natural course of doing business, you are always gathering this information so when the time comes to sit down with corporate and score yourself, you will have been developing and gathering data over the whole year. You can simply fill out the forms. It is not an independent process that you start and stop. This year it did take us about three months to do it.

We did not use benefits paid as a measure, but it would fit very well in the key success factor. How would you compare yourself? That would be a difficult one to compare. You cannot just use absolute dollars, as it does not make sense. It would have to be relative to assets or gain from operations or some measure. This whole discussion of getting data on key success factors was very difficult for us, and we already stubbed our toe on this a great deal because there were some disagreements. Are there key success factors that are generic and common to everybody? If you do well on these things are you going to be successful? Or are success factors so unique to each company that you cannot come up with a generic set? We had people on both sides of the issue say it is ludicrous to come up with a given set of lapse or agent retention ratios that apply to everybody, yet everybody views this as being a key success factor.

We had a group of people who said you could do that. Others said the key success factors are completely different, but there is a unique set of drivers for each company. How can you compare the two? For example, a company may have a top-notch agency force as its strategy. They might put all of their resources in training their agents, and so agent retention becomes a critical success measure. Another company might try to develop products as the low-cost provider and would use brokers for distribution. Agent retention may not be important. What is really important to this company is product development time and low cost. So there is some truth there, but given the caveat on that problem, we did come up with a set of measures.

We wanted to have a group of competitors that included those with a strategy different than ours. We did not just want to pick those competitors that were identical to us in strategy. For one thing we might learn something, and if we study and analyze a company that has a different strategy, there are probably some insights we can gain. However, this caused a problem in that we did not get

information on all 12 companies on all measures. For example, some of our competitors do not have a captive or career agency system so they do not care about it; they do not even calculate agent retention, or they are using other distribution channels. In these cases, we just left them out of the averages.

We generally did not weight each company when calculating top-tier performance averages. If a company had a credible number, it was included in the average regardless of the size of the company. The point is not to come up with the right number, but to look at the data, analyze them, and learn what we can from them. You do know at the end of the day this is going to corporate, it is going to be evaluated, and it could have implications for the future on what kind of resources are going to get in your business unit.

There are several benefits of implementing a corporate portfolio analysis approach. First, it provides the discipline to gather and analyze this competitive information. If you are like people at our company, we are so busy just putting out fires and trying to execute things and to do things internally, it's easy to not take the time to look at competitive information. We all say it is important, we have to do it, but we just never have done it very well. We have done benchmark studies from time to time, but the corporate portfolio analysis forces you in a very comprehensive way to really sit down and do this. There is great value in this approach to gathering and analyzing external competitive information.

Second, it does identify performance gaps. After looking at all these data you can identify specific areas that you know need improvement.

In the first year, we relied heavily on the consultant to gather the data. Our goal was to have each of the different functional areas develop that capability within the distribution. I do not think distribution, service, marketing, financial, or any functional area said that at the end they were going to hire a full-time person to do this. The idea was we get two or three people in the area to weave this into their job, to help us do this on a continual basis. Third, it gets the management team to sit down and discuss these strategic issues. It gives us a little more incentive to sit down and talk about these important issues. Finally, it enables corporate to assess the relative attractiveness of each business on, ideally, a comparable basis. When they get a score of five from one business unit and a seven from another business unit, hopefully there is some degree of comparability.

There are also limitations, of course. The data are just not available in some cases. There are inconsistent definitions. For example, agent retention could be defined differently from company to company, so you have to be careful when making comparisons. The businesses in the whole portfolio are quite different, and even

though one attempts to get a level playing field, we know we are never going to get an exactly level playing field. It also does ignore a lot of the nonfinancial elements such as degree of strategic fit. You may have a business that scores low but fits really well into your corporate strategy of serving a particular market. That is something outside this process that corporate needs to consider. It does, in some instances, require a high degree of subjective judgment needed, even though it is attempting to be a mechanical process. You just go to the table and gather your data and up pops a number. There is still a lot of subjective judgment needed, but that can be viewed as either a limitation or maybe a benefit.

The conclusion that we have reached is that despite the limitations of this approach, there is strategic value in going through this process. This needs to be viewed not as an end all, but as just one component of a comprehensive performance evaluation process, and we will continue to use this as part of our strategic planning process. In a couple years, we hope to use this process more completely to determine the growth rates and profitability targets for each business unit. For example, the best business is in an attractive market, which is very competitively positioned, and would be encouraged to grow rapidly.

Growth in this sense is the amount of capital being committed to the business, and is where you want to put your capital and grow. A growth rate of 25% would be established. We want you to grow 25% and define growth, not so much in terms of sales but, in capital needs. We would have a target equity formula that defines how much capital is needed to support the operation and say, at the end of the year, we want your target equity to have grown 25%. So if a 25% growth rate is established, that may mean sales would grow 20% or perhaps 30%, and that may mean you grow sales 50%, however it translates, but at the end of the year we are willing to commit 25% more capital to your operation. If maybe the ROE is less than 25%, then the business is only 15% or 12% or whatever it is. That means you are not generating enough capital to support the 25% growth in capital, so capital will come into your operation. On the other hand, if you are in a less attractive business, you might have only a 5% growth target. If the business earns more than 5%, corporate may say, We only want you to grow only 5%; we want your capital need to grow only 5%, so at the end of the year you better have grown 5%. The business will be generating more capital than it needs, and so you will be freeing up capital.

We have a process at the end of the year to allocate capital based on the target equity amount, and so this process of establishing growth targets will be redeploying capital over time. It is through the process of establishing growth targets and then, hopefully, hitting those growth targets, and then through the normal transfer of capital at the end of the year, that capital will be redeployed around the firm in a way that, long term, we think will optimize growth and performance for the

organization. That is how we do it. Again we just started off this year and we will see how it goes from here.

We do share results of our corporate portfolio analysis with others, including rating agencies. Rating agencies have indicated they feel this is a good management tool and reflects favorably in your evaluation.

This information could be used to downsize a unit and bias the process. However, at the point when we launched this, most of the businesses that we have are fairly viable, so it is a matter of how fast should we grow the different ones. If you have two or three that you think are candidates for divestiture, you have to be careful that they are not trying to build an inappropriate case to perpetuate a dog.

We have not yet used the process with a new business, but you certainly could. We could score the future market attractiveness that we are considering. The current competitive position probably does not make a great deal of sense because you are not in it yet, but you would probably score at least the expected future market attractiveness competitive position.

Mr. James F. Reiskytl: I'd like to have some help reconciling this process with the concept of mutuality. We view each line of business as being charged or credited with its own capital, so that each product stands on its own. But if you take 15% of the growth capital from one product line and give it to another line, presumably you make that line less competitive than it could have been. Arguably you may have been more competitive and may have grown faster with that capital, so you may obtain a self-fulfilling prophecy by reallocating capital.

We do this only when we are growing so rapidly that it would have to severely impact your price, assuming you do not expect to continue to grow so rapidly over the next 50 years or so. In this case you we are willing to reallocate capital to that line temporarily until it reaches some form of stability. If you have one product line that is funding its growth at a rate of 5% but requires a 15% growth in capital, one could argue that you are funding growth by subsidizing that line.

There are many aspects of this process that are fine, such as measuring relative market share and giving yourself a score. But when you get into establishing growth rates and reallocating capital, that is a whole separate debate. I think you have made some very big fundamental decisions here that another company, such as ours, may not wish to make or may reach different conclusions about because we have a different concept of how each line should be self-supporting. Our real measure is not our ratings but our ability to maintain nonguaranteed elements. We

are really looking to provide maximum benefits. We only charge enough to maintain our financial strength.

Mr. Neve: We crossed that line over the last couple of years. As a mutual company, we were in a very similar thought process as you described. Every standalone business unit that was growing at 2% got a 2% ROE, and that was fine. If they were providing a value to a customer and supporting their own growth, that was acceptable. But we were finding some of our businesses were limited by the need to balance growth and profitability. If they were going to grow at 25%, they had to price for 25% growth and there is no way they could build in that kind of charge. And it probably is inappropriate to charge the customer that much, even though you have the potential; we wanted that line to grow and to reach more people. Your pricing could not generate enough capital to support that growth, so we were limiting the capability of some businesses to grow. We changed our approach to not require every business unit to be a stand-alone operation in terms of their capital needs. If there is a great opportunity to grow this business, and if they are competitively positioned, and if customers are finding great value in this business, we really want that business to grow, and we don't want to limit them to finance their own growth. That is a change in philosophy that we choose to make.

If you have multiple business units each demanding capital and there is not enough to go around, you are going to run out of capital. If we just followed what we had done, we would run out of capital, and as a mutual company, we cannot raise it. We felt we had to start planning and really grow those businesses that are going to be viable and slow down those that are not because we know we are going to run out or not maintain solid ratings if we do otherwise. We would not go insolvent, but we probably will not get the ratings that we want.

Mr. John W. Boynton: I am an associate with Mercer Management Consulting based near Boston. We work with large organizations to help them design and implement better strategic planning processes. We have done a lot of work for The Prudential, other insurance companies and other industries. The tools that I am going to be showing are based on the ones we developed for The Prudential. I want to underscore the point that the data and models that you will see have been disguised to minimize the risk of any proprietary information leaking out.

In this session, I want to go over the fundamentals of strategic planning. I am going to go through this quickly so that we can get into demonstrations of the two tools that we have implemented at The Prudential. The first is a set of strategic planning templates, and the second is what we call an interactive strategy model, which you will learn more about.

As Dave indicated, strategic planning is an extremely important process at most companies. It is the means by which companies anticipate and adapt to changes in their environment. It also serves as the basis for allocation of resources. As we know, the current insurance business is a very mature business with the entrance of new distribution channels and new products appearing. The rules are changing and the allocation of resources is a very difficult decision.

It is extremely important to have the ability to collect data with integrity, data that is believable, not only to those who are making the decisions about how resources are allocated but also to those who are the beneficiaries of those decisions. Obviously strategic planning is intended to help companies build sustainable competitive advantage within their industry and also lead to excellent economic results, whether you want to measure that by ROE or by some other measure.

Much of consulting comes down to two by twos. Dave used the three by three. We will rely on a two by two. I want to use two dimensions along which strategic planning can be deemed successful or not, and explain why it fails. There are two basic elements: one is the quality of your strategic planning process itself, and two is the quality of the execution of those plans.

Companies that have poor strategic planning processes yet happen to be really strong executors will sometimes do well. Companies that lack both a good strategic planning process and an ability to implement are never going to make it to the majors. Those companies are nonstarters. It is very tough to win in a business in that situation. There are companies that have excellent processes. Where they fall short is in the implementation. We call this the strong-coaching-with-no-players box. Finally, if you are one of these exceptional companies, you have a tremendous process, and you also are good at executing those plans.

Here are possible pitfalls of strategic planning processes that can be addressed by the tools I am going to present. Senior management becomes involved too late in the process and ignores weaknesses and exaggerates strengths of the company. Common economic assumptions (gross domestic product, the stock market returns, 30-year Treasury rates, etc.) are not used consistently throughout the organization and customer needs are not explicitly considered. Revenues are derived as a growth rate applied to prior years rather than looking at the drivers of revenue. Strategy development is independent of financial forecasts, and planning is deemed to be a necessary evil imposed by corporate. The perception is that corporate's request for this redundant data plan may be out of date before it's finished.

There are four key steps to building a really solid strategic planning process. The first is to integrate the process. Second, look inside at the drivers that are

responsible for your success. Look at the ways that you measure the success against your competitors, against your marketplace, against your customers. Consider your strengths, consider your weaknesses. Third, look outside. Consider what the markets are doing, consider what your competition is doing. Finally, and perhaps most importantly, link your financial to your strategy. It is very easy for the two to become disconnected. If you consciously link those two, it will result in a much better plan. As far as linking the process, a lot of companies treat strategy development as separate from these other three areas. Strategy development often goes on as a very involved process. It involves a lot of people and many man-hours without linking back to the financial.

There are a few other steps that are critical to the success of this process. Strategy development generally happens at the strategic-business-unit level or down at the product level. It does not happen at the corporate level in most cases. As such, communicating the way that the strategy is communicated is key. It is very easy for a strategic business unit management team to put together a great plan. But if the plan is not communicated in a way that is intelligible to those who have to analyze it or it does not really convey the essence of the strategy, it loses a lot of its efficacy.

Consider the people who have to analyze the strategy. Most strategic plans are going to be analyzed by somebody different. Half of you said you were involved with people analyzing plans. It would be nice if those who were developing the plans gave some consideration to your job and tried to make it easier for you to do an apples-to-apples comparison of the plans. This is a very big problem in a lot of companies. Finally, the execution of the strategy is key and someone should go back and inform the groups that contributed each step of the process.

In looking inside the company, it is very important to understand what the key drivers of your success are going to be. This is the underpinning of the model that I will be describing. If we are trying to reach a net new premiums number, it is important to know how many new policies we will have to sell next year, what the average policy size is going to be, and what our first-year persistency rate would be. Those are key drivers that dictate the outcome of your business. It is very easy to forecast a 5% annual growth in premiums year after year, but if you do not have a good understanding of what is going to drive behind that growth, it detracts from the value of that plan.

Likewise it is important to do the same on the expense side. What is driving expenses? It is easy to say we are going to pare costs, but how is it going to happen? You have to understand what drives your costs; in this case, we see there is an inner relationship between the cost side and the revenue side.

Third, definitely consider what your performance measures are. The way that you measure your company's success is, to a large extent, going to dictate behavior throughout the organization. Think carefully about the metrics that are chosen.

Far too few companies take a comprehensive look at what is going on in the environment. In most cases, there is a very tenuous relationship between your company and your customers. There are any number of forces that are trying to assault that relationship, steal your customers, and hurt your company's performance. Definitely be sure to look outside at what is going on in the environment.

All too often the plans come in and they are large, incredibly impressive binders with nice covers and absolutely beautiful prose. Too often the problem is there are not enough links to the explicit financial exhibits. It is very difficult to analyze a plan or the viability of a strategy if you are reading about it; you cannot easily see exactly how the strategy impacts the financial performance of the company itself. For that reason it is important to make those links very explicit. The two tools we are going to describe make those links very explicit to look at. I'd like to provide a concrete example first.

Links join the conceptual strategy with the drivers that impact the financial performance of the company. When I talk about links, it is one thing to talk conceptually about strategy; it is another thing to talk about how strategy is actually going to impact what will drive the financial performance of the company. For example, it is one thing to say we may want to focus resources next year on better developing and retaining our agent force. Without understanding how that is going to impact the plan, you will make it very difficult to know how many resources should be put into that particular effort. What I would prefer to see is that we are going to focus on agent retention as a means of growing the company. We are going to move four-year retention from 25% to 35%. That particular tactic in and of itself will result in an improvement to earnings of $X. This example gives you a quantifiable link between the strategy and the financial performance of the company.

The two tools that I have referred to are what we call strategic templates and the interactive strategy model. The templates have four principal objectives. First, we seek to instill rigor into the planning process by ensuring that all bases are covered. Second, we will explicitly highlight the links between the strategy and the financial. Third, we always try to force consistent assumptions because, again, when you are trying to analyze plans that are based on different assumptions it is very hard to do in a rational way. Finally, the templates serve as a concise communication platform when the business units communicate upward to corporate.

When we came into The Prudential two years ago, we set about analyzing their voluminous, but not necessarily complete or consistent, plans. To have something that is a concise vehicle for communicating a plan is extremely important. On the interactive-strategy-model side, this is another opportunity to tie the strategy to the financial. It is an opportunity to explicitly highlight the performance levels that are going to be required to hit the financial performance that we are expecting. It should consider things like retention, persistency, agent recruitment, commission levels, and other pricing assumptions. You must decide how detailed you want your model to be, yet identifying those numbers is important.

Third, it assists in diagnosing any of the problems. When you do come in under plan, it is nice to be able to point to the source of the particular underperforming aspect, such as agent productivity, recruiting, or persistency and say, "We came in low here; our agents were not as productive as we expected," or we did not hit our recruiting numbers, whatever the factor may be. Four, not everybody in the corporate center understands your businesses as well as you do. In the case of The Prudential, we came in at a time when the new chairman had come in. He had come from outside of the insurance industry, from the banking community, and said he understood insurance and I am sure he did, but it is very helpful to structure your plan in such a way that it communicates the essence of the business. It communicates the key drivers on which your success in this business predicated.

Fifth, it provides a real-time, strategy-building, scenario testing tool for your executive team, something you can use when sitting down with an executive team. You can model alternatives, go through and say what if this happens, what if that happens, and not have to break for two weeks while someone goes out and cranks the numbers and brings it back. Finally, this type of model improves the feedback loops to improve the overall process.

There are other considerations that are important. I will try to highlight these as we go through the examples. Echoing what Dave said, both of these should be viewed as living documents. It is a process that you are building, it is not a one-point-in-time snapshot that you are taking of your business. Definitely think in terms of creating a process that will foster consistent, high-quality planning and communication of those plans.

Next, I would like to describe some examples of the templates that were put together for The Prudential and highlight some of the important elements in them. First, when I say templates, what do I mean? Templates are a standard format used by all the business units within a particular company to communicate core elements of its plan. These templates were developed in Microsoft Word, use Word tables

and allow for expandable fields, so they provide a very nice, consistent format for people to enter their information.

We have three different templates that were devoted to customers and customer segments. You can segment customers in a number of different ways. You can segment one way according to their buying behavior. Some customers might already have an investment perspective, feel more self-sufficient, and feel comfortable making investment decisions on their own. Another segment of people might want extensive hand-holding, high face-to-face contact. These are people who are going to be much more likely to buy from an insurance agent. The former might be more comfortable buying through a different channel where there is less direct contact with a customer. You can also segment customers on the basis of their profitability. Some customers are, just by definition, much more costly to serve. Others are willing to pay a premium for a certain product or service that others are not as interested in paying. There are other ways to segment as well.

First, define the customer segments that you believe you are catering to. What are the needs of those particular segments and what are the potential growth opportunities within those segments? You will need some basic benchmarks as well. What is the total size of that particular customer segment and what is your share of it? These measures provide a good overview of the segments we consider most important to the success of the business and how you are doing against those.

The size of a customer segment is the total size of that particular segment. For example, if a new agent said that one of the important segments is the self-directed investor and that was a market you are going to target with one of your life products, you would try to estimate the size of that particular market segment. Perhaps that is worth $0.5 billion a year. We try to estimate how big that opportunity is. The opportunity may be relatively small. The obvious implication is if something is a $5 million opportunity for a company like the PAU, that is not going to warrant a whole lot of attention. If you say it's a big opportunity, but you have already taken up 80% or 90% of the market share in that particular segment, there is again not a whole lot of growth opportunity there. Obviously we would want to preserve your share. It has implications; it informs the strategy development process.

Second, it is nice to know how profitable a particular segment is for us. AT&T has a dominant share of the long-distance business, but I heard recently that something like 60% of its long-distance clientele is unprofitable. These are the people who might spend $5 or $8 a month on long distance. AT&T is not making money off that customer segment. While AT&T can say they have a 55% or 60% share of the long-distance business, in fact a good chunk of that is not earning them any money. It is very important to identify how profitable a particular segment is.

You should also indicate how important a customer segment is to the success of this business. If it is profitable, but we think it may not be growing quickly, it may not be that important to the business. If we think that it is a product line that maybe we are going to divest or no longer be attempting to grow much, it may not be that important to the future success of the company.

Also, indicate how you meet the needs of each segment. In many cases, if you identify a particular customer group as a high-potential, high-profit group, but if your products do not specifically address the needs of that particular group, it is really moot.

One word on how we actually developed these templates. We worked with a number of people at the corporate level, as well as people throughout the business units. These templates replace the plans that they were formerly submitting. No more are there big fat binders of plans that are coming in. It is all being submitted electronically now. Given that we were trying to replace something that had been in place for a long time, it was extremely important to obtain the buy-in from everyone, from people at all levels of the company, particularly from those who were running the businesses down at the product and business-unit level.

Third, we may have identified segments that are high opportunity and high profit, but if our competitive position in those areas is weak, it does not do us a lot of good. In that situation, we need to know how the strategy is going to address those weaknesses. If we have said that a particular segment is important, what are we doing to better position ourselves to serve that customer group?

The templates you use will note that these are both a peculiar mix, between being quantitative and qualitative measures. They are much more qualitative here. These will be coupled with a very quantitative model. Given that these templates are replacing the plan, the process of working through these concise questions in the templates will help instill a lot of rigor into the process.

I have not been involved in any discussions within Prudential business groups that are actually filling out these templates. I have in some other businesses, though. I would echo what Dave said earlier, which is that a lot of the discussion that goes into filling out these forms is extremely valuable because it forces management to focus on some of the key issues that might have been overlooked in the more traditional planning process.

In my experience, some people do respond pretty honestly to the qualitative measures. Some of the stuff is tough to disguise. Another important element that has not been implemented is how to weigh data that are more difficult to obtain.

They may weigh in more heavily at the PAU, but I think this will be mitigated over time as the need for competitive benchmarks and customer benchmarks will help validate the numbers that are contained in these templates.

Let's look at one of the competitor templates; it's very important to be frank about how you stack up against your competitors. We are using the one-to-five rating scale to indicate relative competition, or how our position is relative to them. You must also understand the strengths of your competitors. In both cases I would say that the scoring is probably more management team consensus than a quantitative analytical process.

The goal of all strategic planning is to really create sustainable competitive advantage for your company. It's nice to know how you rank in the areas that can help contribute to that. With the help of the folks at the PAU, we have selected eight key elements in their business that would help create sustainable competitive advantage. By that I mean factors that will enable you to win in the insurance or investment business over the long term. One of the things that was important to them was time to market. You have to be able to bring new products to market quickly. If you do that, it will help improve the overall performance of the company.

Scale economies—it is important to be big in certain businesses, and I would say the financial services business is one of those. Image, reputation, and brand can go a long way to helping a company's case in the marketplace.

Integration benefits—how well does your pricing function or product manufacturing capability support groups throughout the company, not just on a stand-alone basis? Do you succeed in integrating the various elements or capabilities that you have within the company? Price is an important element. Distribution. Products. Are your products' features relevant to what the customers are interested in? How well do you promote those ideas in your company's value proposition? Service is another key differential for many companies.

For each one of these key elements, the businesses are asked to rank how important that factor is to the success of the business, provide a brief explanation, and then score how strong they are to you. Basically, how important is it, and how strong are you? There's also a little more qualitative explanation—is there something that you want to improve? Is this something that is not going to be receiving attention in this year's strategy?

It's easy to put these templates together; it's hard to fill them out. We frequently ran into situations where our immediate client, the corporate planners, were having a great time thinking up extremely difficult questions, identifying data requirements

that would be very hard to get but would be very interesting if attainable. These templates will fail if they are too difficult to fill out, if it requires too much of a stretch for the organization that is going to be providing the answers. This is definitely something to keep in mind when designing templates. Should you decide to do something about this. For each template that takes ten minutes to craft, it probably takes ten man-hours, or 100, or 1,000 man-hours to fill out. The prior template was a very difficult one to fill out, but it would be very insightful and valuable to corporate planning.

We have talked about drivers. Some of the drivers that I mentioned earlier were factors such as agent productivity, recruiting, retention, persistency rates, and expense ratios. The templates ask the businesses to very concisely list their top eight drivers. What are the eight drivers that are going to make you successful in your particular businesses? The second column asks, how will you achieve the changes in 1996–98? What are you going to do to improve performance in this particular driver? Third, what are the risks involved? If a company decides that it is going to expand its agent force substantially, some of the risks that might result are that policy persistency may suffer or productivity may suffer. You must understand the potential risks of a particular strategy or tactic. Finally, quantify the impacts during the planning period. How much will this change impact your bottom line? What is the size of this opportunity?

The form suggests that improvement is necessary. There may be key drivers that do not need to change. If agent productivity is a key driver of our success, but we are already number one in the industry, then we do not see this as a real opportunity to focus on.

Taking this one step further, the businesses are asked to identify major strategic objectives and how they are going to be achieved. If there is an agent recruiting drive, what is the overall objective? How are we going to do that and what is the impact going to be on the drivers? Again, we are trying to link the strategy that people are thinking about to the expected actual impact that it is going to have in the financial. It may be that a particular objective will impact more than one driver. For example, if you are going to increase your agent base, you may find that your retention suffers, your persistency suffers, or your productivity suffers. The seat still may be outweighed by the fact that you would have twice as many agents at the end of the year than you had at the beginning. However, you should understand what the impacts are going to be on other dimensions of the business, because it is all one big system.

All too often strategy stops at the submission of the business plan. Identifying milestones can be extremely important. When implementing a particular objective

or idea, what are the milestones that you are going expect to hit on the way to success? When do you expect to hit those milestones? If you do not make it, what is going to happen and what are your contingency plans? This is the type of information that is valuable to the folks who have to make decisions about how capital and management's time is going to be allocated. Most of the free-form traditional business planning processes will not cover all of these issues, though it will probably hit a lot of them. In addition, having the same page for multiple businesses is a great help for the person who is analyzing the plans and hopes to come up with the best answer for the company.

Now I'll cover the interactive strategy computer model. This set of models is developed in Microsoft Excel. I can demonstrate it right now running on a Pentium personal computer with a speed of 75 MHZ, though it could benefit from a faster PC processor. It is not a model that requires a huge mainframe computer to run. It is something that is designed to be used on every executive's desktop system and is not intended to present any major technical hurdles to implement. It is really just a fancy Excel spreadsheet. We put some Visual Basic programming behind it, but it is a spreadsheet at its heart, although it does contain a lot of big files. In total, there are 1,278 screens in 46 different files, some of which are very large.

The control panel for the whole system has eight different business groups in the bar at the top. Business groups would be things like entities, like an international insurance group, an asset management group, or an individual insurance group. Within each one of those groups are planning units, which are often in different businesses. Each planning unit has its own model, which is accessed by clicking on one of these buttons. That planning unit's buttons take us to that particular model. In any single business unit or planning unit, they may only have one of these models. Business and planning units are responsible for filling out the models and then submitting them electronically to corporate where these are all pulled together.

On the top is a button that is called The Corporate Planning Model. That is the model that pulls all of these unique models together and allows a range of analysis to be performed on them—slicing and dicing of planning units, shifting products around, looking at what the company is going to look like if different scenarios are implemented.

Now let's look at a one of the planning unit models so I can show you how the drivers that were identified in the templates actually link into these models, which, in turn, develop the financial for the company. Then we will go and take a short look at the corporate planning model, so you can see what senior management is doing with the information it is gathering.

To avoid the very lengthy implementation period that information technology projects often have, we develop these things ourselves. It is not software. We try to make them as user friendly as possible to minimize the amount of training that is required. We also try to make these models as graphic as possible so that people can readily understand what kind of screen they are on and what they are looking at. This is intended both for use at the business-unit level, where these plans are being developed, as well as literally in the chairman's computer so that he can use it as well. Blue is used to denote revenues and red to denote expenses. Black, which is the income statement button, is for results of some sort. Yellow cells are calculated and white cells are input. This insures that people enter data, such as net new premium, at the lowest level of aggregation or decomposition.

Let's look at Prudential's income statement format. I want to show you how this model builds this particular income statement. We are building a series of models, each of which is going to have a diverse set of drivers, a unique way of building up to its revenues and of building up to its costs. However, at the end of the day they are all going to feed an income statement that has the same format to it. Here we are able to work with the business units to develop their models, to reflect the way they look at their business and what they think is important in their business. Then marry them back into a single platform at the end so that we can then analyze all these companies and put them on the same basis at the end of the day.

The next screen structurally represents the organization of the model. We have the income statement at the top. Flowing into the income statement, we have a button called Revenue Summary and a button called Expense Summary. Each one of these buttons refers to a particular screen in the model. Flowing into the revenue summary we have three contributors. We have new premium revenue, renewal premium revenue, and net investment income. Flowing into the expense summary we have other general expense, deferred acquisition cost, asset amortization, commission expenses, overhead, and then reserves, benefits and surrenders, which we will take a look at. That was probably the toughest nut for us to crack and it was the actuaries who gave us the most resistance there.

In this case, the top box on the screen says net new premium. We are trying to calculate over a five-year planning horizon what a net new premium is going to be five years out and every year in between.

The bottom shows the way we build to new net premium. We have seen average new policies per agent and average premiums per new policy. That gives us an average number for new premium per agent. That is how we are building our agent productivity number. We also have a mini-model of the agent force. We start with an existing agent force and add a certain number of recruits. Using agent retention

rates, we determine how many agents we have with 1–12, 13–24, and 25 or more months of experience. We are getting specific about the retention numbers that we expect to have at each level of tenure within our agent force. We are using that to build to a total average number of agents, averaged over the year. Multiplying the average number of agents over the year by the productivity per agent gives us a gross new premiums number. We then enter first-year persistency rates and then attribute an average lapse month, we are able to build to net new premiums for the year.

This is much different than an income statement, which says not only are revenues going to be X, but here we are saying to achieve this number we need new premiums of Y, so we are going to play with these four, key variables—the number of policies, premiums per policy, number of agents, and first-year persistency. Those are, in the estimation of the folks that we designed this with, the key drivers of success, the key drivers of new premiums in this business.

To provide the tie, these numbers would also be carried over into the templates. One of the key drivers was average premium per new policy, and they set a target in the templates. Capturing key drivers in the templates and models serves two purposes. Number one, it helps communicate the way the plan is derived. Management does its analysis, recommends target goals, comes up with what they think the right numbers should be going forward, and submits them to corporate. And two, it serves as a tool that allows senior management to sit down and actually play with the numbers in real time.

It is also valuable to have a gross simplification of the way that these numbers will be built in reality. You are forced in this system to come up with averages, that may not always feel comfortable. There may be other models that they build outside of these, that may be used to get to those averages, but in testing against actual results we found there is a high degree of directional accuracy and the numbers are going to be in the ballpark. If you look at the traditional divergence between forecasted numbers or plan numbers and actual, we can do better than that using this system.

Let's look at the net investment income. This is calculated as a gross simplification of the way the net investment income would be calculated. In a lot of companies, the process of actually generating these actual numbers can take several months. For the purpose of testing scenarios, building a plan and trying to find where the business' leverage is in the business, we needed to have something that was simple and easy to use. So we developed it. This is a simple, cash flow model that uses the increases and decreases in general account cash. Increases are premiums, net investment income itself, and other. Decreases are benefits, surrenders, commissions, dividends, taxes, and other general expenses that are going out the door.

We are building a net cash flow number for the year and adding that to our base of invested asset bases to get a total invested assets number. Invested assets are allocated to six different investment classes in this case. Do most companies forecast on the basis of six investment classes? No, but breaking them into cash and short-term bonds, equities, foreign bonds, foreign equities, and policy loans goes a long way in determining the viability of a particular plan.

We then attribute certain rates of return to each one of those investment classes to get our gross investment income number. We deduct investment expenses from that to get to our net investment income number. The premiums we developed earlier feed directly into this investment income section. This is another example of how the model is fully linked.

Let's discuss the variable commission numbers. Red will appear as expense screen, and there will be some blue revenue boxes. Clearly, certain expenses are going to be driven by revenues; in this case our variable commission expenses are going to be driven by both our new premiums and our renewal premiums. There are two white boxes for commission rates—we have a different commission rate in general for new premiums than we have for renewal premiums that have been renewed. Changing numbers here are going to impact the income statement and changing the number on the revenue side is going to flow through here and change your commission costs. That kind of inner relationship is important.

This model is not what we would call a closed-loop model. It is not intelligent enough to figure out what happens, for example, if our commission rates drop below a certain level. Does that mean we are going to lose agents? It is not that intelligent. It requires a user who knows the business, who is able to draw those inferences between what impact one driver change on one screen is going to have on another. That is why, in this case, the bottom boxes are yellow; they are not inputs. These are coming as results from other screens.

A simple calculation of overhead might be broken into general overhead, policy overhead, and marketing overhead, using methods that vary by business unit. In some cases those numbers are developed centrally and allocated out. In other cases, particularly with any given business unit that has multiple product lines and multiple divisions, it is managed at the business unit level to ensure that the numbers total up to the right total. The other way to do it is to build up the business unit level and then have the model reach up to that higher level to grab the overhead numbers.

The summary contains three charts. The first chart, called a stair step, shows the change in reserves over the planning period. This shows, of the five products that

are being tracked here, which is requiring the largest reserve increases. The second chart identifies benefits by product, and the last one identifies surrenders by product. For each particular cohort of premiums, we had to model each of those three charts individually.

Let's look at this 1995 cohort to see how these numbers were developed. Our change in reserves number was built by starting with the premiums from our 1995 cohort, policies that were sold in 1995. We used a premium rate per $1,000 of coverage to get an insurance in force number. We then take the reserves per $1,000 of insurance in force to get our total reserves. The change from one year to the next is going to be the change in reserves.

Looking at how benefits and surrenders were calculated, we start with the insurance in force number that we previously developed for the 1995 cohort. We then say that benefits are a percentage of insurance in force, a significant simplification. Hopefully, it is going to be directionally accurate. On the surrender side, we can take our insurance in force number and attribute a cash value per $1,000 insurance in-force to get a total cash value number. Then we apply our lapse rate. Note that lapse rate is not an input. It is being pulled from the revenue screen where we calculate renewal premiums based on a persistency rate. A lapse rate is one minus our persistency rate. Based on that, we are able to generate our surrender numbers. This is something that can cause a lot of discomfort particularly among actuaries.

We all know what the systems are like that calculate these numbers. For the process of business planning and real-time strategy development it is important to have something that is going to be directionally accurate and close. We tested this particular construction in one of the international business units, and we found that it was about 95% accurate. This system is on our Pentium laptop PC and the Triton system. There was only a 5% difference in the numbers they were forecasting using equivalent inputs to both systems.

Getting back to the data collection issue, it is important to calculate the number of inputs needed that you have to specify to run these high-level models. If you have multiple dimensions in a particular model, in this case, we have five products, over five years, multiple customer segments and within multiple geographies—you quickly find that the number of inputs that are required just to run a single scenario becomes almost prohibitive. Again, this is a great example of one of those areas where you have to be sensitive to the people who have to get the data. This model will only be as good as the data that goes into it.

While we like to think that the CEO of Prudential would be able to alter the model inputs himself, most of the scenarios are run in the business unit. In most cases, the

management team will get together and talk about what they want to see for different levels and assign the tasks of filling in the data to one or more people, who will then spend a few weeks putting the numbers together and then bring the result back. When you are testing sensitivities at the corporate level, it is generally analysts within the corporate planning function at the corporate level who are running the scenarios and presenting them to the more senior folks.

Now, I want to go over the corporate planning model to give you an idea of how these plans can be used. One of the big mysteries for many people is that they spend a great deal of time providing data for these plans. The plans are submitted, but it is unclear what happens to them after that point. Oftentimes notes will come back saying, run this scenario or change that driver, but in many cases it is not completely clear how it is being used by corporate.

As I mentioned, we put together something that I will generically call the company model. This is the model that pulls together the results of all of the business unit and planning unit models and allows a range of analysis to be performed on them. We can easily take each of the planning units, decide how we want them grouped together, and then look at income statements and charts for any existing entities or any regrouping of existing planning units into those newly formed entities. We can also do it for the existing entities.

Let's look at how one would go about changing the composition of the company. The model has a grid with check boxes. Imagine that across the top are the names of each of our planning units. At the left are the names of each of our business units. By checking a box in the business unit row that corresponds to a particular planning unit, we assign that planning unit to that particular business unit. This allows us to use one of our scenarios and be able to see what happens if we take our mutual funds business from our securities group and we put it into our money management group. What happens if we take all of our life insurance businesses? What happens if we move planning units between the business groups and group them together? You can then name the new entities and the model will then show you what the results are going to look like based on the low-level drivers that were entered for each of those planning units. The implication here is that you cannot disaggregate anything lower than the planning unit level. That is really the atomic level here and the business units would be closer to molecules.

I will show you what some of the analytics look like coming out of this. After you have defined the various groups, you then can decide what you want to look at. You can look at data for a single entity or a comparison of entities and then you can choose which one of these analytics you want to look at.

In this case we have elected to look at the company as a whole. Let's see what a trends chart looks like. The model has a chart of total revenue trends, a chart that says, for the whole company over the planning period, here is what is happening with total revenues. Many revenue alternatives are possible. We went through a lot of discussion with the client to figure out how they wanted this model to work. Did they want to build gross share matrixes, or a particular analytic that they thought would be the most insightful? Or did they want to have something that was a more free-flow analytic generator?

We decided to take more of a template approach. You can look at virtually any cut of any number coming out of these models. In this case we have elected to look at income statement data. We have chosen the total revenues line, but you could select any lines in the income statement or you can also select any line from the expense schedules, which are basically a break out of administrative costs. You can look at either one of those as a number on its own, as a percentage change year over year, or as a ratio to anything else. It provides tremendous flexibility in creating different charts and looking at the business from different ways, depending on what the needs are. You do not know what they are going to need to do in advance. This provides maximum flexibility.

We are now going to look at a comparison of our different business groups. We are looking at total 1995 revenues contributed by each business group. You can look at any number from the income statement and any number from the expense break out to get a quick read on—after reconfiguring my businesses or from my existing businesses—how do they compare? Who is gobbling up the most system costs? Who is providing the most net income? How are people contributing to the total pie?

This is something that I am pleased to say really was used. We have been working with the PAU for two years now and just finished our second year of improving the models, deepening the process down into the organization, and refining this high-level model. After the first year, the PAU went through the major reorganization in November 1995. The story goes that the chairman called the head of strategic planning and said he was thinking of realigning or divesting a number of planning units and would like to know what the company would look like when it is done. He evidently expected that it was going to take a week or two to get these numbers pulled together. Our client went down and in about 30 minutes restructured the company, printed out the income statement and a number of analytics, brought them back upstairs and put them on the chairman's desk. The chairman was stunned to see that he already had an idea of what the new company was going to look like. The model was used in the way it was intended to be used.

There is a good amount of input required, but it is distributed among more than 40 different planning units. I would say the biggest model had 100 screens. The average model has probably closer to 20 screens. It is at such a high level, and there is really not so much input when you look at it as something that is used over a two- to three-month period of time.

We have also done models like this for big companies that wanted an even higher level model, where the model is perhaps ten screens. The size of the model completely depends upon its application. In this strategic planning situation, the important thing was to understand the high-level drivers that are going to drive performance.

To ensure that you have the most recent data in the model, you must have a good controlled data update process in place. We built in some safeguards. If the data have not been updated within a few weeks, when the model is fired up, it will warn you that data has not been updated for two weeks and ask for more recent data. Generally, there is one person in each business unit who is in charge of the model, but there were usually several people who worked with it.

One trick that they would use while working on the model on their server was to put their own initials in place of the XLS extension on the end of the Excel file name. If you were to access the model, you would see that somebody else was already working with it. We found that there could be other controls, but given that they wanted to run this in Excel and needed it to be easily ported from machine to machine, using the initialing method was the best way to do it.

This approach is relatively new. We find that most people who see these models have not seen them before. It is different in that most people think of a model as a monster spreadsheet. It is a different kind of a model intended for different purposes, but to my knowledge, not a lot of people have them yet.