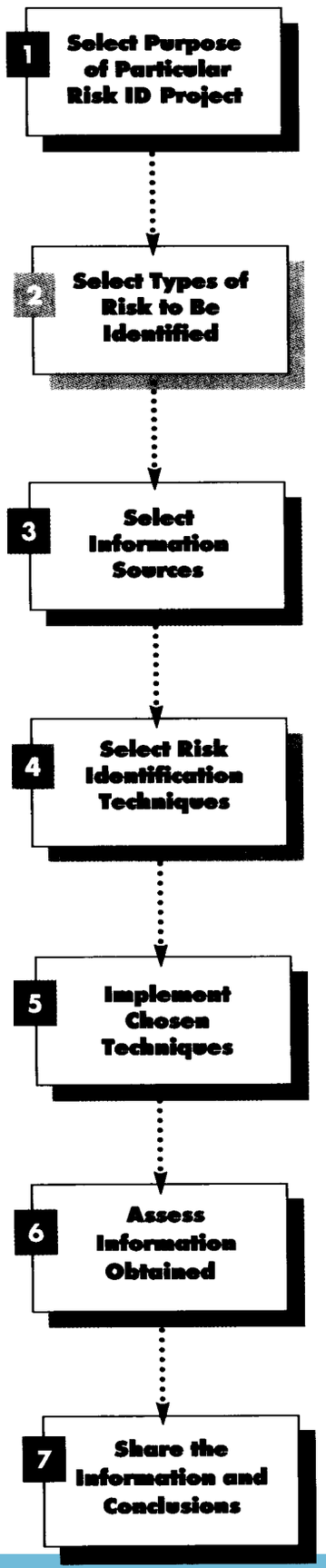


IMPROVING PERFORMANCE WITH

PROCESS ANALYSIS

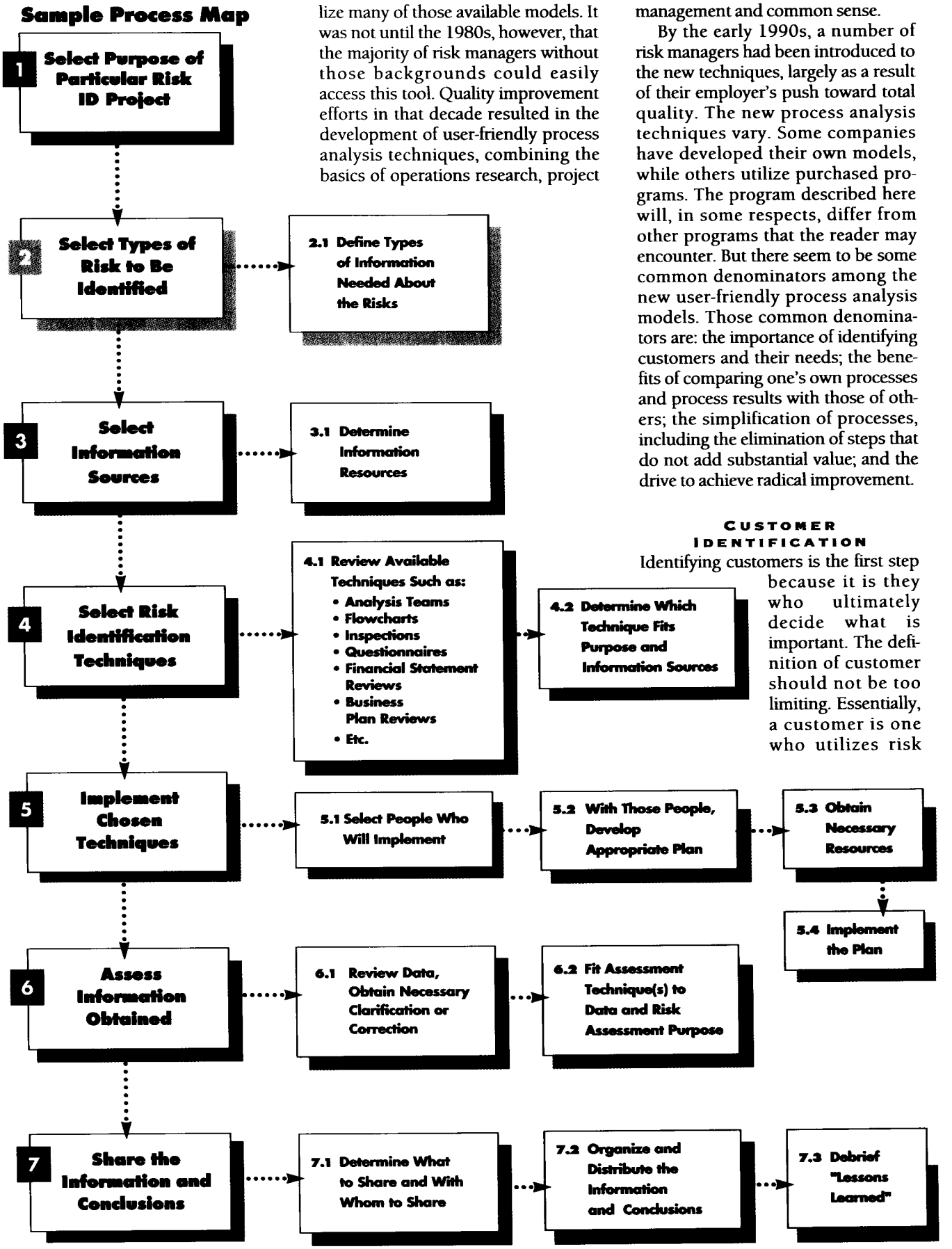
The Risk Management Roundtable participants are: Michael W. Bryant, Westinghouse Electric Corp.; Anne B. Chervony, BankAtlantic; Joseph J. Wojdula, Motorola Inc.; Glenn A. MacCorkle, NCR Corp.; Adelbert H. Seiple Jr., TRW Inc.; Richard T. Shillinger, Aluminum Company of America; Gerald L. Leighton, The Procter & Gamble Co.; Michael L. Smith, Ohio State University; Donald R. Boccardi, Westinghouse Electric Corp.; Mary Roth, RIMS; Peter K. Maier, Corning Inc.; Virginia V. Kolstad, First Bank System; and Paul T. Pope, TRW Inc.

INCREASED PRESsure on businesses to curb costs in these economically trying times has forced today's risk managers to solve a particularly vexing dilemma – how to improve the quality of risk management services while reducing the time required to produce those services. At first glance, improving quality and reducing required job time may appear mutually exclusive. However, in many cases, risk managers have been able to utilize process analysis to substantially improve quality and yield significant reductions in man hours.

Not only can process analysis be used to increase risk management effectiveness, it can also be used to facilitate measuring risk management program costs and results. The importance of this lies in the fact that the drive for excellence requires the organization to compare its costs, products and services with those of the best. For these comparisons – sometimes called benchmarking – to be reliable, they require an understanding of process similarities and differences.

Sophisticated (and complex) process analysis models have been available for decades. Risk managers whose backgrounds or education included operations research or major project management could uti-

This article is adapted from a larger paper that includes a case study of a simulated process analysis. For the complete paper or more information, please contact Mary Roth at RIMS, 205 East 42nd Street, New York, NY 10017. (The views expressed by the Risk Management Roundtable do not represent the official position of the Risk and Insurance Management Society Inc., or its affiliates.)



lize many of those available models. It was not until the 1980s, however, that the majority of risk managers without those backgrounds could easily access this tool. Quality improvement efforts in that decade resulted in the development of user-friendly process analysis techniques, combining the basics of operations research, project management and common sense.

By the early 1990s, a number of risk managers had been introduced to the new techniques, largely as a result of their employer's push toward total quality. The new process analysis techniques vary. Some companies have developed their own models, while others utilize purchased programs. The program described here will, in some respects, differ from other programs that the reader may encounter. But there seem to be some common denominators among the new user-friendly process analysis models. Those common denominators are: the importance of identifying customers and their needs; the benefits of comparing one's own processes and process results with those of others; the simplification of processes, including the elimination of steps that do not add substantial value; and the drive to achieve radical improvement.

CUSTOMER IDENTIFICATION

Identifying customers is the first step because it is they who ultimately decide what is important. The definition of customer should not be too limiting. Essentially, a customer is one who utilizes risk

management products or services. More specifically, a risk manager's customers may include his or her boss; corporate directors and officers; the corporation and its shareholders; the corporation's customers; each person in the corporation who needs risk management advice, support, or information; peers outside the corporation; and brokers and underwriters. Brokers and underwriters are included in the list because they frequently utilize a product (information) or service (explanation of that information) provided by the risk manager.

Once customers are identified, the next step is to determine their needs – what are the products and services required by the customers, and what attributes of those products and services are most important to the customer? Products and services are frequently called "deliverables." A few examples of risk management department deliverables are: financial security against the chance of unexpected incidents of damage, loss, or injury; information utilized by plant safety personnel to assess the effectiveness of their operation's safety program; documents needed to facilitate the company's provision of its deliverables to its customers (e.g., insurance certificates and surety bonds); consulting services that assist operations in reducing the probability of significant downtime; credits, in the form of loss recoveries, to business operations that have incurred insurable loss; and mechanisms for the effective financial treatment of retained risk.

Obviously, this list is not exhaustive. Risk managers ought to consider developing their own lists as an aid to identifying what they and their customers believe are the most important deliverables. Before beginning to analyze any particular process, the risk manager should attempt to find out what the customers value about the deliverables, and how well customers think the currently provided deliverables meet their needs.

PROCESS COMPARISON

Comparing one's own processes and process results with those of others requires three elements. First, each participating risk manager must know how his or her process is structured and how the process flows. Second, the risk manager must be able to distill this knowledge down to a relatively simple (but still relatively complete) description of the process. Third, there needs to be some comparability between each participating organization's way of describing its process (note that this does not mean that each participating organization must have a similar process). Process mapping is one technique for improving one's understanding of process structure and flow.

Once risk managers believe they understand the selected process well, they should consider comparing the process utilized in their operations with those utilized by other companies whom they believe are among the best in performing the analyzed task. This comparison of processes is a key component of benchmarking.

In Robert C. Camp's book, *Benchmarking: The Search for Industry Best Practices That Lead to Superior Performance*, David T. Kearns, chief executive officer, Xerox Corp., defines benchmarking as "the continuous process of measuring products, services, and practices against the toughest competitors or those companies recognized as industry leaders." The key elements in the foregoing definition, according to Mr. Camp, are that benchmarking is a continuous process – and must be so to be effective – and that measuring is an implicit function of benchmarking.

The measurement aspect can be accomplished by two methods. The first, according to Mr. Camp, is by comparing the internal and external practices so that "a statement of significant differences can be documented. This is a word statement measurement of the industry best practices that must be implemented to achieve superiority, although qualitative in nature. It describes the opportunity for change to best practices."

The other method of measurement is by means of quantifying the practices to show an analytical measurement of the gap between practices. In essence, this method quantifies the size of the opportunity. Mr. Camp adds that "while it is important and traditional to strive to obtain analytically derived benchmark metrics, it will become apparent that both [methods] must be pursued. Practices on which the metrics are based should be pursued first. Benchmarking is not just an investigation of the metrics of the external business function, but also an investigation to determine what practices are being used to ensure effectiveness – and eventually superiority – and which practices achieve the metrics."

Camp's use of the word "metric" denotes some quantitative measurement that allows the comparison of performance. Metrics can be dollar figures, units of production, time, or anything that is a numeric measure of performance. Metrics also includes ratios that compare performance.

The deliverables (products, services and practices) can be benchmarked; likewise, so can the processes that produce the deliverables. It may be worthwhile to compare property insurance rates among compa-

PROCESS MAPPING

Process mapping is one technique for improving a risk manager's understanding of process structure and flow, and for describing the structure and flow in a useful way. To map a process:

1. Consider the people who are key to the process – customers, suppliers, risk management staff, etc. Involve representatives of those key groups in the mapping project.
2. Draw a simple flowchart that shows the process' key activities. Generally, there will be seven or fewer of these key "top-level" activities. An example of a top-level flowchart would be: (See chart on page 47.)
3. Roughly estimate the time spent on each top-level activity. These estima tions provide clues about where to seek radical improvement.
4. Determine the important steps in each of the top-level activities. Include these steps in the block diagram – you now have an example of a process map. (See chart on page 48.)
5. Review the process map and identify opportunities for radical improvement.

nies, but it may be just as important to compare the property conservation, brokerage, market selection, and risk presentation processes that help influence those rates.

Compare the deliverable or process being benchmarked with those of organizations that do a superior job in the function, even if those organizations are dissimilar to one's own company. For example, Company A has substantially higher risk financing costs than Company B. But Company A's property conservation processes are superior (it just happens to have more volatile exposures than Company B). Company B cannot learn a lot from comparing its risk financing costs with Company A's risk financing costs. But Company B may learn a great deal by comparing its property conservation practices with Company A's practices. In that process, Company B may reduce its own costs.

In some cases it is advisable to compare processes with those of others who are not risk managers. The trick here is to find other operations that go through similar processes, even if their deliverables are dissimilar. For example, a traffic department may have superior processes for handling commercial documents; studying their process might give the risk manager insight into handling of insurance certificates. Or a training department might have processes containing elements that, incorporated into risk management department processes, could result in improved communications and/or increased technical skill levels.

Comparing risk financing costs may be more problematic than comparing such process metrics as cycle time, or percentage of variance from standard. Most metrics are influenced by factors beyond the manager's control. This is more true of risk financing costs than it is of many other measurable elements. But this fact does not justify the decision not to compare risk financing costs. Risk managers should develop and utilize metrics for making meaningful comparisons of risk financing. To argue that too many variables interact in too many ways to make cost comparisons meaningful may be merely an admission that one is not familiar enough with the processes or business environment to assess risk financing program performance.

There is little doubt that currently no model exists to allow for precise measurement of the impact of all the relevant variables on risk financing cost. Thus, few companies' risk financing metrics can be compared in a way that allows one risk financing program to be graded against another in a consistent, objective, quantitative manner.

SURVEY COMPARISONS

The Cost of Risk Survey, conducted jointly by RIMS and Tillinghast, and The Wyatt Company Directors and Officers Liability Survey each provide sufficient data so that the risk manager can categorize his or her company's risk profile adequately enough to allow at least rough comparison to exposure adjusted risk financing costs. ("Exposure" as used here includes all of the experience, risk, and political-economic elements that influence risk financing costs.) These rough comparisons may not be adequate for the purpose, and more sophisticated techniques may have to be brought into play to achieve solid industry group benchmarking. But these approximations can still be quite meaningful. To cite several examples:

According to the Wyatt survey, Soft Touch Manufacturing Inc.'s D&O premium is well above the third quartile for companies of Soft Touch's size, in its industry, and with its loss experience, limits and retention levels. Soft Touch's risk manager can argue that the survey variables are not fine enough to allow a true comparison of cost. All well and good, as long as Soft Touch's risk manager can articulate, if to no one other than himself what variables could plausibly explain Soft Touch's apparently high premiums and which of those plausible variables have interacted in what ways to produce the result. The risk manager may conclude that it is time for a closer look at how Soft Touch is marketing its D&O program; or, after an appropriate amount of peer research and soul-searching, it may become apparent that Soft Touch enjoys unusually wide coverage breadth that justifies its relatively high D&O costs.

In reading the Cost of Risk Survey, Hard Nose Protective Face Wear's risk manager learns to her horror that Hard Nose has higher claim adjustment expenses than other companies its size. The risk manager initially believes that this high cost is attributable to the fact that the survey claim adjustment expense data includes companies having substantially less products liability exposure than Hard Nose. Nonetheless, she contacts her peers at companies similar to Hard Nose. Nee Cap Sporting Goods, No Brainer Pugilistic Hardware, A. King Bac Free Weights, and Hard Nose compare costs. The survey shows that Hard Nose is paying more than its "peer group" companies. Hard Nose's risk manager arranges for the peer group to compare claim handling cost processes.

This comparison may result in each member of the group improving its claims handling. In any case, it will probably help Hard Nose's risk manager understand the reason for her company's costs. (It may turn out that Hard Nose's claim processes are of a much higher quality than those of its competitors.)

Hard Nose has utilized two levels of benchmarking. First, it utilized the Cost of Risk Survey to compare its program with a large group of companies. Then, it arranged for a detailed cost and process review with a relatively small peer group of companies. Peer group reviews are gaining in popularity among risk managers. Risk managers who utilize some form of peer group comparison believe that the data obtained from those reviews is more useful than industry-wide data because: peer group members' exposures are more similar than industry group exposures, and peer groups allow for more detailed comparisons of process, exposures and results.

But among some companies similar in exposure, much can be learned by comparing risk financing metrics.

PROCESS SIMPLIFICATION

Process analysis is described as a technique that could improve service quality and, at the same time, reduce the time required to produce services. These apparently contradictory results are achieved by simplifying processes so that steps are eliminated unless their value exceeds their cost.

It is obvious why eliminating process steps reduces process time. Less obvious is the fact that, frequently, reducing steps improves quality; this may occur because the eliminated steps made the deliverable overly complicated and less easy for the customers to use.; or perhaps the eliminated steps resulted in miscommunication, so the deliverable was not what the customer really wanted. Furthermore, eliminated steps that used up valuable man hours may have made on-time delivery difficult or impossible. Obtaining the deliverable when it is needed is a key quality component; something done well that arrives after it was needed is low quality.

The new user-friendly process analysis models encourage the establishment of very challenging improvement goals. This drive for radical improvement is based on two things. The first is the fact that the best tend to be far superior to the average. Searches for "significant" improvement (which can mean as little as 5 percent to 10 percent) ignore the probability that the best competitors are 50 percent to 1,000 percent better at the task in question. Second, when we look for good or significant improvement, we often attempt to achieve the improvement by working longer or by making a few adjustments to our systems. The result is that we have not stretched to find the possibilities for real excellence. Establishing radical goals forces us to regenerate our way of looking at the world, enabling us to achieve far more than we could before. RM

WHY USE PROCESS ANALYSIS?

While the new user-friendly process analysis techniques vary, four points common to their effective implementation are –

- **The importance of identifying customers and their needs.**
- **The benefits of comparing one's own processes and process results with those of others.**
- **The simplification of processes, including the elimination of steps that do not add substantial value.**
- **The drive to achieve radical improvement.**