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Session 31PD The Future of our Profession: Critical Skills Needed for Future Success

Track: Actuary of the Future

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Panelists:	MICHAEL M. BRAUNSTEIN
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Summary: Do you think the analytical skills that actuaries possess will be enough to ensure our profession's growth in the future? Come learn about the findings of the 2002 Member Survey and 2002 Market Opportunities Research Report. Listen to opinions about critical skills needs—offered by traditional and nontraditional employers of actuaries—and gain insight into initiatives underway at the Society of Actuaries to advance our profession.

MR. MICHAEL KASTER: I am the managing director of the practice areas at the Society of Actuaries (SOA). I'm an actuary on staff, and my job is to make sure that what we're doing at the SOA is relevant and pertinent to advancing the profession.

Today's session is about the future of our profession and the critical things that actuaries need to keep in mind as they head into the future. What are the skills needed for the future? The Actuary of the Future Section sponsors this. For those of you who do not know about the Actuary of the Future Section, it is a section of the SOA that is geared toward the future development of the actuarial profession: identifying new opportunities for actuaries, new types of jobs, new types of careers and also helping to identify the gaps that exist in actuarial skills for the future of our profession. So they rightly sponsored this session. This discussion is all about advancing actuarial skills in the marketplace.

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Note: The chart(s) referred to in the text can be found at the end of the manuscript.

Being on staff, I'm very familiar with a lot of the initiatives at the SOA, and many, many of them are geared around the advancement of our profession. As I already mentioned, the Actuary of the Future Section focuses on this. We have a whole department within the SOA, which I manage, called the practice areas. We have actuaries on staff in the main practices in which actuaries work: life insurance, pension, health and finance. We have fully qualified staff actuaries, and they're there to make sure that what we're doing will help practitioners in all those different fields.

We also have a strategic planning committee for the SOA. This is a board-level committee that is there to help give direction to the overall initiatives of the Society. They've been very focused on making sure that the initiatives are working toward the advancement of the profession and not on whatever whim somebody wants to do today or tomorrow. It's all about advancing the profession.

We also have a Management and Personal Development Section, which is very focused on the other skills. It focuses not on the technical skills, but more on management skills and communication skills. We have representatives of all these areas on the panel today.

The objectives of today's session are to help you learn more about what the market is saying about actuaries. We have done a number of surveys, a couple more recently, and we'll tell you a little bit about what the marketplace says about actuaries. What skills are employers are demanding of actuaries? What jobs will demand actuarial skills in the future, and what will be the demand? So we'll tell you a little bit about the survey results that helped us not only identify what people think, but also to gather some data on it. Actuaries need data, so we had to get data, even on the market.

We'll learn more about management and personal development skills, and more specifically, what is business acumen or business savvy, and how can you develop these skills in the future? We'll also learn about one of those nontraditional, developing roles that actuaries are getting more and more opportunity to play, and that's the role of a chief risk officer. By the end of this session, you'll know a little bit more about what to expect in that role and how you might be able to get into that role. So without further ado, let me introduce today's speakers.

Michael Braunstein is director of North American operations and global marketing for BPP Professional Education Inc., a training and development organization. Michael has 30 years of actuarial experience, but with a lot of emphasis on training, development, communications and recruiting. Michael will talk to us about business acumen and business savvy, and he's well qualified to speak on that subject. Our third speaker, but second in the order here, is Zafar Rashid. He's apparently an independent consultant, but next week he will start a new position as chief financial officer (CFO) at Prudential Annuities. He is formerly a chief risk officer for American General, so he's well qualified to speak about the role of a chief risk officer and what's involved.

Our first speaker today is Dorn Swerdlin. Dorn is an FSA, as all of us are here. He's president of Swerdlin & Co. He's an independent consultant focused on actuarial and mostly pension consulting. Dorn is well qualified to speak to us today because he's involved in two of our groups that we talked about. He's a member of the Actuary of the Future section, and he's also a member of the strategic planning committee. Dorn will talk to us about recent market research and what was uncovered from that market research.

MR. DORN SWERDLIN: Also, I'm on the Section Council for the Actuary of the Future Section, and I was a former chair about three years ago. I just wanted to get all my credentials in there.

My portion, as Mike said, is to talk about what the strategic planning committee has done and how it affects the business, as well as the critical skills that actuaries need for their future success. We went out to the marketplace, which means employers or prospective and possible employers of actuaries, to find out what kind of things they need, what they think about actuaries and that sort of thing. We also did some surveying of the Society's members to see what they think. I'll also discuss the implications of the survey and some initiatives that are already underway to deal with these situations.

The first thing is what employers think of actuaries. We started with identifying the most important skill set and identifying any gaps—we will talk about this in more detail later—between what actuaries think about themselves and what employers and other marketplace people think about actuaries. There is a gap. We think differently about ourselves than they do. Next, the survey sought to determine potential opportunities and demand for actuaries by market as identified in the strategic plan and the high-level perception, meaning the perceptions of the top people in the businesses.

Why is this important? It's important because of the convergence and consolidation within the financial services industry. I remember back a few years ago when Howard Blohm headed the strategic planning committee. He used an example of Citicorp, which bought Travelers, and the people who run Citicorp don't really know anything about actuaries. So, even for an insurance company that's owned by other financial service industries, we're losing our position, so to speak, with regard to future employers.

The perception is that actuaries are losing positions of power and influence within the organizations. I think even with the traditional employers, such as insurance companies, actuaries are not getting to the top as they have in the past. And then the chief risk officer, which is the focus for today because we have a good example of a gentleman here to talk about his own experience, is an area that's already taken off. We're sitting around and not taking enough action, in my opinion. But

there have been some things happening that I just found out today. Mike, tell me what they were again.

MR. KASTER: The board just recently approved the formation of a Risk Management Section for the SOA, so you all have the opportunity to join the Risk Management Section. They also approved the formation of a risk management track for the education process, so we'll have—not tomorrow, but sometime in the very near future—a Course 8 or its equivalent for risk management, and that was in recognition of this growing and evolving area of risk management.

MR. SWERDLIN: I read that one of our members went to the Global Association of Risk Professionals (GARP) meeting. It's an organization that's only two or three years old, and it already has 26,000 members in the United States and Canada. I don't have the numbers, but it's a much bigger number throughout the world. They have a credential called financial risk manager (FRM). I really think it'll be important for us to have a credential real soon. The steps that the Board of Governors has already taken, which I learned about today, are a good step in that direction. To have a track and a section would be great.

In the research, we looked at traditional actuarial employers and consulting/insurance/government. In the practice areas, as Mike mentioned, we looked at health, finance, life and retirement. We also looked at broader financial services, areas in which we're not traditionally involved: banking—commercial and regional; investment banking; mutual fund management; financial advisers and brokerages.

Looking at the skills that traditional actuarial employers are demanding in Table 1, you can see that No. 1 is business savvy. You have quantitative, risk management, financial institution and markets, and No. 1 is business savvy. Mike will talk a little more about what that means. This has two particular breakouts of it: business communications and business acumen. He'll go into that a little further.

Table 1

Level of skill desired by traditional actuarial employers

Skill Area	Ranking of Relative Importance	Level of skill required
Business Savvy	1	Business Communications Business Acumen
Quantitative	2	Performs calculus-based statistical modeling; adept with calculus, finite and infinite series, differential equations, performs calculus- based statistical modeling
Risk Management	3	Designs enterprise financial and other kinds of risk management strategy and tactics; analyzes and manages mitigation of enterprise risk
Financial Institutions/Markets	4	Creates pricing models for new securities issues; analyzes assets/liabilities and recommends management strategy and tactics
Accounting	5	Analyzes details of financial statements, prepares pro forma projections, performs asset valuations and liability analysis
Economics	6	Forecasts short-term economic trends, can explain monetary policy and global trade dynamics
Source: 2002 SOA Market Oppo	ortunity Research, I	Leading Solutions Group

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Then we have opinions expressed by the broader financial services market shown in Table 2, and guess what their No. 1 demand is? Business savvy.

Table 2

Level of skill desired by employers in the broader financial service market

Skill Area	Ranking of Relative Importance	Level of skill required
Business Savvy	1	Business Acumen Business Communications
Risk Management	2*	Designs enterprise financial and other kinds of risk management strategy and tactics; analyzes and manages mitigation of enterprise risk
Quantitative	2*	Adept with calculus, finite and infinite series, differential equations; applies multivariate statistical analysis of variance; knows the general linear model
Financial Institutions/Markets	3	Models and analyzes financial risk for enterprises, analyzes market sectors or funds, creates pricing models for new securities issues
Accounting	4	Analyzes details of financial statements, prepares pro forma projections, performs asset valuations and liability analysis
Economics	5	Forecasts short-term economic trends, can explain monetary policy and global trade dynamics
Source: 2002 SOA Market Oppo * Both Quantitative and Risk Mar		eading Solutions Group raged to an equal relatives importance
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Chart 1 shows the relative importance of skills sought by employers, and they vary by traditional practice area. You can see business savvy is right up on the top in terms of what the employees want.

Chart 2 shows level of proficiency. Does anybody know what "skill set gradient" means?

MR. KASTER: I can help out a little bit. The survey was done to ask people, on a scale of one to 10, how important or at what level of this skill do you need people to do various quantitative business analyses for your organization. So they ranked the skills and anything with a high score of seven or eight meant that they wanted a pretty proficient level of skill for their professionals to do that job. You can see risk management. They were seeking a pretty high proficiency level in that skill set.

MR. SWERDLIN: Chart 3 shows that overall, for all segments, business savvy skills were important. This is kind of the bottom line of this one—business communications and business acumen are highly valued in this situation.

What do employers think of actuaries? On the down side, they perceive poor communications, interpersonal skills, no imagination, no solutions, poor managers, too linear, lost in detail, unable to see big picture, in a technical box and cannot multitask. This doesn't mean we're that way, but it means that's the way they think we are. So that's important. As you can see, someone with these kinds of characteristics will not be a good leader or a good businessman or businesswoman,

and that's what people want.

We do have some positives. We're hard workers, motivated, bright and quantitatively skilled. We have expertise; we're communicators. We can solve complex problems, understand products and have good thinking ability. These are all great things to have, and in the past, these positive characteristics were enough for us, for actuaries. Now and in the future, we won't grow if this is all we have to offer. Again, this is not where we are, but this where they think we are. If you go to an employer and he has this image of actuaries being like this, you'll have a lesser chance than if he has a different attitude, a different assumption, about this. As far as I'm concerned, this is kind of a key one here, in that this is what people think. We do have some of these problems, and we need to deal with that.

Let's talk about who our competition is among other professions. We think MBAs are big competitors. Accountants are next, and then financial engineers, risk analysts, economists, statisticians and others. This is what the members think according to the survey about who our competitors are.

There are SOA members who have other credentials, such as Mike here. He's an MBA. There are Ph.Ds, CFAs, FLMI, CLU/ThFCs, lawyers and CPAs. Other important facts we learned were that members feel the most important thing that the SOA does is to maintain and enhance the value of the credentials. I think this is really a big issue. It's one of the issues that must be dealt with before we can have a risk manager credential given by the SOA. Let me poll the audience. How many people think that if the SOA added some kind of risk manager credential, that would that lower the value of your FSA or ASA? How many think that's true, that it would lower the value? Three. OK, how many think it will not lower the value or will enhance the value? OK, good. That's really good. I'm with the second group.

But that's part of the problem. I don't think it will. If we don't do this, we're simply left in the dust and that will lower the value of our credentials because things that we could be doing are being done by other people, not actuaries. So it's almost like if you do nothing, you'll end up lowering the value, in my opinion.

Members measure the SOA's effectiveness of the value potential through compensation levels for actuaries relative to other professions, the number of opportunities available for actuaries and the number of actuaries in positions of power. I think with regard to the second one, the number of opportunities available, that if there are things out there that we haven't done before that we can do, such as the risk manager field, that's an opportunity. We either take it or leave it. But if we leave it, I think we're stepping backward, and we're being left behind.

Let's discuss the implications of the data. To achieve the desires of members, actuaries need to enhance their skills, according to those who would hire and promote them. A gap exists between our members and employers in the perception

of actuarial skills and abilities. Members believe that putting image first will stimulate the demand for actuaries. Employers believe actuaries need improved skills before they will be employed in broader markets and senior positions. So our prospective employers are saying, "You have to have more business skills, or it's a problem." And we're saying, "Well, we just have to get an image, like we could get a public relations (PR) person out there, and that would make everything better." I'm not sure that's what this is, but that's my interpretation. Actuaries and employers of actuaries must dedicate time for training in business savvy skills. That's our focus today.

An initiative is underway already, and we mentioned a several that just recently came to be. There was meeting in October of last year with the strategic planning committee, and at that meeting one of the things we decided was what additional research was needed, and these are the things that are in the process right now. So we're looking at these things: How do employers perceive our competitors? What skills do employers seek for a professional to manage enterprise risk? Why are or are not members obtaining additional skills/credentials/degrees?

Outsourcing research would help to create a branding and awareness-building campaign for the profession. They'll determine which market opportunities are the most viable and what changes the SOA wants to make to the current education and qualification process in the long term. Now we have the initiatives—basic education, investigating a risk management actuarial track—and that's already been started. Restructuring the ASA course to integrate business communication is also being considered.

MR. KASTER: We're working on that.

MR. SWERDLIN: OK. The continuing education area, Michael's section—the one he started at least—and the Actuary of the Future Section are hosting a Webcast devoted to business savvy skills, and we've already had several conference calls. I am on the committee, and I may be part of the actual Webcast.

Increasing partnerships with non-actuarial organizations to enrich actuarial thinking with external perspectives and—I don't know if work has been done on that, but GARP may be one that they can look at. Another is their continuing relationship with the Kenan-Flagler Business School of Executive Education, University of North Carolina, Chapel Hill, for general business skills. They'll help us with the general business skills.

We also need to consider attracting the best and brightest. First, you look beyond the traditional candidate, with a strong math focus, to attract an array of skill sets. All these years that we've been actuaries, the math and quantitative skills have been the main focus, and it's just not enough anymore. That's what we're learning with all this research.

That's exactly what is going on with the financial services industries. In the old days, the MBAs couldn't even think about doing things that we were doing because they weren't trained and they didn't have the technology. We had commutation functions. That's the way I did it when I grew up. It's an old structure, and within insurance companies that used to work OK because to be an actuary in an insurance company in the older days was the prime place to be.

Does anyone have a comment on that?

MR. FRANK LONGO: I understand a little bit about what this gentleman is saying. I guess I would affirm that communication issues are the dominant issues in my job. I'm a valuation actuary, and I do traditional valuation and financial reporting financial projection kind of work. But explaining the results, even within our own actuarial staff—let alone to outside peers and other department members, including people, some of whom don't have life insurance backgrounds and some of whom don't have insurance backgrounds—is the challenge. So, I think a lot about how do I improve my communication skills? Even though I think my communication skills are reasonably good, I know they have to be a lot better.

Anybody who is taking exams or is through with their exams needs to have outstanding technical skills. Your work has to be good and supportable and validated. But everybody, in my opinion, needs to think about how to enhance their communication skills to the max because it's the only way that we, as a profession, will build the credibility that you were talking about, which is exactly what the respondents to the survey said. So even if you're currently in a job or in a company that seems structured and the career paths may seem somewhat structured, you need to think about things in as long a timeframe as you possibly can. Where will I be five years from now and 10 years from now? Because of all the changes in the industry, you could have gone through a couple of different jobs in different companies, so the absolute most important thing to do is to concentrate on your own skills. I'm fully supportive of the comments and also of the initiatives that are being created by some of the sections, such as the Management and Personal Development Section. I think those initiatives will go a long way toward helping us concentrate on the issues that are absolutely at the forefront of our future development.

MR. SWERDLIN: Let me ask you a question. I agree with you that no matter where you are, your communication skills are much more important. You said you're a valuation actuary? Do you find that communication skills are much more important now than they used to be?

MR. LONGO: I find that to be true. I have been in jobs in which I communicated primarily with other actuaries and I could use "actuarialese." Where I am now, I deal with a lot of non-actuaries, and I deal with people who don't really have the same strength in insurance background. Subjects such as statutory accounting have a lot nuances. I know that I understand my material, but I have to be able to

explain it to others to win their confidence. Nobody owes me anything. I have to win their confidence all the time, and I think that's an attitude that people will be well served to consider.

MR. SWERDLIN: You can't say to the client, "Well, you don't understand this. You're stupid because you should know that." That won't go over too well. Thanks.

MR. KASTER: One of the issues that we always wrestle with as a Society is that actuaries are so wanting to make sure that we do the technical training that we focus an awful lot of our training on the technical side. Companies put their actuaries in actuarial departments, while all those other people are out there getting practice in communicating. We really need to think about ways that we can help our actuaries in training to get both the technical and the communication skills.

They learn how to communicate well, and whether or not they're right, it doesn't matter. They're being listened to and actuaries are not necessarily being listened to. Michael Braunstein is here to help us all learn how to have a little better business acumen and communicate a little bit more strongly, so please welcome Michael.

MICHAEL BRAUNSTEIN: What I'm planning to talk about is business communications, and like that little engine that said, "I think I can," we'll talk about self-development. "Don't follow me, I'm lost too," is really about leadership, leading people. Relating to others is the real thing, not that I did it my way. Sometimes those people have as good a way to do it. "That's the way we've always done it," is business acumen. I had a boss who told me, "That's the way we've always done it, and it's not necessarily the right way." And, of course, personal courage, not "the only thing we have to fear is fear itself."

Now before I continue, I just want to say that we did this presentation in Washington, D.C. I have kind of a big ego, so I wanted to check out those evaluation forms immediately. Most of the comments were fairly nice, but one person in particular said, "Braunstein was interesting, but everything was so obvious." Let me defend myself here. There's nothing that I'll tell you that you don't already know. In fact, it was no different than today's ethics conversation, right? Nothing that Jim said today was new to you. You know it. The question really is how do we get from knowing it to doing it? Now, that's what I'm saying to you. You know everything I'm about to tell you. The trick is to do it. Maybe this group is already doing it. I might be preaching to the choir. Overall, as actuaries, I think we fall a little bit short.

So let's talk about business communications. We need to be good verbal communicators. I don't want to be like my wife. When she's unhappy with something, she just rolls her eyes, and her body language tells me a lot. Those are fine ways to communicate, I suppose, but in an office you really want to

communicate intelligently and verbally. You need to be able to articulate your ideas. You also need to be persuasive. Somebody told me once, if you really want to convince somebody, you'd better give them both sides of the argument, especially if it's an intelligent person. But you do really want to present both sides of an argument if you want to convince somebody.

You need to be logical and engaging. How am I doing? Am I engaging? That's important, all right? If you don't do that, you'll lose the audience. People won't pay attention. If they don't pay attention, you won't get your point across. You need to have some good writing skills. How many of you have seen business letters, technical letters, resumes, or anything with spelling mistakes or grammatical mistakes? How do you feel about it? It turns you off, right? You see it and immediately you won't hire that person, right? Now, how many of you have ever done it? So it's obvious isn't it? You all do it, and of course, it happens. So we need to have strong writing skills. We need to be able to present intelligently and do it carefully with some good spelling. With spell checks and grammar checks and everything else on a computer, it should be pretty straightforward.

You need to listen well. On a flight—not the flight here, but the flight down to D.C.—I was reading the airline magazines. There was an article about listening. It said that 80 percent of our time in the office is spent listening and that the difference between effective listening and ineffective listening is attitude. So it's important when you're listening to want to listen, to pay attention.

We also need to share information. Nothing will kill morale more than if you assign a job to someone, for example, and then they spend a few extra hours, stay late, forget their family, and then you say, "Oh by the way, I meant to tell you, we don't even need that. We changed our minds on our project." That's not a good thing. Has that happened to anybody, where you've worked late, only to find out from your boss that, "Oh yeah, we didn't really need that." That's great, isn't it? How many of you have done that to somebody? A couple of good sources of communication are the obvious sources: Toastmasters, Dale Carnegie and my good friend, Jerry August.

Let's look to self-development. We need to learn quickly. Now actuaries, I don't think, have a problem there. We do learn quickly, and we need to continue to learn throughout our lives. Somebody told me that once you get to the end stages, such as 100 years of age, if you're still alive, what keeps people going is intellectual curiosity. I don't know how many of you are like that. I think I'll live to be very old because I have a lot of intellectual curiosity. If I'm walking down the road, I keep walking. I always need to know what's around the corner. I always want to know what's around that turn. I always want to know what's going to happen tomorrow. When people die, I always think gee, they don't know. They don't know what's going to happen in this event that's playing itself out. I always think I don't want to miss that. But there's always been an event like that. So that's where the intellectual curiosity comes in, and I think that's mentally stimulating and helps you

learn.

We need to make connections. My daughter is a writer, and it's amazing how good authors will pull ideas from different places and bring them together. I think we need to do that ourselves. Even in a technical sense, as actuaries—and we'll talk about it a little bit later—how you have to connect with all different departments in a way that a lot of people get involved in decisions that are made. So we need to be doing a lot of connecting. Of course, actuarial rotations give us that opportunity, don't they? We can see the similarities in this job and the one we just had and the one we're going to have in the future. I remember my first job. It took me about a year to figure out what was going on, and in my second job, after I rotated, it was much faster. The learning curve was much faster because I discovered there were lots of connections I could make from what I learned in my last job.

We need to be accountable. If somebody at work does something wrong, it's not a good idea to take it and say, "Well, nice try. Let me take care of it. I'll do it now." That's not a good management technique. If somebody does it wrong, you have to give it back to them and say, "You need to get this right." They need to pay the price, and they need to be accountable. You also need to be accountable. In fact, it's a mistake on your part if you let that happen. Accountability is important for you in your own work and so is making certain that other people are accountable too. The real favor you can do for people is to make sure that they get the job done right, and you'll appreciate the advantages that come with that, right? Even if they mess it up a few times, when they finally get it right, it will bolster their confidence. They'll know that you have faith. They can ultimately get it. The other side of the coin is, they just don't feel good about themselves. Self-esteem suffers. I don't know about you, but I've worked with people who made me feel good about myself. I do a lot better job than when I'm working for people who don't make me feel good about myself.

We need to possess a range of interests. Who's the life of the party? The life of the party is the person who can speak on all different topics, right? You go up to someone and start talking about something, and he or she can talk about it. This person knows something about it. The conversationalist is the person who's the life of the party. That's the person who you want to be with, and that's the person, by the way, who will get that job that you want. The person who can talk about this, that and the other thing is the person who'll get the job. You need to have a range of interests, and that can be a lot of things within your technical field, but it can be things outside your field as well.

You need to be ambitious, to develop yourself. You need to have energy and enthusiasm. How many of you would take a pill that would make it so you wouldn't have to sleep anymore if you could? Oh man, would I take that pill. Sleep, what a waste of time—there's plenty of time to sleep when you're dead, the way I look at it. What are some of the sources for self-development? The exams, to help you on the technical side, are good, but seminars, meetings like this, sessions on

management and personal development sessions are good too. Here I am with Actuaries of the Future, which has a lot of great meetings. The meetings provide a lot of this opportunity, and you should take advantage of that. Of course, things at the library are helpful too. There are a lot of books that have been written about this.

Let's talk about leadership. We need to assess people, and we need to assess situations. Putting together teams is a fun thing to do. I've put together volleyball teams, softball teams and baseball teams. I've also put together administrative teams, sales teams, marketing teams and financial teams, and it's the same process.

I've always thought I could be a baseball scout. I can just tell right away when I see someone play if they're good or not. I'd like to think I'm pretty good at that. Putting together teams is important, and that means we need to assess people. We need to assess them accurately. We need to deal fairly with people. We need to tell the truth. If somebody is good for a job, you need to tell them that and win them over. If someone is not good for a job—that doesn't mean they'll never be good for the job—but you need to tell them that too. Good leadership means dealing fairly and being honest with people. So, if somebody is not right, you say, "You're not right for this spot. Here's the reason why." That's not to say they can never get right, and that's important.

The other thing in dealing fairly with people is that sometimes you have to make tough decisions. If you're any kind of manager, you should make your decisions ruthlessly, as they say, and communicate compassionately. There's always a nice way to give bad news, and sometimes you have to give bad news if you're in a management role. If you want to give someone bad news and you say it nicely, that can be a motivational tool. Of course, if somebody is doing a good job, you can make a big deal about it. You have to be careful—some people don't want attention. But you have to understand people, assess them and motivate them in positive ways.

We need to be flexible in relating to other people. How many of you_are familiar with Meyers-Briggs? It lists 16 different categories of people. The labels sometimes get a little funny, and I know it can sometimes be controversial. But just for example, I'm an extrovert. You may not know that. My wife, unfortunately, is an introvert. I say unfortunately, but we work well together at times. Extroverts and introverts can work fine together, as long as they understand who they are.

When I was on Management Personal Development Section, I met a guy named Jim Trefz. Some of you may know Jim, and Jim is the opposite of me. He's absolutely the opposite. We were at a Meyers-Briggs session. That's where we met. They lined us up on the wall in the order of our scores, and I was at the end of that room, and Jim was at that other end of the room. I noticed him and he noticed me, and at the very next session, we happened to be, just by coincidence, sitting next to each

other. We started talking, and I convinced him that he should join the Management Personal Development Section. He went on to be chairman of the section, and he's just a terrific find, a great guy. We have completely different styles, and yet we were able to work very well together because of an appreciation for the other person's style. We need to be able to do that.

We also need to create networks, which happens at meetings and also at extracurricular activities. I don't know how many of you volunteer your time, but it's a great way to get to know other people and to network. When it comes time to find the next job or whatever, it will happen because you already know the people. I try to make appointments sometimes to do my little dog-and-pony show for my company. There are people I don't know, and it's like, "Well, I don't know. I'm busy. I can't give you a half hour." Then I tell somebody I do know, and it's, "Oh yeah, come on in." It makes a world of difference. That's the way it works. So you need to network.

Build collaborative trust. Honesty is the best policy. There's an obvious point, but if you lose trust, it's very hard to regain it. If you tell somebody something and say, "Hey, this is just between you and me," and then somehow that word gets out, that really has a definite negative impact on that relationship, and it's a long time before you can get the trust back.

Can you handle conflict in a positive way? Let's say you lose your job, for example. I lost my job a few years back. I remember talking to someone, and I was laughing about it. He said, "How can you be happy? You just lost your job." I said, "Look, I lost my job, and I can be happy, or I lost my job, and I can be unhappy. Either way I lost my job! Which is better?" Now I know that sounds good in theory, but it's true. The truth of the matter is, losing your job is an opportunity. Forget the stress. It's an opportunity to do something better. So that's the way you have to look at life and go through it.

Teamwork is important, and you need to foster teamwork. The difference between winning and losing is attitude. I've played on a softball team where one year, we were getting along. The guys loved each other. It was a great group of guys. We couldn't lose, no matter what we did. We'd get that win every time in the last inning. The following year, we started bickering about this, that and the other thing—same group of guys, same talent—and we lost every game. We couldn't win. What was the difference? The difference was attitude. I'm convinced it makes a big difference.

Communications is important, and business acumen is the other big one. We need to be perceptive. We need to be aware of our surroundings. We have to pay attention. There are a lot of politics in the office, right? Some people hate politics, but you know what? Politics is fun, and it's interesting. Keep an eye on it. It gives you valuable information and can be interesting and helpful.

We need to be creative, to come up with creative solutions. I've always tried to find ways to look at the problem a little bit differently. I had an uncle who wanted creative solutions. He hired only lazy people. Lazy people found the easiest way to do things.

We need to have a balance in our lives. What does balance in life mean? There are a couple of ways to look at balance. You can just look at balance as operating right on the mean and leave it at that. Or, you can diversify it across a wider spectrum, and I think diversifying across a wider spectrum of things is really what balance is all about. Just imagine if you're walking across the balance beam—how hard it is to do that—whereas, if you have a whole wide plank to work with, and move back and forth, it's a lot better. So, concentrate on doing lots of things but keeping everything in balance.

Build processes. Keep moving. Never rest on your laurels. Don't look back. Look back to learn, but bring things together. MBAs, for example, have an ability to bring things together. We talked about this a little earlier. If you're in the product development area, the pricing area, you might want to talk to the sales department. You want to talk to the underwriting department. You want to talk to the marketing department. You want to talk to the underwriting department. You want to talk to the investment department. If you want to be a CEO, or you want to be a manager at a regional level, you need to bring it all together. That's this business acumen, and that's what it's all about. You can't have this actuarial tunnel vision. Finally, you want to have broad knowledge. Expand your horizons. I made a list of what was of interest to me by decade. I was born in 1951. I was looking at the '50s. What were the things of interest to me in the '50s? What were the things that were of interest to me in the '60s and the '70s and the '80s? It's interesting. Things keep changing. Things are added. I don't lose anything. I'm still interested in cartoons. So, you make that list.

I want to touch on personal courage. We need to be composed to spread our fear. We talked about losing your job. Everyone is afraid when he loses his job, but you don't want to show fear. What you want to show is confidence. I recruited actuaries for about a dozen years, and who got the job? It wasn't necessarily the most talented person who got the job, I'll tell you that right now. It was the person with the most confidence, the person who would articulate his position the best. That's who got the job. You want to be composed.

You want to be consistent. You don't want to tell Employee A one thing and tell Employee B something to the contrary. If everybody wants off the day before Christmas, and you tell everybody, "Oh, no problem, no problem, no problem," somebody has to work the day before Christmas. So you always have to be consistent, and sometimes that means taking a stand. But employees will react better if you give them the facts and you're honest with them and tell them the way it is and be consistent. You don't want to tell everybody what he wants to hear. It'll come back to haunt you in the long run.

Of course, you need to be ethical, and fortunately Jim took care of that this afternoon. He wrote, "Values, Ethics and the Lone Ranger," which was a great book. Now he's written a book called, "What Do You Stand For?" Just to give you an idea on ethics, when I was recruiting actuaries, I was paid once by a company. It was a \$25,000 fee. I received a check in the mail, and the next day I received the check in the mail again. And I said, "Oh, this is good." I thought, what am I going to do? Let's see. I can give back the check, or I can burn in hell for eternity. So I gave back the check. I decided that they probably would find me out anyway, right? But you have to do the right thing.

You need to be truthful. Don't be afraid to tell the boss he's wrong. Nobody wants a yes-man around him. When I was working at a company years back, the sales department was double counting production figures. It was amazing! Everyone was getting this \$1 of production. It was only \$1 of production, but you got it and you got it and you got it. It was amazing. So I blew the whistle on it. This isn't right. You do need to tell the truth and blow the whistle if something is not right. And you need to show—the operative word here is "show"—knowledge. You want to have knowledge, but it's not just sufficient to have it. You have to show it because the people around you need to know that you know things. Sometimes that's a function of personality. So share it when you know it.

We talked about balance, having work and life and good health—having a balance in your life. I planned to write a book years ago called, "Work Is One of the Things I Do," because it was true. Work is one of the things I do. When I wake up in the morning—I work for myself—I have to write a letter, and I have to negotiate a salary, and I have to take out the garbage, and I have to go to the drugstore. So I have a lot of things to do, and work is one of the things I do. I think it's important to have that kind of balance.

What next? Here are some places you can go. We talked about Actuaries of the Future, Management Personal Development sessions, Dale Carnegie and Toastmasters. This book called, "Stop Managing, Start Coaching," by Matt Fountain is good. Matt has spoken for us at a Management Personal Development session a couple times. He's good. If you want to get up early in the morning, at 7 a.m. tomorrow, there's, "Does This Suit Fit?" It's something of a workbook that's offered by the SOA, and we're doing a piece of it tomorrow morning. So those are just some places you can go for help.

MR. KASTER: So again, just to reiterate, we're getting a lot of information that says actuaries need to learn about communications and do a better job of communicating so we can expand our horizons in the future and stay relevant and pertinent to employers. One of those new and developing roles is the role of the chief risk officer, so if you would please help me welcome Zafar Rashid, he'll tell us about that role.

MR. ZAFAR RASHID: I'll follow Mike's lead and tell you what I'm going to tell you,

and even though I don't have a slide for it, tell you again what I just told you. So, let's go right into it.

One thing that you should probably know as you listen to me talk is that about three years ago, I was hired by American General to be the first chief risk officer of the company. The chairman just gave me a blank piece of paper and said, "You go figure out what you have to do." It was great in the sense that I supposedly had complete freedom. It was also kind of a daunting experience because I didn't know where to start. But I thought I'd have it fairly easy because risk management is not a new field. People have been doing it for a while. I figured the easy thing to do was to look at what was being done in other industries, particularly in the banking industry, which has had that kind of a role for quite a long time.

We studied other industries and to be honest with you, we came away somewhat unsatisfied in terms of either the way things were approached or how we would apply them to our company or to our industry. We ended up trying to create our own approach, so a lot of what you'll hear is relatively new. It's experience that we learned as we went along, so I won't claim that it is the best approach or the only approach. These are just lessons that we learned as we stumbled through the process, so to speak.

But in any event, let me start first by asking, what is enterprise risk management? How many people have heard that term? How many people know what it means? This is not unusual. It's a fairly commonly talked about term, yet when you look at what has been done in other industries, a lot of people don't really know how you go about taking risks that are fairly broad, diverse and non-similar and put them together into a comprehensive framework. So that's one of those things we'll talk about. I'll also describe a couple of case studies, although we didn't have to do a lot of work to look at case studies. We'll discuss the spectrum of risk with which we have to deal. We'll touch on the role of the chief risk officer and what we had to do to develop that function within my company. Then, we'll talk about some of the critical skills. You've already heard a lot about the critical skills that are generally applicable in all fields of our endeavor, whether it's as chief risk officer or any other position. But I'll try to address specifically what I found was most useful in my role as the first chief risk officer of the company and lessons learned from experience.

What is enterprise risk management? I looked at a number of different definitions and read a lot of books on it, and this is really the best definition that I've been able to come up with: the discipline by which companies assess, monitor and control the risks facing the organization. The critical part is the latter part of it, which is that it is all driven toward enhancing the long- and short-term value to the stakeholders of the company. You might be interested to know that this definition came from the Casualty Actuarial Society, so it was very close to home.

Why is it becoming so critical? Everybody knows the events of the last few years. I think the market has become quite sensitive to risk issues, and so we started

looking at case studies, what's happened with risk in the past. We didn't have to go far beyond our own industry to find a few things. I'll talk about a couple of them just as an introduction.

Everybody is familiar with AIG. It's a company that is much admired in our industry. It has done a lot of things really well. Here's a company that for more than a decade had very consistent combined ratios in its business in property/casualty, particularly in its commercial property/casualty business. It had a record that was absolutely admirable, and I don't think any other companies have been able to approach it.

The company had very steady earnings growth over a long period of time. It had the highest fee ratio by far in the industry. The other fee ratios for comparative purposes were not even close. And, of course, it had the world's largest market capitalization. So it had everything in terms of performance that you could imagine. Let's look at what's happened just in the very short period of time, in this past winter. Two events occurred very close to each other. One was a downgrade by Morgan Stanley of the entire insurance industry, including AIG. It was not singling out AIG as a company, but it downgraded the entire industry. The second event that occurred, maybe just a few days after the first, was that AIG announced a \$1.8 billion charge to earnings for asbestos-related claims.

Those two events occurred, and AIG's stock dropped from the low \$60s to the high \$40s. Subsequently, I think, it even dropped lower than that, and now it has come back a little bit. This was just measuring the impact on the stock market within a very short period of time after those events came to light. And you can see \$40 billion of market capitalization was wiped out. Now that says how sensitive the world has become to risk and risk-type issues.

For another example, take a look at Cigna. Cigna's stock last summer, was trading in the mid-\$70s. It had actually been more than \$100 earlier. Its market cap was about \$10.5 billion. Two things happened. They announced a charge for guaranteed minimum death benefit for insurers of \$720 million, and the stock dropped down into the low \$60s. Secondly, they announced some problems in the health care business, particular service issues and a few other things, and stock dropped below \$40. It actually got down into the mid-\$30s, and market cap fell almost to half of what it had been prior to those events.

Now in both cases, if you wanted to quantify the dollar amount lost, even if you were to take more conservative estimates, you wouldn't get anywhere near the degree of impact that happened to stockholder values. I think that's the lesson to take away from it—the investment markets do and are extrapolating from these events in terms of their evaluation of companies. I think that's one of the reasons there's been growing focus, not just in the insurance industry but in other industries as well, on risk management and the discipline of risk officer or chief risk officer or somebody who is focusing on managing these risks. It has become more

critical and, if anything, I suspect the insurance industry may be farther behind than some others in developing this role. But I am hopeful we'll catch up in a short period of time.

Let me now talk about why it becomes so complicated, because there are six categories of risk. These are only categories. There are obviously sub-categories within them that can run into the hundreds of types. But when you think about market risk, credit risk, pricing risk, legal risk, operations risk or strategic risk, they're all different. One of the things we had to try to figure out was: How do you take all these different risks and put them into some kind of a framework that makes sense? Something that allows the CEO to understand the overall composition and the profile of risk that his or her organization is taking on?

What do you have to do as chief risk officer if you're trying to get your arms around a broad spectrum of risks like that? The first thing is you have to either create or manage the risk policy of the organization. You also have to deal with governance issues. Where will this be managed? Who will take ownership of different aspects of it? How will things be reported up and down the line, and where will decisions be made? There are a lot of organizational issues that have to be dealt with in terms of control, of hierarchy, of clarity and decision making. Those are the types of issues that fall on the shoulders of the person who is to be the chief risk officer.

The risk analytics and modeling are probably home base for us because this is what we do, and this is what we learned how to do. But there are many areas in which we have not applied our analytic skills and marketing skills that we have to expand into.

Data development and management are important. So much of what you can do in this measurement and quantification depends on the data on which you're basing it. It's the old adage that we have all learned through our careers—garbage in, garbage out. If you have bad information, you won't be able to use it. Worse, you allow yourself to think that you've done something when you haven't. So data management and development becomes a key part of the role that chief risk officer has to perform. Then risk monitoring and control and the management of risk, obviously, are another part of the job.

Let's talk about risk policy. What do you have to do in terms of risk policy? The first thing is you have to define what this means to your organization. That can mean different things to different organizations. That's one of the things we found in looking at other industries. Our perspective on risk was perhaps different from others. Being an insurance company, we are in the risk-taking business, so perhaps we are not quite as fearful of risks as some other industries are. You have to define what the objectives are of the risk management function. You have to define what risk is for your organization. You have to develop risk standards. How much risk will you take? What kind of risk appetite will the organization have? How will the risk-taking decision making be spread across the organization in terms of authority

level? You have to set limits on that.

The second thing is governance. One of the issues we had to face was the rule of risk policy. Which levels of management within the organization does that go up to? In our case, the board had overall approval of risk policy, but the details of it were at the management level. They were not at the board level. But each organization, depending on the nature of the organization, will take its own approach.

Approval of risk standards and appetite definitely has to go fairly high up within the management organization, probably up to the CEO level. In establishing and managing the reporting structure, one of the things that you have to do as chief risk officer is to create mechanisms so that risks that are being accepted and taken in different parts of the organization are not lost or hidden. The ones that hurt you most are the ones you didn't know about. So creating that transparency is a key part of the role, and that becomes part of the governance. Then, you must consider governance issues that depend on the size of the company. In our case, American General is one of the largest life insurance companies in the country. We had to have risk committees within each of our businesses. We had a corporate risk management committee at the corporate level and then mirror risk management committees in each of our businesses. There are many governance issues have to be surfaced from one level to another and that type of activity had to be sorted out?

When you think about risk, there are basically only three things you can do with it. You can either reject it, you can transfer it or you can accept it. We took the approach that we had no business accepting a risk unless we could do what we call the "three Ms" of risk management—measure it, monitor it and manage or control it in some fashion. So the key issue then becomes, what do you have to do in such a disparate set of risk to be able to do the three Ms? You must decide which ones your organization can hold for its own account in a cost-effective fashion and which ones should be transferred to another organization that can perhaps manage that risk better than your organization can and do it on a more economical basis.

In terms of measurement, the metrics that you might use will vary quite a bit, depending on the type of business, the line of business, the type of risk and so forth. There are many measures that I'm sure you're familiar with and some perhaps that you're not as familiar with. We found in going through this is that there isn't a single tool that applies easily to all of them, except perhaps the economic value at risk and present value of distributable earnings, which_seemed to cut across very easily. Value at risk (VAR) was not particularly useful for us because we have a tool that's developed primarily for short-term trading portfolios. Risk-adjusted return on capital (RAROC) is used a lot in the banking industry, but that didn't work well for us in the insurance business, particularly with the way we managed our business at American General. So in any event, we had to settle on ways in which we would go about measuring the risks and trying to do the three

Next, let's look at monitoring. The conclusion that we came to was that we had to have at least quarterly updates on the different risk exposures. This will vary by company and by type of business. In some cases, you would want it more frequently, but for a large part of our business, at least, quarterly monitoring of exposures would be adequate. You should consider periodic reporting against maximum limits that you establish. Part of your control structure is establishing the risk appetite and establishing how far you're willing to go either in counter-party risk or any other kind of exposure. You need processes that allow you to give management regular reports on how close you are to those limits and exposures.

This is one that probably doesn't get as much attention, but many of the risks that organizations face just don't lend themselves to quantification, and this is more so in the operational risk arena than others. You can't get away from using good management judgment, and this is where business savvy and a lot of other things come in particularly handy in terms of doing regular self-assessments of what risks and exposures the organization is facing. We had, as I mentioned, risk management committees in our divisions, and I had regular meetings with those committees to measure the pulse of things.

In terms of managing, the risk management committees should look at all new products and new ventures from a point of view of what risks are we taking on and are we being rewarded adequately for the risks that we are assuming? There are a lot of tools available. If the risk profile is not acceptable, if we need to transfer risk or reject it, they can modify the asset liability options. There are a lot of preventive activities that can be taken. In this category would fall things like business recovery plans or the compliance procedures in your legal and sales departments. Those types of activities fall into the category of preventive activities that can be taken to manage and control risk. Reinsurance is an old one. Everybody has done that. Other types of risk transfer options include hedging in capital markets or other devices. But all of those things are aimed at maximizing shareholder value. You're trying to maximize the risk-adjusted shareholder value, and you do that by keeping the risks that you can manage more effectively on your own versus letting somebody else do it.

Looking ahead in terms of what does the risk department, chief risk officer's area, do for the corporation? In some areas you have to prompt centralized risk analysis. We took the approach that we wanted to do at center only those things that most effectively could be done at center, and the rest of our energy was focused toward helping the business units make the risk/reward choices on their own.

We tried to establish enterprise-wide consistency in terms of approach, monitoring, measuring and so forth. Careful selection of local parameters becomes important because you don't want two different parts of the organization making assumptions that are fundamentally inconsistent with each other. If that happens, when you try to put the results together, they won't make a whole lot of sense. And then the recognition of contagion and diversification effects within the organization is

important. You don't want to be compounding the risks. If you have the ability to diversity risk, that's the cheapest way from an economic standpoint to handle it.

Creating transparency is important. The main focus in our case—and this will vary obviously from company to company—was to get local management of the risk by making the risk decisions as close to the customer as we could, yet create the enterprise view of risk. That was our way of trying to make sure that we were making the right risk decisions, but at the same time, having the capital and tax efficiencies. Risks come into an organization in different places, but where a risk comes in, where a piece of business is accepted, priced or underwritten, may not necessarily be the right place to keep it within the organization. If you have the right transparency, you can make a lot of those kinds of choices.

Now let's talk about monitoring concentration again. We talked about the compounding of risk and the contagion effects. A lot of that is fairly straightforward. Then, there is macro hedging. At the end of the day, when you've netted out all those exposures, what do you do with the residual risk with which the company is left? Is it acceptable, or do we need to do some macro hedging to then transfer that risk?

What kind of skills does a chief risk officer have to have? In my mind, the critical piece is a strong grasp of the company's strategy and tactics, which means that he or she has to be fairly familiar with the various parts of the organization and the strategy and be operating at a fairly high level within the organization. Chief risk officers, if they are six layers down in the management hierarchy, simply cannot be effective because they don't have the overview and the understanding of the company strategy. They have to be strategic thinkers. They have to go onto a program of organizational advocacy. In our case particularly, because this was a brand new function, I was on a pulpit sometimes, trying to advocate risk decisions throughout the organization. Certainly communication skills are absolutely essential. We've talked about business and market savvy. These are all essential tools if you're to be effective in an organizational advocacy-type role.

The previous speakers have touched on effectiveness with executive management, and I think there were comments from the audience as well. This is an area in which I think actuaries have to be able to communicate well and win the trust of executive management if they're to be effective in this kind of a role. Of course, you have to be very effective with the board of directors. Management will not send you in front of the board of directors unless they are quite confident that you can handle the board in a manner that will help the organization and help the board of directors. So, these are kind of the overall skills that are important in terms of organizational and governance activities.

Modeling and analytic skills may be fairly straightforward. We have the technical background in a number of areas, but there are some areas in which I think we have been somewhat lacking. Pricing and valuation experience, obviously, is

essential, given the role that we play.

Conceptual skills are a new arena. A lot of ground is being broken. The science in risk management is fairly well developed in some areas, such as market risk. It's less developed in credit risk and even less developed in operational risk. A lot of theoretical change is taking place in how you measure, monitor and manage these different areas of risk. So, conceptual skills become very important because no matter what you do, you'll be breaking some new ground somewhere.

Financial engineering expertise is an arena in which I think we probably should have been a lot farther along. I think this was a natural base for actuaries. Then, when you look at other countries—Britain, for example—actuaries have developed their financial engineering skills to a much greater extent than they have in this country. Over here we lost ground to the people who have Ph.Ds in finance. They have taken over that key role from us. Hopefully this is an area in which we_can make improvements and regain some of that ground.

Finally, you have to have an economist's mind-set. You can't be locked into the actuarial way of thinking. You have to be able to set the rules aside. If you were a man or woman from Mars and you came down and looked at this problem, how would you address it? What would you view as the vulnerabilities? You need to approach it from that standpoint.

In terms of risk-management skills, suddenly reinsurance experience becomes very handy because that is one of the most common tools used in the insurance industry, at least for managing the level of risk exposures.

Capital markets knowledge is becoming increasing meaningful because as we become more sophisticated in managing risk—managing other exposures, slicing and dicing our risk—we're having to turn more and more to capital markets instruments. We have to learn how to use those capital market instruments to hedge, offset and mitigate the risk that we are taking and the options that are embedded in all of our products. This is a complicated arena because a lot of capital markets math is based on risk neutralargitrage-free valuations. A lot of actuarial work tends to be projections and realistic assumptions and that type of thing, and those two don't necessarily produce the same results. This is an arena in which we have to figure out the right time to use one and the right time to use the other approach—they both have their own uses—and make the most of it.

We've already touched on analytical skills. Creativity is critical because this is, again, a relatively new field that will develop over the next several years. The practice standards are not thoroughly established, and I think there is plenty of opportunity for imagination and creativity here.

A sense of urgency is something that is absolutely important because events can move very, very fast, and I think that having a sense of urgency to go and tackle where the probabilities are, where the exposures are in the organization is an essential role for the CRO.

Crisis and response management is something to consider. When those events happen, no matter how much management and preventive activity you've taken on at the front end, you do have to think through what you will do when an event occurs. That's a critical part of it.

So what did we learn from having tried it? Implementing enterprise-wide risk management is a daunting task because of the breadth and diversity of risk that you're trying to deal with, if your role truly is enterprise-wide risk management. What happens is that people narrow down the scope of this, that or the other type of risk. Many organizations have focused only on financial risk or only on compliance risk. That's one of the things we found as we looked at different companies. But if your organization wants to take a comprehensive approach to it, it's a fairly complicated task.

Creating a risk-management culture is important because we have to change the mind-set throughout the whole organization. You have to get people to think in terms not just of profitability, but also of profitability and risk. Most of the time, risk management involves making choices between risk and reward. Sometimes it's a matter of saying, "Here's something we absolutely will not do because the tail risk, the downside, is just so bad that we can't stand it. We're not even going to touch it." If that is more than 5 percent or 10 percent of the type of things that you're looking at, then your organization probably has some serious problems. Most of the time, you should be dealing with situations in which you're trying to weigh risk against reward. That's something that has to happen throughout the organization. It's not something that can only be done by a chief risk officer or in a corporate risk management department. So, getting the risk management culture across the organization is important.

Overcoming fear and suspicion is part of the job. One of the first things that happens when you come in as a chief risk officer is that people think you're the risk police. You're the one who tells the chairman about all the bad things that could happen in your organization, and that's a tough thing to overcome. This is where building trust throughout the organization, getting people to realize that you aren't there to be their adversary, is important. You're there to help them do the right thing, do what's good for the organization and good for their division. That takes a certain degree of not just communication skills, but a level of personal skill to create those bonds throughout the organization. Broad organizational buy-ins are absolutely necessary to implement a program on a consistent basis throughout the company.

The key is empowerment and control. You have to empower people who are the closest to the customer to make some of those choices. The thing that we realized early on in our process was that if you make decisions too high up in the

organization, if you become risk-averse and force all these decisions up to the highest levels in the organization, you'll tend to make bad risk choices. On the other hand, if all the risk decisions are pushed down closest to the customer, you'll probably make better risk decisions.

But you'll find two kinds of problems—either the individuals making those risk choices will take too much risk or not enough risk. Sometimes that involved someone taking too much risk if they were going beyond their authority. But more often, what we found was that they were taking risk in the scope of their own organization and what they felt safe about within their world, not realizing that they're part of a much bigger organization, and the organization's capacity to absorb risk is much greater. Empowerment and control at the level that's closest to the customer is key, but then you must try to create the transparency that allows you to monitor the process overall.

Sooner or later, some trigger event will happen to bring issues of risk to the fore. You never want these things to happen, but when they do, you gain experience. You may say, "No, look, you should have been doing this." It becomes a tool that we can use.

This is probably the fourth forum in which I've delivered a talk on the role of chief risk officer. I was, in one of my earlier ones, looking for a way to summarize the role of a chief risk officer, and this is what I came up with. I was in a Chinese restaurant about a week before that presentation, and I found this in a Chinese fortune cookie: Use caution to enhance, not impede, progress. It's truly the way I feel about it, that to be effective in the role of a chief risk officer, you have to use caution to enhance progress, not impede it. The worst thing we can do is to fall into the trap of being viewed as risk police or approach the role in a defensive fashion because this goes back to the preconceived notions of people outside the actuarial field. People are already conditioned to expect us to act that way, and I think we have to overcome that handicap to function in a manner that truly enhances shareholder value rather than taking a defensive approach.

Chart 1

Relative importance of skills sought by employers varies by practices area....

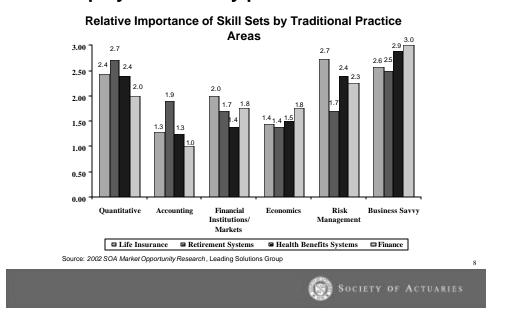
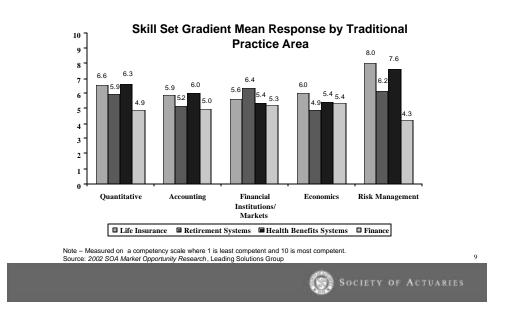
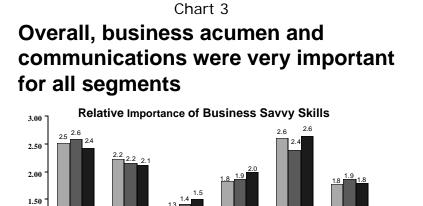


Chart 2

...as does the level of proficiency





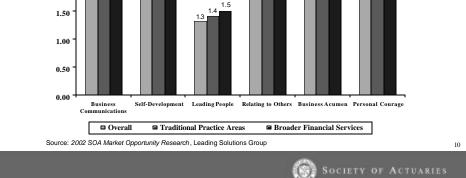


Chart 4

The SOA is also utilizing members' experience to define critical skills

