Part

THE ROLE OF THE MANAGER: LEADERSHIP PRACTICES

- 12. Ethical problem-solving and decision-making
- 13. Power and politics
- 14. Leadership



Chapter

Ethical problem-solving and decision-making

Learning outcomes

After studying this chapter, you should be able to:

- **Explain** the nature of managerial problem-solving.
- **Identify** the five steps of the rational problem-solving process.
- Appreciate the value of ethics and morality in decision-making.
- **Describe** the strengths and weaknesses of different decision styles.
- **Utilise** quality management tools for problem-solving.
- **Apply** techniques to stimulate creativity and innovation.

The following vignette explores how a change in management approach combined with an ability to solve problems can improve services in a failing London Council.

Profile: Planned escape from chaos: Josephine Kwhali, leading the overhaul of Hackney children's services

When she arrived at Hackney council two years ago as head of the children's and families' service, Josephine Kwhali was shocked at what she found. 'Child protection files were stuffed in boxes and cupboards and nobody could tell me with any accuracy, which children were on the protection register', she says. 'About half those vulnerable children did not have an allocated social worker.'

Many staff were demoralised and management was generally poor or non-existent, says Kwhali. The service was fundamentally directionless.

The chaos surrounding child protection was just one example of the mess that Hackney's children's services had got itself into, resulting in a series of highly critical inspection reports, the placing of the east London authority on the government's 'special measures' list, and the imposition in 1999 of ministerial directions, forcing the borough to observe its statutory obligations.

The social services crisis was part of a wider collapse in Hackney, with its education standards under fire, the lowest council tax collection rate in London, political infighting among councillors, and a financial meltdown resulting in savage budget cuts.

Today, the borough still faces huge problems, but its children's services have staged a dramatic recovery. In her recent annual report, Denise Platt, chief inspector of the Social Services Inspectorate (SSI), praises the contribution of Kwhali and her colleagues in turning things round. Their work, she says, meant that Hackney was this year taken off the special measures regime, and the SSI team that visited the borough in the summer found 'real and positive improvement in children's services', more confident management and shared values among managers and staff.

'All [staff] were clear that the leadership of the head of children and families services had been a critical factor in the change', says Platt. 'Staff were purposeful and talked about being able to do the job from the moment they arrived at work, not clearing yesterday's backlog.'

Kwhali, who had held senior posts at the London boroughs of Lambeth, Hammersmith and Fulham, and Greenwich before joining Hackney, is reluctant to take the credit and insists that other factors contributed to the improvement in social services. These, she says, included the re-forming of the department, which had been split into various free-standing units with no overall director during a much-criticised council restructuring in the late 1990s.

'Just before I joined, Hackney had appointed a new social services director, the political instability on the council was being tackled and there was a new managing director', she says.

There was a recognition at the highest levels of the council that children's services needed to be turned around, although there have been complaints that this has been partly achieved by cuts to services for older people. Kwhali denies that these services were singled out, arguing that there was little left in children's services to cut and that the combined adult services had the largest share of the budget.

Of her role, she says: 'I was appointed with a clear agenda to sort out the mess and there was a lot of pressure because everyone knew we were in the "last chance saloon".' However, she knew by the end of her second week that dramatic improvements were

feasible because she 'wasn't faced with a workforce resistant to change'. While there was low morale, 'there were also many staff who had kept faith with Hackney and were passionate about delivering a good public service and were prepared to be part of a change'.

The first priority was ensuring that Hackney delivered on its statutory responsibilities, notably in respect of children on the child protection register and those looked after in care. 'There's no point doing lots of innovative work if you're not doing the basics right', Kwhali says. In this case, doing the basics meant a huge task of sorting through caseloads, reviewing cases and putting in place new systems and procedures, backed up with firm management monitoring.

By the time the SSI team reviewed Hackney's performance in the summer of 2002, there were rarely any unallocated cases of children looked after or on the protection register. 'All visits now take place in the statutory timeframe, and in one year we doubled the number of looked-after children for whom adoption was secured', says Kwhali.

Another improvement was the creation of specialist teams to address the needs of particular groups of children about whom there were serious concerns. But for Kwhali it was not enough to put in place proper management structures: it was also about winning 'hearts and minds'.

Source: Patrick McCurry in The Guardian 9 October 2002.

Discussion questions

- Why do you think Josephine Kwhali was able to implement changes when her predecessors could not?
- 2. How did Josephine Kwhali implement her decisions?

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Individual, managerial and organisational success all depend on making the right decisions at the right times.¹ However, decision-making is just one component of the problem-solving process. Unless a problem has been defined and its root causes identified, managers are unlikely to be able to make an appropriate decision about how to solve it. Effective managers, like Hackney's Josephine Kwhali, know how to gather and evaluate information that clarifies a problem. They know the value of generating more than one action alternative and weighing all the implications of a plan before deciding to implement it. In addition, they acknowledge the importance of following through. This chapter explains decision-making and problem-solving and offers some guidelines for eliminating barriers to effective problem-solving.

The steps for rational problem-solving

problem-solving The process of eliminating the discrepancy between actual and desired outcomes.

decision-making Selecting the best solution from among feasible alternatives. **Problem-solving** is the process of eliminating the discrepancy between actual and desired outcomes. Although, sometimes subconsciously, most people confront problems by first acknowledging that they exist. Next, the problem needs to be defined and analysed. Then alternative solutions need to be generated. **Decision-making** – selecting the best solution from among feasible alternatives – comes next. Finally, the solution needs to be implemented, which Europeans call 'taking' a decision. For optimal problem-solving, social scientists advocate the use of the rational problem-solving approach outlined in Exhibit 12-1.²



A problem exists whenever the actual situation is not what is needed or desired. For example, when a work project needs to be done by a certain deadline and information needed to complete the assignment has not been supplied, a problem exists.

Problem awareness

A major responsibility for all managers is to maintain a constant lookout for actual or potential problems. Managers do this by keeping channels of communication open, monitoring employees' current performance, and examining deviations from present plans as well as from past experience.³ Four situations usually alert managers to possible problems: When divers

dynamics of

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there is a deviation from past experience; when there is a deviation from a set plan; when other people communicate problems to the manager; and when competitors outperform the overall organisation.⁴ The Dynamics of Diversity box shows how Vitra try to keep ahead of the competition.

Hot desking; it's autumn, when thoughts turn to fashion. So just what will the modern office be wearing this season?

It was as if the dozen or so journalists had been invited to the Thunderbirds headquarters to meet Brains, only to find that he'd been cloned into an eerie, not-quite-matching pair. We had thought, quite reasonably, that we were in Basle, Switzerland, at the Frank Gehry-designed headquarters of Vitra, one of the world's most influential furniture manufacturers, for a press briefing. However, no. This was International Office Furniture Rescue. Moreover, it wasn't Brains at all. It was the Bouroullec brothers, the quizzical Bretons who are the hottest French design export since Philippe ('I can design a hotel in one day, zut-boff ker-ching!') Starck.

The Brains were here, after 18 months' wood-shedding, to reveal something called 'Joyn', an office furniture system featuring shower curtains, latticed plywood, fabric-covered desk dividers and dinky R2D2 filing cabinets on leads.

And there was a third Brain to consider: Mr Vitra, aka Rolf Fehlbaum – pared down, blackclad, smiling, preternaturally alert. As the trio sat in the conference room, patiently waiting for the audience to settle down, two unspoken questions hung in the air: can the Bouroullecs cut it; and has Fehlbaum, Europe's radical furniture savant, read the runes correctly?

It matters, big-time. Sales of designer office furniture are worth £830 million in Britain alone. In Vitra's case, we're talking serious kit, the kind of thing you find in venture capitalist board rooms: office chairs designed by Charles and Ray Eames or Alberto Meda at well over £1000 a pop. And new product launches by the company are closely watched in the industry – not least by Vitra's rivals. The contract market – where specifiers regularly buy furniture pieces in the hundreds – is, after all, where the money is.

Talent is the first requirement. Fehlbaum has it. He took over the family business in 1977. In 1986 he acquired the rights to manufacture classic Eames designs in the lucrative markets of Europe and the Middle East. He's built on that success by 'breaking' hot new designers dozens of times since then: 'There are a lot of designers who produce a couple of interesting projects but there are very few who keep on producing projects with the depth and originality they do. There are too many designers praised for good, but not great work. I believe the Bouroullecs have the seeds of greatness in them. They interrogate typologies. They really think about how people want to use products.'

In addition, what have the Bouroullecs come up with so far? Why are they 'great'? Five years ago it was Les Vases Combinatoires, Ronan's riff on ceramic containers that could be put together in myriad ways; two years later, he struck again with a modular kitchen for Cappellini that was about as minimally detailed as you can get. Interlocking, moulded brick shelving, Hole Chairs, felt loudspeakers, the skinnily proportioned Glide Sofa and, the star of the Design Museum show, the Lit Clos sleeping cabin, a weirdly screened gerbil-hutch for two on needle-thin legs.

The Joyn desk system, officially launched this Tuesday at the Orgatec exhibition in Cologne (the office furniture industry's equivalent of Cannes), sits on the same, strange cusp: these are products designed for mass-production, heavy marketing and profitability. And yet, these are

also products that seek to break hierarchies, democratise decision-making processes and promote teamwork.

The system is based on 8 m-long tables with slide-in space dividers and a central spine that houses electrical and computer junctions and allows accessories such as trays, lights and file-stands to be slotted in. It's extremely simple to manipulate and reflects Fehlbaum's view that in the truly dynamic office 'personal organisation is more important than hierarchy. The new office has to deal with creativity. Everything that's an obstruction to natural work is an obstruction to success.' The idea is that work teams can be 'created rapidly and make communication and collective intelligence the normal thing'.

However, have they got it right, or will Joyn's almost domestic appearance (the white desks are so clean-looking you could eat off them) prove too avant-garde for office workers used to divisive cubicles and open-plan wastelands?

'We wanted to know what makes industry real', says Erwan. 'We're trying to de-code things. This system allows you to break down cultural walls. We concentrated on ease of use to try to make people free. We don't promise that it's the 21st-century answer to everything – it's just that we tried to create the kind of buzz that will put some life into work.'

And Vitra into unknown territory. However, then, nobody said it was easy at International Office Furniture Rescue.

Source: Jay Merrick, The Independent, 19 October 2002, p. 66.

Discussion questions

- 1. Can you identify how Vitra makes its decisions?
- 2. Who do you think controls the decision-making process?

Being aware that problems exist is not always easy, however. People may be genuinely unaware of a problem's source or reluctant to acknowledge that a negative situation actually exists. The problem may appear threatening to them, they may fear reprisal from a supervisor for their share of the responsibility, or they may not want to be considered inept.

Establish trust When a problem involves others, they need to feel understood and accepted; they must have confidence that the problem can be resolved; they must trust management to see the problem as a learning experience and not as an excuse to punish someone.⁵ People need to feel secure enough to acknowledge that a problem exists and to acknowledge their own contributions to it.

Clarify objectives

'Cheshire Puss,' Alice began, 'would you tell me, please, which way I ought to walk from here?'

'That depends a good deal on where you want to get to,' said the Cat.

'I don't care where,' said Alice.

'Then it doesn't matter which way you walk,' said the Cat.⁶

objective Desired outcome that we want to achieve.

Unlike Alice in Wonderland, most of us have an **objective** or desired outcome that we want to achieve. If you do not know what your objectives are, it is difficult to know what your

problems are, let alone what to do about them. Therefore, objectives must be set and clarified before a current situation can be assessed.

Setting objectives serves four main purposes.⁷ First, it provides a clear, documented statement of what you intend to accomplish. Written objectives are a form of acknowledgement and a reminder of commitment. Second, setting objectives establishes a basis for measuring performance. Third, knowing what is expected and desired provides positive motivation to achieve goals. And fourth, knowing exactly where you are going is much more likely to get you there than trying many different solutions in a haphazard way.

It is a manager's responsibility to make sure that set objectives support overall organisational goals. To obtain commitment from employees, managers must define organisational objectives and point out how they support each employee's personal goals. Finally, the objectives for any particular person or group should mesh with the objectives of others who might be affected by them. One way to address these constraints is to conduct team goalsetting meetings so that all concerned parties can participate openly.

There is little motivational value in setting objectives that require nothing more than maintenance of present performance levels. On the other hand, very difficult objectives may appear unattainable and therefore be demoralising. While objectives should foster an improvement over present performance, they should also be clearly achievable.

Organisational decision-making

The decision-making process and what types of decisions are made are largely determined by the structure of the organisation. Does the decision-making rest mainly with top level management or can it be delegated to lower levels in the organisation? When we look at decision-making we need to look at the types of decisions that are made, who makes them and the organisational approaches to gathering information, evaluating alternative solutions and implementing the final decision.

Assess the current situation When evaluating the current situation, participants must focus on both the 'what' and the 'how' of performance from two viewpoints: that of the organisation and that of the people involved. The immediate need is to determine if goals are met by the current situation. Do actual conditions match desired ones? If not, what are the differences? Mismatches usually show up clearly, but sometimes an inadequate current situation is taken for granted because it is how things have been for so long. If the matching process reveals discrepancies, the next step is to determine why.

Identify problems Serious mistakes can be made if managers act before they accurately identify all the sources of a problem. To identify a problem accurately, it must be understood from all points of view.

The full determination of how a particular problem prevents people from accomplishing desired goals can be made only when all parties are free to participate in its identification without fear of being blamed or criticised. If problem-solving is perceived as a joint learning experience, people will be much more likely to contribute needed information than if they fear punishment for disclosing information that may indicate they have made mistakes.

Problem identification and solution are much easier in routine than non-routine situations. Routine problems are those that arise on a regular basis and can be solved through *programmed decisions* – standard responses based on procedures that have been effective in the past. One example of a programmed decision is a student's automatic probationary status when his or her grade point average sinks below a predetermined level. Another is the

reordering of supplies as soon as stock on hand falls below a certain quantity. Most routine problems are anticipated, which allows managers to plan in advance how to deal with them and sometimes to delegate problem-solving to their subordinates.

Non-routine problems are ones not anticipated by managers. They are unique. No standard responses to them exist. These types of problems require *non-programmed decisions* – innovative solutions tailored to fit specific dilemmas. The fuel blockades in 2000 was a nonroutine problem; if it had escalated it would have required new ways of distributing petrol and transporting goods and people. Catastrophes always pose non-routine problems. When Concorde crashed on take-off in Paris the remaining planes were grounded until their fuel tanks were reinforced. Stranded ticket holders, loss of custom, and idle pilots and flight crews were just some of the non-routine problems faced by decision-makers at many levels.

One way to be prepared for potential problems and to be able to quickly identify their cause is to thoroughly understand the process involved. A **flowchart**, or **process flow diagram**, is a pictorial representation of all the steps of a process. Flowcharts document a process and help demonstrate how the various steps relate to each other. See Exhibit 12-2 for a sample flowchart involving quality inspection of incoming parts.

The flowchart is widely used in problem identification. The people with the greatest amount of knowledge about the process meet to first draw a flowchart of what steps the process actually follows. Then they draw a flowchart of what steps the process should ideally follow. By comparing the two charts they find differences, because that is where the problems arise.⁸

Problem definition

If the problem is not defined clearly, any attempt at solving it will be doomed to fail because the parties involved will not really know what they are working on (as the saying goes, 'rubbish in equals rubbish out'). All the remaining steps will be distorted because they will be based on insufficient or erroneous information. Lack of information often inhibits the generation of adequate alternatives and exploration of potentially negative consequences.

All necessary information should be gathered so that all relevant factors can be analysed to determine the exact problem that must be solved. The goal is to determine the root causes of the problem. If instruction forms are constantly misinterpreted, for example, are the forms incomplete, or is the required information poorly supplied? Causes should not be assumed; instead, all plausible alternatives should be investigated before settling on the most probable cause(s).

Hasty assumptions can also result in symptoms being mistaken for sources of problems. When symptoms are eliminated, it is often mistakenly assumed that the problem has also been eliminated. This is like receiving medication from your doctor to control a skin rash, which is only a symptom that something is wrong. The medication clears the rash, but the actual cause of the problem is not identified until you and/or the doctor look for clues. When you discover that the onset of the rash coincided with the arrival of a new plant in your living room, you have identified the problem: an allergy to that plant.

Analyse problems Checking to make sure that the problem is defined accurately and analysed completely provides a safeguard against incorrect assumptions, treatment of symptoms only, and incomplete understanding. The way a problem is actually defined has a major impact on what alternatives are considered, what decision is reached, and how the action plan is implemented. Failure to define an identified problem accurately can impede consideration and eventual application of the best solution.

flowchart (process flow diagram) A pictorial representation of all the steps of a process.



Failure to thoroughly diagnose a problem can result from inadequate time and energy available to review all the possible causes and implications. Other times, underlying psychological reasons come into play, such as not wanting to know what the real problems are, fearing that we ourselves are to blame, being concerned that a close associate will be hurt, or anticipating that the problem will prove too big for us.

One technique for facilitating a thorough problem analysis is the cause-and-effect diagram.⁹ A *cause-and-effect diagram*, or fishbone chart, is constructed to represent the

relationship between some 'effect' and all possible 'causes' influencing it. As illustrated in Exhibit 12-3, the effect or problem is stated on the right side of the chart and the major influences or causes are listed to the left. Although a problem may have various sources, the major causes can usually be summarised under the four 'M' categories of *manpower, methods, machines* and *material.* Data can then be gathered and shared to determine the relative frequencies and magnitudes of contribution of the different potential causes.



Agree on problems to be solved If more than one problem has been identified and defined, the next step is to set priorities regarding which problem will be worked on first and which ones will be put aside temporarily or indefinitely. One criterion for rank ordering multiple problems is how much their solutions will contribute to desired objectives. The most important problems should be dealt with first, even if their solutions seem more difficult. One quality management tool that can help management do this is called 'pareto' analysis.

Pareto chart

A vertical bar graph that indicates which problems, or causes of problems, should be solved first. A **Pareto chart** is a vertical bar graph that indicates which problems, or causes of problems, should be solved first. To construct a Pareto chart, the problems to be compared and their rank order are determined by brainstorming and analysing existing data. Then a standard for comparison, such as annual cost or frequency of occurrence, and the time period to be studied are selected. After necessary data for each category have been

gathered, the frequency or cost of each category is compared to that for other categories. The categories are listed from left to right on the horizontal axis in order of decreasing frequency or cost.¹⁰ A Pareto chart of field service customer complaints is illustrated in Exhibit 12-4.

EXHIBIT 12-4 Pareto Chart: Field Service Customer Complaints (Rank Order by Frequency of Occurrence)



Decision-making

After information has been gathered and goals have been clarified, situations assessed, and problems identified, the next step is to develop a particular course of action that will either restore formerly acceptable conditions or improve the situation in a significant way. Since there is usually more than one way to solve a problem, it is critical to keep open to all possible solutions and arrive at several alternatives from which to choose.

<mark>criteria</mark> Statements of

objectives that need to be met for a problem to be solved. **Establish decision-making criteria** Decision-making **criteria** are statements of objectives that need to be met for a problem to be solved. Effective criteria should possess the following characteristics.

Specific, Measurable, and Achievable, Relevant, Timescaled (S.M.A.R.T.) 'I need to reduce scrap material waste by 10 per cent, avoid a reduction in product quality, and increase production by 5 per cent. This must be done in one month.' Is an example of a concise decision-making criteria statement. Decision-making criteria should be *specific:* 'I will increase productivity by 5 per cent', not just 'I want to increase productivity'. Second, they should be *measurable:* Saying you want to increase employee morale is not as good a criterion statement as saying that you will increase employee morale as indicated by a 4 per cent reduction in absenteeism over the next three months. Third, to gain commitment to meeting criteria, there should be *sufficient time*, resources, and expertise available to make them *achievable*. They must also be *relevant*, it is no good introducing a system of child care to increase staff morale, if none of the employees have children. They must also be *timescaled*, achieved within a time limit. This helps when measuring targets and also ensures that a problem does not linger on indefinitely.

Complementary The criteria must also complement one another. The achievement of one should not reduce the likelihood of achieving another. For example, you would not improve the quality and detail of your written reports at the expense of spending the necessary time with those who must interact with you.

Ethical Decision criteria should conform to what is considered morally right by society. Criteria should be legal, fair and observant of human rights. Organisations need to establish a commonly agreed upon set of ethical standards to guide decisions when individuals are confronted with conflicting obligations, cost-benefit trade-offs, and competing value choices. The following section on ethical decision-making expands on the many dilemmas of applying moral criteria.

Acceptable Even the best technical decision will not be workable if it is unacceptable to the parties involved. You may be convinced, for example, that the best solution for meeting a production deadline without increasing costs is to have the department work weekends for the next month without additional compensation. However, this is not a viable action plan because it will not be acceptable to those on whom its implementation depends. Negative reactions to changes can create more problems than are solved. Sensitivity to emotional factors, personal values and individual objectives is vital in choosing a successful action plan.

Develop action alternatives The value, acceptance and implementation of an action plan are enhanced by involving all affected parties in the generation and analysis of alternatives. Acceptance can be tested by soliciting feedback to determine if those involved understand the potential benefits and to assess their readiness to make the necessary commitment. As many solutions as possible should be generated to avoid picking a premature solution that does not meet all long-run criteria. Techniques to facilitate this step are provided in the following section on how problems can be solved more effectively.

Evaluate benefits and risks of alternatives It is important to look at all the long-run consequences of the alternatives being considered. This is sometimes overlooked because of our tendency to avoid spending extra time and energy and our fear of discovering negative consequences in preferred solutions.

Important criteria to consider in evaluating action alternatives are each alternative's *probability of success* and the associated *degree of risk* that negative consequences will occur. If the chance of failure is high and the related costs for an alternative are great, the benefits of an alternative may not justify its use. Risk can be personal as well as economic – just ask the person whose reputation is on the line or who is soon to undergo a performance review. The degree of risk can be separated into four categories: certainty, known risk, uncertainty, and turbulence.¹¹

certainty

Exists if the exact results of implementing a particular solution are known in advance.

known risk

Present when the probability that a given alternative will produce specific outcomes can be predicted. **Certainty** exists if the exact results of implementing a problem solution are known in advance. Certainty (of return) exists if you put your money in a savings account for one year, whereas it does not exist if you invest it in real estate or the stock market. Certainty is the exception rather than the rule in most managerial decision-making situations. Complete information and guaranteed outcomes are rare.

Known risk is present when the probability that a given alternative will produce specific outcomes can be predicted. For example, an executive may know that by taking a commercial airline flight tonight, he or she has a 99.5 per cent probability of arriving on time for a business meeting in London tomorrow morning. If the executive lives in Glasgow, he or she will also know for certain that if the last flight is missed, the meeting tomorrow will also be missed. Probabilities based on historical records or statistical analyses are sometimes assigned to risky alternatives. At other times, probabilities are simply estimated through managerial intuition.

uncertainty

Exists when decisionmakers are unable to assign any probabilities to the consequences associated with an alternative.

turbulence

Occurs when the environment is rapidly changing and decisionmakers are not even clear about relevant variables, available solution options, or potential consequences of decisions. **Uncertainty** exists when decision-makers are unable to assign any probabilities to the consequences associated with an alternative. Choices among uncertain alternatives are often based on intuition and hunches.

Turbulence occurs when the environment is rapidly changing and decision-makers are not even clear about relevant variables, available solution options, or potential consequences of decisions. In times of recession, economic reforms or military conflict, turbulence usually prevails. **Decide on a plan** As alternatives are evaluated according to these criteria, many will be clearly unsatisfactory and can be eliminated. Sometimes the evaluation will reveal that one alternative is decidedly superior to all others. At other times, none of the proposed action plans will be acceptable, signalling a need to develop additional alternatives. Most often, however, several alternatives will appear feasible, and the best one must be selected. Exhibit 12-5 illustrates a decision-making grid that summarises the above criteria for evaluating alternatives. Such a grid can help to visualise which alternative offers the maximum benefits with minimal risks and costs. The decision-making goal is to select the best solution alternative for solving the entire problem without creating any additional negative consequences for anyone else in the organisation.

EXHIBIT 12-5 Decision-Making Grid

ALTERNATIVES		CRITERIA				
	BENEFITS	PROBABILITY OF SUCCESS	COSTS	RISKS	ASSOCIATED CONSEQUENCES	TIMING
Alternative A						
Alternative B						
Alternative C						

RESEARCH FOCUS Rational versus bounded rationality perspective

Perfect rationality In a world of perfect rationality, all problems can be clearly defined, all information and alternatives are known, the consequences of implementing each alternative are certain, and the decision-maker is a completely rational being who is concerned only about economic gain. These conditions of *classical decision theory* allow for an optimal solution to every problem and provide the basics for ideal management decision-making.

The model of human behaviour called the economic man model, assumed the following:

- The decision-maker had access to perfect information concerning all aspects of the decision situation.
- The decision-maker could process all the relevant information when identifying and diagnosing problems.
- The decision-maker could identify all possible solutions to a problem and evaluate the outcomes of each alternative solution.
- Multiple goals of an organisation could be combined into a single, simple mathematical equation.

- A rational decision-maker would always select the alternative solution that would produce the maximum benefit to the organisation.
- All decision-makers process information in the same manner and make similar decisions.

The real world, however, is made up of real people with real problems, and it rarely conforms to these ideal conditions. Consequently, there are not many arguments in favour of the economic man approach, although most of the economic theories of human behaviour are based on these assumptions.

Bounded rationality Behavioural decision theory has questioned the classical assumptions and recognised the real-world limitations to obtaining and processing all relevant information that might optimise decision-making. Simon argues that administrators exhibit bounded rationality when they reach satisfactory rather than 'perfect' decisions. Bounded rationality is necessary in the face of constraints on time, money and intellectual resources.¹² While the goal of the decision model presented here is to optimise decision outcomes, **satisficing** – choosing the first satisfactory alternative that meets minimal requirements – probably describes the majority of daily managerial decision-making. Herbert Simon, a Nobel Prize winner, challenged early decision-making models of perfect rationality. The concept of bounded rationality implies that decisions are made under the following external and psychological constraints:

- Individuals do not have perfect information regarding the problem.
- Decision-makers are not aware of all feasible solutions.

Action plan implementation

• Even if all the information were available, they would probably not have the cognitive capacity to understand and remember it all.

The decision-maker's ability to analyse only a few things at a time is know as *cognitive limits of rationality*. This means that, contrary to the rational economic man approach, most decision-makers explore very few alternatives and make decisions on limited amounts of information.

A major implication of bounded rationality is the 'satisficing' by decision-makers rather than 'maximising'. 'Satisficing' means that decision-makers are establishing a minimum level of acceptability for a solution and then finding alternatives until one reaching the minimum level is found. When the first suitable alternative is found, the search for other alternatives comes to an end. This means that decision-makers using the bounded rationality approach limit their information to the most convenient and least expensive solutions. Unlike the rational approach that implies decision-makers are 'maximisers' who will search for the solution that will be of maximum benefit in solving the problem. Another critical implication of the bounded rationality approach is that the search for alternative solutions and the process of evaluating them is influenced by the decisionmaker's attitudes, values and cognitive processes. This means that personality and psychological implications have an impact in final decisions, as we will discuss later in this chapter.

satisficing

Choosing the first satisfactory alternative that meets minimal requirements.

A decision and action plan are of little value unless they are effectively implemented. How the action plan is to be accomplished connects the decision with reality. Implementation includes assigning tasks and responsibilities, and establishing an implementation schedule. Take a look at the Eye of Ethics box as to what happens when a government implements a decision in the foot-and-mouth crisis.

Faith and reason

ethics

True creativity is not the same as problem-solving. Now we have not one, but three inquiries into foot-and-mouth disease. But will any of them address the really awkward questions?

In the end, the government has decided upon not one inquiry into the outbreak of foot-andmouth, but three – one to look at its own handling of the epidemic, one to review the science and one to consider the future of farming and food. There will be plenty of questions for the three inquiries to ask. But will they overlook the most important?

Foot-and-mouth disease has indeed been a tragedy; but ought we to see it as a problem? Dorothy L. Sayers would have said no. In her book about God, *The Mind of the Maker*, which is quite as excellent as her detective novels, she argues that we ought to stop treating life as a series of problems, and instead attempt to deal with it creatively. Creativity, as she knows well from experience, is a quite different thing from problem-solving.

Detective novels work precisely because the 'problem' is artificially designed. It must be neatly, completely and always soluble. Once the story is over, there must be no loose ends: we can put the book away satisfied. We discover the answer, though, just because the author was careful to set the question so that we could solve it according to the rules. Real life is not like that.

We are treating foot-and-mouth disease, as we treat most social issues, as a problem. That, indeed, is why the scourge has turned into a disaster. We decided in advance what question to ask: how can we eradicate it? Politically, we have allowed ourselves to ask nothing else. We assumed, with no good reason, that there was a single and complete solution, and that when we found it we would be able to drop the 'problem' as casually as we can lay Sherlock Holmes aside when we get to the last page. We were wrong; yet we continue in the relentless pursuit of 'solutions' that only deepen the tragedy.

When someone sees a sick sheep they remember first that it is an animal, and ask, 'Can it be cured?' Mere problem-solvers assume that everything is there to be manipulated; the only constraint on action will be the limits of brute strength. They will ride roughshod over nature and law and custom alike. What does it matter if that flock belongs not to the state, but to this family, which has tended it for generations? If it must be commandeered and destroyed to 'solve the problem', then so be it.

For those who think in terms of problems, it is natural to reduce the complex richness of life to simplified abstractions; for these are easier to manipulate. In our society, that usually leads to questions of money. We know all about the effects of foot-andmouth: the millions lost to the tourist industry, the wealthy farmers sitting pretty with their vast payouts. It is much easier to ignore those awkward elements of genuine tragedy that do not fit easily with our predetermined view of the question. What of the families who have sacrificed themselves to months of lonely isolation and succeeded in keeping their flocks healthy, yet still had them destroyed? Or the experienced slaughtermen who have been reduced to despair by the brutal pointlessness of their commission? Why so little of them? If we attend to them, however, the 'problem' might become too complicated to solve.

Life does indeed throw up limited and solvable problems, and we must tackle them. But we should be worried when we catch ourselves thinking of the big issues simply as problems.

Source: The Independent 11 August 2001, p. 7.

Discussion questions

- 1. Should it have been the government's responsibility to solve the problem and how did it identify the solution for the mass slaughter of animals?
- 2. How does developing creativity differ from problem-solving?

Assign tasks and responsibilities It is important to clarify both verbally and in writing what each person involved will do to make the new action plan work. To avoid misunder-standings it is essential to specify who is to do what, by when and how.

Establish an implementation schedule To be implemented effectively, all necessary tasks need a specified time schedule for completion. One way to do this is to start at an end point (the date by which the objective should be completed) and work backward. Action implementation steps can be listed in priority order and assigned a reasonable length of time for completion, starting with the last step before the objective is accomplished.

Gantt chart

A graphic planning and control method that breaks down a project into separate tasks and estimates the time needed for their completion. One of the earliest scheduling techniques was developed by Harry Gantt in the early 1900s. A **Gantt chart** is a graphic planning and control method that breaks down a project into separate tasks and estimates the time needed for their completion. The chart has a space for planned starting and completion dates, and actual dates filled in as implementation occurs. A sample Gantt chart appears in Exhibit 12-6.

Gantt charts help to make certain that all implementation tasks are considered in relationship to each other and appropriate people are assigned to each task. They provide checkpoints for all tasks to ensure that they are finished on time. Gantt charts are developed by defining goals and setting completion dates, then bracketing time blocks based on the time required and completion date of each task.

Once an action plan is implemented managers often move on to another task. It is of major importance, however, to follow through to be sure that the solution is working effectively and that no additional problems have been created. Follow-through is the final stage of the problem-solving process.

Follow-through

Following-through entails the development and maintenance of positive attitudes in everyone involved in the implementation process. There are several guidelines to help establish the positive climate necessary for the implementation steps which follow:

- Visualise yourself in the position of those doing the implementing so that you understand their feelings and perspectives.
- Establish sincere respect and concern.
- Make sure necessary resources are available.
- With this kind of positive climate set up, there are several sequential steps in the followthrough process. They include establishing the criteria for measuring success, monitoring the results obtained, and taking corrective action when necessary.

Establish criteria for measuring success Unless the circumstances have changed, the criteria for measuring problem-solving success are the time, quality and quantity goals already developed in the action-planning stage. These criteria serve as *benchmarks* for measuring and comparing the actual results.

EXHIBIT 12-6 Sample Gantt Chart

Activity description	Dec 1992	Jan 1993	Feb 1993	Mar 1993	Apr 1993	May
(responsibility)	7 14 21 28	4 11 18 25	1 8 15 22	1 8 15 22 29	5 12 19 26	3 10
Process planning, routing, and scheduling (Chuck Teplitz: Project Manager)						
Materials procurement (David Burt: Procurement)						
Parts fabrication (Don Helmich: Manufacturing)						
Part No. 1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
Subassemblies						
A						
В						
C						
D						
E						
Final assembly (Pam Schwerin: Assembly)						

Source: L. W. Rue and L. L. Byars, Management Skills and Applications, 6th edn, Homewood, IL, Richard D. Irwin, 1992, p. 210. Adapted from Elwood S. Buffa, Modern Production Management, 4th edn, New York, John Wiley & Sons, Inc., 1973, p. 576.

Monitor the results The data on the results can be compared with the established criteria. If the new performance meets the criteria, no further action is necessary other than continued monitoring. If the new results do not measure up, the next step is to determine why. Each implementation step may alter the problem situation in unanticipated ways.

Take corrective action The problem-solving process is a *closed-loop system*. If performance fails to match the success criteria, the problem needs to be identified by again applying the problem-solving process. For any new corrective action plan new measures and schedules need to be determined and new data need to be gathered and tested against the criteria.

Ethical decision-making

A large majority of managers agree that unethical practices occur in business, and a substantial portion (about 65 per cent) report that they have been pressured to compromise their own ethical standards when making organisational decisions.¹³ Some of the underlying causes for individuals and organisations making poor choices when considering ethical issues are:¹⁴

- Individuals and/or organisations are sometimes immature.
- Economic self-interest is overwhelming.
- Special circumstances outweigh ethical concerns.
- Lack of education in the areas of morality and ethics.
- Potential rewards outweigh possible punishments for unethical behaviour.
- The culture or mindset is that 'All's fair in love, war, and business'.
- There is organisational pressure on individuals to commit unethical acts.

ethics

The discipline dealing with what is good and bad and with moral duty and obligations.

ethical behaviour Behaviour that conforms to accepted standards of conduct.

ethical reasoning

The process of sorting out the principles that help determine what is ethical when faced with an ethical dilemma.

ethical dilemma

A situation or problem facing an individual that involves complex and often conflicting principles of ethical behaviour. **Ethics** is the discipline dealing with what is good and bad and with moral duty and obligations. **Ethical behaviour** is that which conforms to accepted standards of conduct. **Ethical reasoning** involves sorting out the principles that help determine what is ethical when faced with an ethical dilemma. An **ethical dilemma** is a situation or problem facing an individual that involves complex and often conflicting principles of ethical behaviour. A classic example of an ethical dilemma would be the submarine commander who has to decide whether to stay afloat to save a downed pilot or to submerge immediately to avoid enemy aircraft. In business, ethical dilemmas often arise when managers face conflicting values. For example, a salesperson might face the dilemma of telling the truth about a product and thus losing a sale and his or her commission.

To prevent these ethical dilemmas, organisational decision-makers need to prioritise all competing values and standards of behaviour. A commonly agreed upon set of ethical standards can then be developed to guide decisions when conflicting obligations, cost-benefit trade-offs, and competing value choices are present.¹⁵ When thinking through particular dilemmas, the following questions can sharpen ethical sensitivity and moral awareness:¹⁶

- Does this decision or action meet the highest societal standards about how people should interact with each other?
- Does this decision or action agree with my religious teachings and beliefs (or with my personal principles and sense of responsibility)?
- How will I feel about myself if I do this?
- Do we (or I) have a rule or policy for cases like this?
- Would I want everyone to make the same decision and take the same action if faced with these same circumstances?
- What are my true motives for considering this action?

Public justification criteria One dilemma in determining ethical criteria concerns differences of opinion regarding what behaviours are appropriate. The rule of thumb in many business cultures is whether you would feel proud about your behaviour if every detail was published in the newspaper the next day. Specific questions to ask yourself when contemplating an action using *public justification criteria* are:¹⁷

- How would I feel (or how will I feel) if (or when) this action becomes public knowledge?
- Will I be able to explain adequately to others why I have taken this action?
- Would others feel that my action or decision is ethical or moral?

This test does not eliminate ethical dilemmas between subcultures or different countries, however, because there are 'readers' with very different values. An international example concerning different expectations about bribery is given in the World Watch box.

Corruption in foreign aid

world watcl

The United States hoped that with the passage of the Foreign Corrupt Practices Act in 1977, other countries would follow suit. None have, however, which places American companies at a major disadvantage when operating in foreign countries with different views toward ethics. It takes only a casual vacation trip to Southeast Asia to see hundreds of copies of American products, some even with authentic-looking US company logos on them. In this part of the world it is commonplace for foreign companies to have to pay bribes to be able to conduct business, but even some westernised countries such as Germany permit legal tax deductions for bribes to win foreign business deals. How can American companies compete in such an environment?

However, the bribes and corrupt practices are not limited to private business alone; official US government aid to foreign countries for infrastructure development projects (road and water plant construction, communications projects, etc.) has been diverted for non-targeted uses. In a recent study, the World Bank received some shocking news – 40 per cent of overseas firms (including some US firms abroad) admitted to using bribery to win World Bank-sponsored projects.

A new Act is before Congress to combat the misuse of official funds from the United States – the Fair Competition in Foreign Commerce Act. The aim of this Act is twofold. First, it will block US Treasury funds from going to a country that does not have a third-party monitor in place. This action will require independent monitors to oversee the bidding on projects and disbursement of monies. Secondly, it will require recipient countries to establish their own anti-corruption programmes, including the use of third-party monitors.

While the aim of the Fair Competition in Foreign Commerce Act is twofold, so are the intended outcomes. This act will require countries to operate on a higher ethical level, eliminating bribery and the diverting of funds for non-specified uses (especially since these are US government funds). Secondly, it should place US companies in a better position to compete with foreign firms when bidding on development contracts.

Source: Adapted from James Srodes (2000) 'Curbs on Foreign Bribery – and Foreign aid', World Trade, Irvine, February 2000, p. 12.

Discussion questions

- 1. Should companies be able to use bribes to win business in countries where the practice is accepted?
- 2. If it is acceptable to use bribes overseas, would it be acceptable to use bribes in the home country?

Values as benchmarks Since neither the home nor host country values are absolute and nor do they hold for both countries, some type of transitional, or compromise, criteria need to be established which satisfy all parties concerned with the interactions. Nevertheless,

there are some moral values which might be so important to a party that they should never be compromised. These are core values or *absolute values*, like those established by the United Nations regarding basic human rights. *Compatible values* are statements of desirable ways of behaving that support absolute values. One example is a credo statement of a company that states how members should behave to live up to the company's absolute values. *Transitional values* are those which bend somewhat from absolute and compatible values to be more compatible with the different values of another culture. For example, the limits established for gift-giving in the United Kingdom might be less than those allowed for Japan where the custom is to be more extravagant. These are values in tension which may or may not endure depending on the consequences. Finally, there are *intolerable values* which are so opposed to our core values that no interaction with the people holding them is possible. Countries allowing slave labour, or dangerous procedures with high death rates, would not be viable business partners for a company in a country where human rights are seen as important.¹⁸



Source: The San Diego Union-Tribune, 14 August 1999, p. C–4. Copyright 1999 G. B. Trudeau. Reprinted with permission of Universal Press Syndicate, Inc. All rights reserved.

Applying moral frameworks to ethical decisions Competing ethical criteria can also create ethical dilemmas within the same culture. Take the dilemma faced by John Higgins in the following situation.

John Higgins is director of research for a large company in the electronics industry. He recently promoted Mary Jones to head the design team charged with developing a critical component for a new radar system. He evaluated Mary as having superior knowledge of the technical elements in the project. However, he had begun to hear that the members of the all-male team were complaining about a woman leading them. There was evidence that some team members were subtly sabotaging the project. John knew it was fair to give Mary this job based on her merits, but he also knew that the successful and quick completion of the project was essential both for the company's success and his own reputation. He wondered if he should remove Mary as team leader.¹⁹

John Higgins' problem is typical of the complex decisions managers face much of the time. These problems can be viewed from different points of view, including the economic, legal and moral frameworks.²⁰ A strictly *economic* framing of this problem would consider what is most efficient and effective in terms of minimising costs and maximising efficiency and profits. From this point of view Higgins would probably opt to remove Mary Jones as team leader. The *legal* view is concerned with whether or not a given act violates the law.

Using a legal framework Higgins would ask such questions as: 'Would removing Mary be illegal because of gender discrimination?' and 'Does management have the legal right to assign duties?' From this viewpoint Higgins may need legal advice in making his decision. Viewing this problem from a *moral* framework raises a different set of questions. Two basic ones are: 'Would such a move be right?' and 'Would it be fair and just?' A decision might be both economically wise and legal and still be immoral.

Some people believe that moral considerations apply to their personal lives but not to their business decisions. Those with this viewpoint believe that economic and legal considerations are the only relevant basis for making sound business decisions. What is most profitable overrides moral considerations, assuming legality. This does not mean such people believe business is an immoral activity. Rather they would see it as amoral, which means business runs according to its own rules. They assume that laws provide the necessary rules for conducting business, so the relevant questions are: Is the behaviour profitable, and is it legal? If John Higgins held this amoral view, he would probably replace Mary. However, he might believe that moral issues are relevant for work as well as for personal behaviour. Managers face difficult decisions when they must balance moral considerations and organisational goals.

Morality

morality A set of principles defining right and wrong behaviours.

behaviours. A behaviour is considered moral if it conforms to a standard of right behaviour.²¹ The concept of ethics is closely related to morality, and the terms *moral* and *ethical* are frequently used synonymously.

What then is a moral viewpoint? **Morality** is a set of principles defining right and wrong

Some educators say ethics cannot be taught.²² Their point, partially, is that people may be taught ethical behaviour, but that is no guarantee they will behave ethically. While this is true, the starting point is to teach people to recognise the ethical dimensions of a problem and to reason with ethical principles to decide on an ethical solution in a particular situation. A framework for applying moral principles to ethical dilemmas is presented below.

Moral principles

When individuals are confronted with ethical dilemmas – situations that involve conflicting or competing moral interests – it is helpful to have guiding principles for reasoning through the dilemma. Three major sets of moral principles are utilitarianism, rights and justice.

utilitarianism

Acting in such a way that the greatest good is achieved for the greatest number.

social good

Positive decision results such as happiness, benefit or least harm.

utility

The economic benefits realised in transactions.

Utilitarianism Utilitarianism means to act in such a way that the greatest good is achieved for the greatest number.²³ To use utilitarianism for reasoning through an ethical dilemma, begin by identifying alternative courses of action.²⁴ Then determine the benefits and harm resulting from each alternative for all relevant stakeholders that would be affected by the behaviour resulting from a decision being made. Next, select the alternative that encompasses the most benefits and least harm for the most stakeholders. This principle is similar to cost-benefit analysis, which is commonly used in business decision-making. Utilitarianism guides the decision-maker to choose the alternative that produces the greatest net social good when all the stakeholders are considered.

In the context of a moral decision, **social good** is defined in general terms such as happiness, benefit, or least harm.²⁵ The broad nature of this definition sometimes makes application of the concept difficult, and people may differ in their assessments. It is easier to use the economics term, **utility**, but it has a narrower meaning, referring to only the economic benefits realised in

transactions. It is much more difficult to measure happiness, benefit or good. The greater the number of stakeholders affected by a decision, the more difficult such measurement is.

Another weakness of utilitarianism is its focus on outcomes and not on the means for achieving the ends. If utilitarianism is the only principle applied, some courses of action may be suggested that conflict with other ethical principles such as rights and justice. The Higgins-Jones case exemplifies this point. Higgins might reason that he, the other employees, and the company would be best served if the conflict surrounding Mary Jones was eliminated by removing her. However, such a decision would appear to violate Jones's rights, and many would question the fairness or justice of such a decision.

In spite of these limitations, the utilitarian principle can be useful. Its main value is that it helps guide decision-makers to act in ways that lead to the greatest social good. Appropriate application of utilitarianism requires considering the impact of decisions on all stakeholders and reaching decisions that benefit the largest number. Questions to ask when applying utilitarianism might include:²⁶

- What will be the short- and long-term consequences of this action?
- Who will benefit from this course of action?
- Who will be hurt?
- How will this action create good and prevent harm?

Rights A second philosophic approach to reasoning about ethical dilemmas focuses on the rights of individuals. This approach is grounded in the work of Immanual Kant, an 18th century philosopher who believed that each individual has a right to be treated with dignity and respect and as a free and equal person. A **right** is a justified claim or entitlement that an individual can make to behave or to have others behave toward him or her in a certain way.²⁷ The justification for such a claim is based on a standard accepted by a society. Sometimes these rights are explicitly stated. The Declaration of Independence identifies life, liberty and the pursuit of happiness as 'unalienable rights'. The UK's new Human Rights Act sets forth the rights of individuals. Interpretations of these specific rights are leading to many legal challenges and socially accepted moral rights.

Legal rights are codified in law, whereas *moral rights* are justified by society's generally accepted moral standards. An important basis for moral rights is Kant's principle that humanity must always be treated as an end, not merely as a means.²⁸ This implies that treating another as a means is to use that person for one's own gain. Treating the individual as an end implies respect by allowing the person to choose for herself or himself in order to satisfy personal needs and goals.

Rights impose corresponding duties. These duties may either be to refrain from certain behaviour or to act out certain behaviour. For example, an individual's right to privacy imposes on others the duty to refrain from violating that privacy. Kant's notion that each individual should be treated with respect suggests that each individual has a corresponding duty to treat others with respect. If society accepts that each individual has a right to education or medical care, there are corresponding duties to provide them for those who cannot provide for themselves.

The rights approach suggests that actions that violate the rights of individuals are wrong. However, individual rights sometimes conflict. For example, the right to associate freely with whomever one wants may conflict with the right not to be discriminated against. For example, should a private club be able to determine that only men can be members? In such cases the decision-maker needs to determine which right is more important for sustaining human dignity. Is it free association or equality?²⁹

right

A justified claim or entitlement that an individual can make to behave or to have others behave toward him or her in a certain way.

The rights approach to ethical dilemmas indicates that it is morally wrong to interfere with the moral rights of an individual. However, consideration of individual rights alone is insufficient for ethical decision-making because social costs must also be considered. Individual rights should not be achieved at an unreasonable cost to others in the society. The difficulty of defining, measuring and balancing these rights sometimes makes specific ethical decisions difficult. Both individual rights and the common good must be considered. Questions to ask when using the rights approach to solve ethical dilemmas include:³⁰

- Would this action infringe or impinge on the moral rights or dignity of others?
- Would this action allow others freedom of choice in this matter?
- Would this action involve deceiving others in any way?

Justice Justice has been connected with ethics and morality more than any idea in western civilisation.³¹ **Justice** is fairness. It means giving each person what he or she deserves.³² Conflicts often develop when people disagree over how benefits and burdens should be justly distributed. The challenge is to determine morally what each person or group justly deserves.³²

One widely accepted principle that helps reason about such issues was stated by Aristotle over 2000 years ago. He postulated that equals should be treated equally and unequals unequally. Today, that principle is interpreted as meaning that 'individuals should be treated the same, unless they differ in ways that are relevant to the situation in which they are involved'.³³ For example, two people of different gender or race who perform equally should be compensated equally. However, two people who perform and contribute differently should be paid differently, even if they are of the same gender or race. Differences based on such criteria as contribution, need and what one deserves, are sometimes used to justify unequal treatment. For example, it is widely accepted that it is just for the government to treat poor people differently than those who are wealthy. However, many would agree that it is not just, or fair, to treat Mary Jones differently than her male colleagues only because of gender.

There are different types of justice.³⁴ The kind we have been talking about so far is **distributive justice**, which refers to the fair distribution of benefits and burdens across a group or society. A second kind of justice is **retributive justice**, which is the fairness of blame or punishment for wrongdoers. For example, most would say that firing an employee for making a relatively small mistake the first time would not be fair. On the other hand, if that employee had been adequately trained and had made a similar mistake before, and if the mistake was relatively expensive, dismissal might be just.

Compensatory justice is concerned with the fairness of compensation awarded to those who have been injured. For example, an employee who is sacked illegally is entitled to compensation for having been wronged. The extent of a compensation that is just, depends on such factors as how long the employee goes without getting work, how long the employee had been with the employer, and how much hardship the illegal sacking caused the employee.

A key question to ask when making moral decisions is, Am I treating all people equally, and if not, is such action justified? In business and other organisations people are often treated differently in terms of their pay, job responsibilities and authority. If these differences are based on morally acceptable criteria, such as performance or experience, such unequal treatment is considered just. Differences of treatment based on such things as race, gender, religion or age are not considered just in the UK. Morally acceptable criteria, however, are different in different countries.

Questions to apply when deciding how to be just include:³⁵

justice

Fairness in giving each person what he or she deserves.

distributive justice

The fair distribution of benefits and burdens across a group or society.

retributive justice The fairness of blame or punishment for wrongdoers.

compensatory justice The fairness of compensation awarded to those who have been injured.

- Would I feel that this action was just (ethical or fair) if I were on the other side of the decision?
- How would I feel if this action were done to me or to someone close to me?
- Would this action or decision distribute benefits justly?
- Would it distribute hardships or burdens justly?

Cultural differences will make a difference in what is considered just, which can cause ethical dilemmas in international business transactions like those previously described in the World Watch box. The issue of bribery, for example, is one of the toughest to resolve in the international context. It regularly occurs in government as well as business even though it violates all the economic, legal and moral frameworks just discussed. The free market system is the best in the world for promoting efficient productivity, but it only works if transactions are based solely on price and quality considerations. No country in the world has laws that sanction bribery, so it is universally illegal. Furthermore, it violates the moral principles of justice (it is not fair), rights (those who produce the best quality with the lowest price are not necessarily rewarded), and utilitarianism (the greatest net social good for all stakeholders is not obtained).³⁶

As we have seen, however, not all issues can be unequivocally solved by applying previously agreed upon standards of conduct, because such agreement is impossible. In such situations, the best that one can do is to refer to personal intuition and insight. Some questions to ask yourself when dealing with these ambiguous ethical dilemmas are:³⁷

- Have I searched for all alternatives? Are there other ways to look at this situation? Have I considered all points of view?
- Even if I can rationalise this decision or action, and even if I could defend it publicly, does my inner sense tell me this is right?
- What does my intuition tell me is the ethical thing to do in this situation? Have I listened to my inner voice?

Individual differences in decision styles³⁸

Individuals do not always follow ethical guidelines or the rational problem-solving process just described. Even when they do, there are variances due to individual informationprocessing habits. Some differences involve satisficing versus optimising preferences. Others are determined by the amount of information people prefer and the criteria they focus on when making decisions.

decision styles Learned habits for processing decisionmaking information. **Decision styles** refer to our learned habits for processing decision-making information. Whether one style is 'better' than another depends on the particular situation in which it is used. There are two primary ways that people differ in their decision-making habits: (1) in the amount of information they use; and (2) in the number of alternatives they develop to potentially solve a problem.

Amount and focus of information processing

Some people use a great deal of information in generating and evaluating alternatives, while others use very little. When faced with a problem, a *satisficer* uses just enough information to arrive at a feasible solution. The satisficer knows that more information about the problem might be available but decides that it is not worth the additional effort to obtain it.

A *maximiser*, on the other hand, continues to gather information until nothing new can be learned about the problem. A maximiser knows that a workable solution might be reached with less information but decides that important aspects of the problem might not be recognised unless all available information is considered.

Both methods are valuable in appropriate situations. For example, the satisficer has an advantage when time is important, whereas the maximiser has an advantage when problems are complicated and there is little time pressure.

Solution focus refers to the number of alternatives that a person develops for dealing with a problem. *Unifocus* people are committed to one dominate criterion and consequently favour a single solution to a problem. *Multifocus* people, on the other hand, apply several criteria and generate several solutions to a problem. The unifocus approach has an advantage when efficiency is important, when it is possible to adopt only one solution, or when rules and regulations narrowly limit the range of choices. The multifocus approach has an advantage when there is a need to find new ways of doing things or it is important to 'cover all the bases'.

The five dominant decision styles

From these differences in amount of information used and solution focus, five fundamentally different decision styles emerge. Exhibit 12-7 illustrates the relationships among the five decision styles.



Decisive style Decisive persons use just enough information to reach one workable solution. Decisives are fast thinking, action-orientated people who place high importance on efficiency, promptness and reliability. They usually stick to one course of action for dealing with a particular problem.

Flexible style People with this style also use a minimal amount of information, but they are multifocused and so produce several solutions for a problem. Like decisives, flexibles are action orientated, but they place greater importance on adaptability than on efficiency. They like to keep their options open.

Hierarchic style People with the hierarchic style analyse a large amount of information thoroughly to develop a single, best solution to a problem. They place great emphasis on logic and quality. Hierarchical organisations tend to be slow to make decisions the first time they encounter a particular problem, but they speed up substantially after they develop a method for handling that type of problem.

Integrative style People with this style utilise a very large amount of information to produce multiple solutions to problems. Integrative people value exploration, experimentation and creativity. They look at problems from many points of view and see numerous options for dealing with a single problem. Consequently, they sometimes have difficulty deciding on only one solution, which makes them appear indecisive. To counter this tendency, integrative people sometimes try to implement several courses of action simultaneously.

Systemic style This two-stage decision style combines both integrative and hierarchic patterns. A person using the systemic style initially approaches a problem in the integrative way, viewing it from many points of view and exploring multiple solutions. After examining many options, however, the person becomes more hierarchic, subjecting various alternatives to a rigorous analysis that ends with a clearly prioritised set of solutions. The systemic person usually develops a very broad understanding of a problem. In many cases, systemic people examine multiple problems simultaneously to understand the broader implications of situations. Because of the thoroughness of their analyses, systemic people tend to be slow decision-makers.

Backup styles

Although most people have a clear predisposition toward one dominant decision style, many shift to a different 'backup' style occasionally. The shift between dominant and backup styles is related to how much pressure a person experiences when making decisions.

Under the pressure of tight deadlines, high risk, and significant consequences, people tend to shift to the less complex decisive or flexible styles, which are easier and faster to use. These styles are also frequently used under low pressure if there is not enough information to employ a more complex style. Under moderate pressure, people tend to use the more complex systemic, integrative or hierarchic styles because there is a lot of information available and sufficient time to analyse it in depth.

The importance of participation in decision-making

Who should be involved in the problem-solving process? Just the manager? A committee? A coalition of key individuals? The entire department? The Halewood case in Chapter 5 high-lights the value of involving the workforce in decision-making.

Degrees of decision participation

There is evidence that participation can enhance morale, satisfaction and productivity, but in emergencies or when others do not have sufficient information, an autocratic decision may be more appropriate.³⁹ Victor Vroom and Phillip Yetton have developed a diagnostic framework for matching the amount of participation in decision-making with situational requirements.⁴⁰ Their five possible decision-making processes described in Exhibit 12-8, vary in the degrees of participation they allow.

Criteria for participation in decision making

When deciding how much participation to use when making a decision, several factors need to be considered. Three of the most important criteria are the quality requirements, the degree that it is necessary for subordinates to accept the decision, and the time required to make the decision.

EXHIBIT 12-8 Types of Participation in Decisions

Key: A = Autocratic, C = Consultant, G = Group; I and II denote variations of a process

- Al You solve the problem or make the decision yourself, using information available at the time.
- All You obtain the necessary information from your subordinate(s), then decide on the solution to the problem yourself. You may or may not tell your subordinates what the problem is in getting the information from them. The role played by your subordinates in making the decision is clearly one of providing the necessary information to you, rather than generating or evaluating alternative solutions.
- CI You share the problem with relevant subordinates individually, getting their ideas and suggestions without bringing them together as a group. Then you make the decision that may or may not reflect your subordinates' influence.
- CII You share the problem with your subordinates as a group, collectively obtaining their ideas and suggestions. Then you make the decision that may or may not reflect your subordinates' influence.
- GII You share the problem with your subordinates as a group. Together you generate and evaluate alternatives and attempt to reach agreement (consensus) on a solution. Your role is much like that of chairman. You do not try to influence the group to adopt 'your' solution, and you are willing to accept and implement any solution that has the support of the entire group.

Source: Reprinted from Organizational Dynamics, Spring 1973. © 1973 with permission from Elsevier Science.

Quality requirements Whether a decision is best made by an individual or a group depends on the nature and importance of the problem. Important decisions that have large impacts on organisational goal achievement need to be of the highest possible quality. In complex situations, it is unlikely that any one individual will have all the necessary information to make a top-quality decision. Therefore, the decision-maker should at least consult with others who are either closer to the problem or more 'expert' in dealing with it. One person with appropriate knowledge and experience, on the other hand, can decide what to do to solve simple routine problems.

Acceptance requirements The effectiveness of the action plan decided upon is a combination of its quality and the effort put into implementing it. A top-quality decision, if not implemented appropriately, will not be effective. A lower-quality decision that receives enthusiastic support from all involved may be more effective than a higher-quality alternative that implementers do not 'buy into'.

Those affected by a decision are usually more highly motivated to implement the action plan if they have had an opportunity to influence it. Being involved usually increases participants' understanding and generates a feeling of commitment to make 'our' decision work, whereas an arbitrary, autocratic decision that is handed down often results in passive acceptance or even active resistance to implementation. This will be elaborated on in Chapter 17.

Time requirements Allocating problem-solving and decision-making to a group requires a greater investment of time in meetings which is then unavailable for usual tasks.

Nevertheless, the level of acceptance and probability of efficient execution is greater for participative decisions than autocratic methods. In addition, a higher-quality decision may also result from the inclusion of a variety of perspectives and approaches. It is important to determine if this additional time investment produces significantly higher degrees of quality, acceptance and commitment.

RESEARCH FOCUS Vroom and Jago Decision Tree

Determining the appropriate degree of participation in decision-making

The specific needs for quality, acceptance and time provide the impetus for choosing from the five degrees of participation considering the optimum approach to a particular decision. Vroom and his colleagues have found that the answers to seven questions about decision quality and acceptance can indicate the most appropriate degree of participation in any given decision situation.⁴¹ Exhibit 12-9 illustrates the appropriate sequence of three questions regarding quality and four questions regarding acceptance, in a decision-tree format.

It is possible that more than one style will be appropriate for a particular problem situation. In that case, the optimal style indicated by this model is the more autocratic one because it will require the least amount of time to implement. Therefore, the decision tree is most useful in situations where time is a critical factor. It does not take into consideration such long-term factors as morale or employee development. In a situation where increased group cohesiveness and worker morale are important, it may be more appropriate to choose a more time-consuming decision style that emphasises team development. While the autocratic style takes far less time, it does not address the long-term developmental needs of the individuals involved.

Solving problems more effectively

Techniques for avoiding 'groupthink' and the liabilities of group decision-making discussed in Chapter 10 can enhance group problem-solving effectiveness. Other methods for solving problems better include encouraging creativity, structured processes for guiding interaction, and electronic information processing.

Encouraging creativity

For organisations to solve problems creatively, managers have to demonstrate that they value it and know how to deal with innovations when they are suggested. Research has identified how some characteristics of managers generate creativity in their organisations.

Characteristics of managers who generate creativity⁴² Managers who encourage creativity are willing to *absorbrisks* taken by subordinates. They allow their people freedom, expect some errors, and are willing to learn from inevitable failures. Managers who are afraid of mistakes, on the other hand, restrict the freedom of their subordinates to experiment and be creative.

Productive managers of creativity can live with *half-developed ideas*. They do not insist that an idea be 100 per cent proven before supporting its development. They are willing to listen to and encourage subordinates to press on with 'half-baked' proposals that hold promise. They know that criticism can kill innovation.



Creative managers have a feel for the times when the company rulebook needs to be ignored and will *stretch normal policies* for the greater long-term good. Managers that permit no deviation from standard operating procedures will make predictable progress and avoid mistakes but will not obtain giant breakthroughs that calculated risk-taking can promote.

Productive managers are *good listeners*. They listen to their staff, try to pull out good ideas, and build on suggestions. They do not try to impose new policies or procedures on people without listening to the other side first.

Creative managers *do not dwell on mistakes.* They are more future orientated than past orientated. They do not hold the mistakes of others against them indefinitely. They are willing to begin with the world as it is today and work for a better future. They learn from experience, but they do not wallow in the past.

When good ideas are presented, productive managers are willing to decide on-the-spot to try them without waiting for further studies. They are courageous enough to *trust their intuition* and commit resources to implementing promising innovations.

Finally, productive managers are *enthusiastic and invigorating*. They encourage and energise others. They enjoy using the resources and power of their position to push projects forward and make improvements.

To determine how creative you are, complete the Your Turn exercise. If your score is not as high as you would like, a number of ways to enhance creativity are described in the next section.

Your turn How creative are you?

Place a check mark by the 10 words in the following list that best characterise you.

energetic	persuasive	observant	fashionable	self-confident
persevering	original	cautious	habit-bound	resourceful
egotistical	independent	stern	predictable	formal
informal	dedicated	factual	open-minded	forward-looking
tactful	inhibited	enthusiastic	innovative	poised
acquisitive	practical	alert	curious	organised
unemotional	dynamic	polished	courageous	clear-thinking
helpful	efficient	perceptive	quick	self-demanding
good-natured	thorough	impulsive	determined	understanding
realistic	modest	involved	flexible	absent-minded
sociable	well-liked	restless	retiring	

Scoring Key: For each of the following adjectives that you checked, give yourself 2 points:

energetic	resourceful	original	enthusiastic	dynamic
flexible	observant	independent	perceptive	innovative
persevering	dedicated	courageous	curious	self-demanding
involved				

For each of the following adjectives that you checked, give yourself 1 point:

thorough	determined	restless	informal	self-confident
alert	open-minded	forward-looking		

The rest of the adjectives receive no points. Add up your total number of points: ____

Interpretation:

16-20	Very creative
11–15	Above average
6-10	Average

- 1–5 Below average
- 0 Non-creative

Source: Adapted from Eugene Raudsepp, How Creative Are You? New York, Putnam, 1981, pp. 22-24.

Promoting creative thinking in organisations To encourage creativity, a manager needs to provide a bureaucracy-free environment that tolerates diverse behaviour. When a wealthy patron once asked Pablo Picasso what he could do to help him, Picasso looked at him and said succinctly, 'stand out of my light'.⁴³ Several examples of how universities and businesses have promoted creativity by eliminating organisational barriers follow:⁴⁴

'You cannot just order up a good idea or spend money to find one', points out Jon Henderson, director of Hallmark Card's Creative Resources Centre. 'You have to build a supportive climate and give people the freedom to create things.'

One famous example of how a creative climate can pay off is some advertising agenices, where employees are encouraged to devote some of their work time to non-job-related creative thinking. The advertising agency Saatchi & Saatchi has recreation rooms where designers can kick a ball around, staff may also be found watching the Teletubbies on TV, they also have their own pub.

Despite the obvious benefits creative risk-taking has brought to companies, not all managers are comfortable with the adjustments necessary for creating a climate that nurtures creativity. Research by Alari has found that managers with negative feelings about creativity feel that it is uncontrollable, which is anathema for a manager whose job is to control. Consequently, many managers are fearful and unwilling to give up their power and control. For those managers who see the necessity for creativity but are still apprehensive, several structured alternatives to promoting problem-solving creativity exist that do not entail giving up control in the work environment.⁴⁵ Among them are brainstorming, the nominal group technique, and the Delphi technique.

Brainstorming

brainstorming

A small group approach for achieving high participation and increasing the number of action alternatives. **Brainstorming** is a demonstrated approach for achieving high participation and increasing the number of action alternatives.⁴⁶ To engage in brainstorming sessions, people meet in small groups and feed off one another's ideas, which provide stimuli for more creative solutions. Rules for effective brainstorming promote the goal of quantity of ideas no matter how far-fetched, allow no criticism or evaluation of ideas as they are generated, allow only one idea at a time from each person, and encourage people to build on each other's ideas.

Brainstorming groups are encouraged to be freewheeling and radical. Through use of a non-evaluative environment that is intentionally fun, brainstorming ensures involvement, enthusiasm, and a large number of solution alternatives. The Garbage Can model shown below in the Research Focus box can be one method used in these situations.

Brainstorming generally works well in a participative, team-orientated climate where people are comfortable with each other and are committed to pulling together toward a common goal. In some situations it may not be effective, however. One example occurred in Paris, France, where the expatriate general manager from the United States attempted a brainstorming session with department managers and instead of a number of excited ideas was met with a room full of frowns and complete silence. When he inquired why there were no responses, he was told very seriously that he was the director general, and it was his job to tell them what to do. The staff's job was to follow orders and accept his suggestions, not to do his job for him.

At other times, a hostile or political climate might inhibit the free flow of ideas. In restrictive interpersonal climates, more structured techniques like the nominal group or Delphi group technique may be more effective. The recent development of electronic brainstorming, described in the Technology Transformation box, can also circumvent the need for face-to-face brainstorming meetings.

Small business solutions: Two laptops are better than one: Using networked laptops in brainstorming sessions can yield more ideas

We have all been there. In a meeting, searching for ideas to create new business or solve an old problem, out comes the obligatory flip chart and a set of markers. Then the tired mantra 'all ideas are good ideas' is recited before all present attempt to come up with some ground-breaking creative thinking. However, do these traditional techniques actually work?

Ray Elmitt, founder of Crystal Interactive, which regularly runs brainstorming sessions for companies using wirelessly networked laptop computers, believes that traditional ways of generating ideas are largely unproductive.

'Ideas are batted up on to flip charts, and groups find it difficult to separate the generation of ideas from the evaluation stage. It slows down really fast as people start to criticise the ideas', he says.

Elmitt estimates that in a traditional session with a group of about six people you are only going to get about 15–20 ideas. With the same group using wireless-enabled brainstorming technology, he often gets three times that number in about five minutes.

That probably explains why a range of companies from the BBC and ITV to major airlines are organising sessions on anything from strategy to product development using these new technology-based techniques.

In a typical Crystal Interactive brainstorming session, all participants are given their own laptop, which lets them input their ideas anonymously. Meanwhile, on their screen they can see all the other contributions that are being simultaneously submitted by other members in the session.

'Everyone has a PC so everybody can effectively speak at once instead of waiting their turn. You just key your ideas in. It's much faster because they are anonymous and people are not afraid to put forward ideas', explains Elmitt.

He feels that in a traditional business environment ideas can be shot down, not on grounds of quality but simply because of the position of the person who suggested them.

The company works in advance with all of its clients to agree the subjects that are to be addressed by a team and then acts as a facilitator to assist the real-time collaborative process. 'We help the groups to generate loads of ideas, evaluate them and organise them into themes so they understand them. Then we hone in on a few vital areas', Elmitt explains.

He admits that the generation of a large volume of ideas is not in itself a guarantee of quality, but he points out that it does give more options to work with. Working anonymously, participants are invited to group results under headings and then they can vote in real time on issues of importance and the priority actions to be taken.

Dot.coms were famous for introducing flatter organisations to promote the faster sharing of information, and the Crystal Interactive approach carries forward this culture.

The tailored software which facilitates this new brainstorming process is a product called groupSystems and it was produced by Ventana Corporation, which is a commercial offshoot of the University of Arizona.

But what do the participants feel about this new way of exchanging ideas? Andrew Oldham, e-commerce standards manager for Intel, recently used the wireless laptops as part of an e-business workshop on investment issues and he felt the technology helped people overcome their normal inhibitions.

'You get good ideas which traditionally you might not get because people might be unwilling to express them', he says. technology transformation

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Based in Kingston-upon-Thames, Crystal Interactive (www.crystal-interactive.co. uk) works with a permanent core staff of just three, but with extra help available on contract. A lot of the company's methods are used by organisations overseas and while the group decision-making technology is potentially available to anyone, it tends to be high-tech organisations and the financial services industry which use it the most at the moment.

Adrian Abbott, b2b finance manager for Sainsbury's, has been on a Crystal Interactive workshop and he came away impressed with the efficiency of the process. 'The technology enables you to gather ideas from a wide variety of people very rapidly.'

Nevertheless, for small groups, he thinks face-to-face discussions are more effective and he feels the technology-based process does not allow enough scope for people to challenge and react to the instantly generated findings.

However, Peter Lewy, director of learning and development for Exel plc, a global supply chain management company, believes it is important for employees to feel their opinions are valued, and he likes the immediacy of technology-enabled brainstorming.

Exel has used Crystal Interactive in order to make its conferences more interactive. Rather than leaving staff to pay lip service to someone addressing them from a stage, he explains they wanted to get employees more involved with the development of the organisation. 'Too much communication is top down. This gives instant opportunities for sideways and upwards feedback.'

Copies of the output of the sessions are printed off quickly, but Lewy accepts that the use of the technology will not necessarily mean much unless the feedback is acted on. He also believes it will be a while before traditional managers make non-hierarchical group decisionmaking part of their day-to-day practices.

Source: Justin Hunt in The Guardian, 31 May 2001, p. 11.

Discussion questions

- 1. How does this method involve everyone in the decision-making process?
- 2. Using this process why is there likely to be a higher commitment to the chosen decision?

RESEARCH FOCUS The Garbage Can model

The **Garbage Can** model deals with pattern flow of multiple decisions within an organisation referred to by March, Cohen and Olsen as 'Organised Anarchy'.⁴⁷

It is used to explain the pattern of decision-making in organisations that experience extremely high uncertainty and does not rely on normal vertical hierarchies

The Garbage Can model is based on three premises:

- 1. There are problematic preferences, where goals, problems, alternatives and solutions are ill-defined and ambiguity characterises each step.
- 2. There is unclear and poorly understood technology, which means the cause and effect relationships are difficult to identify.
- Turnover: employees change rapidly, or they are busy and only offer limited time to one decision.

According to the Garbage Can model, the decision process is not seen as a sequence of steps but rather as a **stream of events**.

Stream of events

The stream of events consists of:

- 1. Problems: the problems are the difference between the situation now and the desired situation. The problems are seen as independent from the alternatives and solutions.
- Potential solutions: the solutions are the constant flow of ideas through an organisation. In this model solutions are used to formulate problems rather than the other way around. This is the opposite to the classical model. It suggests that managers often do not know what they want until they have some idea of the potential solutions that are available.
- Participants: these are the members of the organisation who contribute to the decisionmaking process. They are not static and will bring different values, attitudes and experiences to the process.
- 4. Choice of opportunities: these are the occasions when the organisation is expected to make a decision. Some of these decisions occur regularly such as recruitment and selection of employees, others may result from a crisis, such as the fuel blockades in 2000.

Consequences of the Garbage Can model

- Solutions may be proposed even when problems do not exist.
- Choices are made without solving problems.
- Problems may persist without being solved.
- A few problems are solved but often this is only by chance.

The implications for management highlights an important feature of decision-making in organisations. Often the choosing and implementation of solutions is done by different people in the organisations and it is the job of managers to ensure that what was chosen is implemented. As we have said, many problems go unsolved as often there is no agreement between the match of problems to solutions. Often it is only when a problem and solution meet together by chance, and the decision-maker has recognised it as so, that a solution is implemented. Therefore, it is the focus of the manager to find the links between problems and solutions.

Garbage Can model

Views decision-making as a mix up of choice process, problems, solutions and participants.

stream of events

The choice of opportunities that flow in and out of an organisation.

nominal group technique

A highly structured group problem-solving format that governs the decision-making process.

Nominal group technique

In the **nominal group technique**, participants meet together in a highly structured format that governs the decision-making process.⁴⁸ First, participants independently write down their ideas about the problem. Second, each presents one idea to the group in a round-robin fashion without discussion. These ideas are summarised and written on a flip chart or blackboard so all can see them. After a group discussion to clarify and evaluate the ideas, an independent ranking of the proposals takes place. These rankings are pooled to determine the proposal with the highest aggregate ranking, which is the group's decision.

The nominal group technique offers the advantages of multiple idea generation, balanced participation, and participant satisfaction. It is time consuming and does require participants to meet together at a common location. In any group decision-making situation, the advantages and disadvantages of a proposed technique should be weighed with respect to the nature of the participants and the specific decision being made.



Delphi technique

Delphi technique A structured group problem-solving process where participants do not meet together but interact through a series of written judgements and suggestions. In the **Delphi technique**, participants do not meet together but interact through a series of written judgements and suggestions.⁴⁹ After each participant has been presented with the problem, he or she writes down comments and possible solutions and sends them to a central location for recording and reproduction. Each participant then receives a copy of all other comments and solutions to use as a springboard for additional ideas or comments. These also are returned to the central location for compilation and reproduction, and an independent vote on solution priority is taken.

The Delphi technique allows for the pooling of a variety of ideas, viewpoints, independent feedback and criticism at minimal expense, since participants do not have to congregate at a common meeting place. It does, however, take an extended period of time and there is really no control over the decision-making process. Depending on the nature of the decision group, participants lack of face-to-face interaction can be either an asset or a liability.

Studies by Van de Ven and Delbecq have examined the effectiveness of both the nominal group technique and the Delphi technique and traditional interaction groups. These studies have revealed that significantly more ideas tend to be generated by the nominal group and Delphi techniques than the traditional group and satisfaction tends to be higher using the nominal group technique than the Delphi or traditional groups.⁵⁰

Group decision support systems

Group decision support systems are electronic and computer-supported data processing tools that can facilitate group decision-making in certain situations. 'Same time-same place' interactions among team members can be facilitated by software tools such as mathematical models, spreadsheets, graphics packages and electronic brainstorming activities. 'Same place-different time' interactions are supported by such tools as retrieval systems for information sharing and display software. 'Same time-different place' group interactions can be accomplished through videoconferencing, which combines audio and video communications. 'Different time-different place' decision-making can be helped by such mechanisms as electronic mail and groupware. Group decision support system tools have been shown to increase the efficiency of group problem-solving, better document it, and produce higher-quality decisions.⁵¹

group decision support systems Electronic and computer-supported data processing tools that can facilitate group decision-making in certain situations.

Hackney: A second look

As a senior black social services manager, one of the reasons she went to Hackney was its multicultural population and workforce. 'Probably 70 per cent of the staff are black, or from a visible minority, and it's a similar figure for the families we serve, so that gave me an extra spur', she says. 'It meant there was a point of connection and shared experience with a large proportion of staff – and that helped in terms of bringing people with me in what we were trying to achieve.'

A white male, she thinks, may not have been as effective in leading the service at this time because of the disillusionment that many black staff felt with the previous regime. 'That's because leadership is not just about making the right decisions, but also inspiring and making a connection with staff.'

Two years ago, Hackney social services had such a poor image that it was rumoured that even agency staff refused to work there. Today, in common with other inner London boroughs, the council still has a recruitment problem, but it can build on a core of loyal and increasingly motivated staff.

'People tend to either love or hate Hackney', says Kwhali. 'But for those staff that love it, the place gets in your blood.'

Source: Patrick McCurry in The Guardian, 9 October 2002.

Summary

The rational problem-solving process includes identifying the problem, clarifying objectives, analysing alternatives, deciding on a solution, implementing the solution, and following through to ensure its effectiveness. To begin solving a problem, the current situation needs to be diagnosed to understand and define the problem as accurately as possible. Hasty assumptions often contribute to a failure to distinguish a problem's symptoms from its sources.

The immediate and long-term effects of all alternative solutions on other people and situations should be considered. Effective action plans contain measurable criteria and time lines. Involving the people affected by the plan in the analysis of alternatives and in decision-making will build their commitment to its implementation.

When evaluating action plan alternatives, benefits are weighed against possible negative consequences. Other considerations include probability of success; associated risk factors; potential money, time, and energy costs; and the possible reactions of those affected.

Effective implementation of an action plan depends on the parties' commitment to make it work. Commitment to the agreed-upon solution is usually gained when problems, needs and objectives are identified mutually, and solutions are reached through the participation and consensus of all involved. Specific tasks and responsibilities are assigned, schedules are established, and personal commitment is reinforced as the plan is activated.

The follow-through process involves the development of procedures to monitor and assist the implementation of the new action plan. A control process is applied to measure performance, monitor results, and take corrective actions when needed.

Areas for Personal Development

- 1. Apply all five steps in the problem-solving process.
- *Problem awareness.* Focus on correctly identifying problems versus symptoms of problems. Assess the importance of the problem relative to the overall goals of the team. Is it a 'mission critical' problem or a relatively minor situation?
- *Problem definition.* As the saying goes, 'rubbish in equals rubbish out'. Make sure you correctly define the problem so you do not create new problems.
- *Decision-making.* Establish good criteria for a decision. Then come up with alternative solutions and assess the impacts (both positive and negative) of each alternative. Choose the best alternative.
- *Action plan implementation*. Assign specific work assignments to the most appropriate people and determine how long the individual tasks will take. Once actions are under way, reinforce team commitment to the actions.
- *Follow-through*. Identify success criteria and measure the results against it. If the results do not match the success criteria, determine why and how far off the results were. Identify new actions that need to be taken.
- **2.** Use problem-solving tools. Use flowcharts to analyse processes, and cause-and-effect diagrams to uncover sources of problems. Use Pareto charts to identify graphically the major causes or priorities of problems. Use decision-making grids to establish criteria and

alternatives for decisions. Use a Gantt chart to identify tasks and time lines for decision implementation.

- **3.** Identify the ethical concerns in each specific decision situation. Ask yourself, if I made this decision and it was published in *Financial Times* tomorrow, how would I feel? How would others feel?
- **4.** Use the most appropriate personal decision-making style. Examine the strengths and weaknesses of your dominant decision style. In situations where other decision styles are more appropriate, use them yourself or enlist others more comfortable with other styles to aid you in the decision process.
- 5. Determine when and how much group participation is optimal in each decision situation. Some decisions and problems require an autocratic approach, while others need a consultative or group approach. Recognise the difference in problems and the level of participation needed to be successful.
- **6.** Encourage creativity. Show others that you value creativity by absorbing risks, living with half-developed ideas, stretching normal policies, being a good listener, not dwelling on mistakes, and committing resources to implementation of promising innovations.
- **7.** Use group decision-making to enhance problem-solving effectiveness. Use group techniques like brainstorming, the nominal group technique, and the Delphi technique to enhance creative group problem-solving. If available, take advantage of computer-supported group decision support systems.

Questions for study and discussion

- 1. Explain why it is so important to establish an atmosphere of trust in situations of group problem-solving. Can you cite situations where you have not trusted others with whom you were involved in solving a problem? Compare them with situations in which you have felt trust. Have you ever felt that others in a group distrusted you? Why?
- 2. What four purposes are served by clarifying objectives early in the problem-solving process? Whose objectives should be considered?
- **3.** Explain this statement: 'No problem solution can be better than the quality of diagnosis on which it is built'.
- 4. With regard to selecting an action plan, indicate whether you agree or disagree with each of the following statements and why: (1) Experience is the best teacher; (2) Intuition is a helpful force; (3) Advice from others is always beneficial; (4) Experiment with several alternatives.
- 5. What difficulties might you anticipate when using the rational problem-solving process? Why? What additional difficulties might arise because of personal attributes? Which of these have you experienced? Explain. What were the consequences? How can these difficulties be avoided?
- 6. Which decision style would be most effective at each stage of the rational problemsolving process? Why? Explain which decision style would be best for making decisions under emergency circumstances. Which is best for solving a complex problem requiring considerable creativity?
- 7. Explain under what circumstances you would want to use participation to solve a problem. When would you rather solve the problem individually?

- 8. How can a manager encourage creative problem-solving by department members?
- **9.** How would you, as a manager, motivate your employees to engage in ethical behaviour?

Key Concepts

problem-solving, p. 478 decision-making, p. 478 objective, p. 481 flowchart (process flow diagram), p. 483 Pareto chart, p. 485 criteria, p. 486 certainty, p. 487 known risk, p. 487 uncertainty, p. 488 turbulence, p. 488 satisficing, p. 489 Gantt chart, p. 491 ethics, p. 493 ethical behaviour, p. 493 ethical reasoning, p. 493 ethical dilemma, p. 493 morality, p. 496 utilitarianism, p. 496 social good, p. 496 utility, p. 496 right, p. 497 justice, p. 498 distributive justice, p. 498 retributive justice, *p.*compensatory justice, *p.*decision styles, *p.*brainstorming, *p.*Garbage can model *p.*stream of events *p.*nominal group technique, *p.*Delphi technique, *p.*group decision support systems, *p.*

Personal skills exercise

Choosing a decision style⁵²

Objectives To learn how to apply the Vroom and Yetton decision participation model.

Preparation Review the section entitled 'The importance of participation in decision-making?' earlier in this chapter. Make sure you understand the five decision participation styles (Exhibit 12-8) and the decision participation tree (Exhibit 12-9).

Stage 1: Individual case analyses

Individually read each of the hypothetical cases that follow. Decide which of the five
decision participation styles from Exhibit 12-8 you would use in each situation. Record
your decisions.

Case A You are a manufacturing manager in the northeastern division of a large electronics plant. Upper management is always searching for ways to increase efficiency.

Recently management installed new machines and introduced a simplified work system, but to everyone's surprise (including your own) the expected increase in productivity has not been realised. In fact, production has begun to drop, quality has fallen, and the number of employee resignations has risen.

You do not believe there is anything wrong with the machines. You have requested reports from other companies that are using them, and their responses confirm this opinion. You have also called in representatives from the firm that built the machines. These technicians have examined the machines thoroughly and report that they are operating at peak efficiency.

You suspect that some elements of the new work system may be responsible for the decreased output and quality, but this view is not shared by your five immediate subordinates – the four first-line supervisors who head your four production sections and your supply manager. They have attributed the drop in production to various factors: poor oper-

ators, insufficient training, lack of adequate financial incentives, and poor worker morale. Clearly, this is an issue about which there is considerable depth of individual feeling. There exists a high potential for discord among your five key subordinates, and this may be just the tip of the iceberg.

This morning you received a phone call from your division manager, who had just reviewed your production figures for the last six months and was clearly concerned. The division manager has indicated that the problem is yours to solve in any way you think best but has requested that you report within a week what steps you plan to take.

Certainly you share your manager's concern and you know that, despite their differing views, your subordinates share it as well. Your problem is to decide what steps must be taken by whom in the effort to reverse the decline.

Case B You are the general team leader in charge of a large work team that is laying an oil pipeline. It is now necessary to estimate your expected rate of progress in order to schedule material deliveries to the next field site.

You know the nature of the terrain you will be travelling and have the historical data you need to calculate the mean and variance in the rate of speed over that type of terrain. Given these two variables, it is a simple matter to calculate the earliest and the latest times at which materials and support facilities will be needed at the next site. It is important that your estimate be reasonably accurate. Underestimates result in idle workers, and overestimates result in holding materials for a period of time before they are to be used.

Up to this point, progress has been good. Your five group team leaders and other members of the team stand to receive substantial bonuses if the project is completed ahead of schedule.

Case C You are supervising the work of 12 nurses. All 12 have similar levels of formal training and work experience, a condition that enables you to use them interchangeably on most wards. Yesterday your manager informed you that a request had come in from a hospital in the same Health Care Trust for four nurses to go on extended loan for a period of six to eight months. For a number of reasons, he argued (and you agreed) that this request should be met from your group.

All your nurses are capable of handling this assignment and, from the standpoint of present and future projects, there is no particular reason why any one should be retained over any other. The major problem is that the location of the other hospital is considered undesirable by most members of the organisation.

Stage 2: GroupAfter individuals have recorded their opinions of the most appropriate decisiondiscussionparticipation style to be used in each of these cases, proceed with the following steps:

- 1. Divide the class into groups of three to five people. Designate one person from each group to keep a record of each group's discussion.
- **2.** Each person shares with others in the group why he or she chose a particular decision style for each of the three cases.
- **3.** Focus on determining all the reasons people chose different decision styles. One person should write down the styles chosen for each case and note briefly the associated reasons. Important: The group should not try to reach a consensus; you merely want to discover how many different approaches were taken and why.
- 4. Using the decision-making tree in Exhibit 12-9, individually answer the questions at the

top and work through the decision tree until you reach the recommended decision style for each of the three cases.

- **5.** Repeat step 4 as a group. Now establish consensus as to the appropriate decision style prescribed by this model.
- **6.** Check your answers with Vroom and Yetton's, which your instructor will provide. Discuss any variations and reread the chapter explanation if misunderstandings persist.
- **7.** Discuss within the group how original decisions agreed with or varied from the Vroom and Yetton model. Speculate as to why. The recorder should note the outcome of this group discussion.

Stage 3: ClassReconvene as a class. Have the group recorders report group outcomes, including
discussiondiscussiondiscrepancies between the original (individual) analyses and Vroom and Yetton's solutions.
Note any sharp disparities among the groups' responses, and try to determine why they
occurred. Participate in a class discussion based on the following questions:

- **1.** To what extent do you agree with the model? What are its strengths and weaknesses in application?
- **2.** Do you have a preferred decision style (AI, AII, CI, CII, GII)? Why or why not? Will knowledge of this model help you be more flexible in choosing a decision style?
- **3.** How closely does your decision behaviour match that prescribed by the model? What evidence do you have that you are concerned more with time (efficiency) or with participation in choosing a decision style?

Team exercise

Ethical decision-making⁵³

Purpose	To practise stretching and expanding your moral reasoning and ethical judgement and to sharpen your ethical sensitivity and moral awareness. (Total time required is 55 to 110 minutes, depending on the number of cases assigned and the degree of class discussion.)
Procedure	Participants assume that they are managers at Martin Marietta PLC which is undertaking an ethics training session. The exercise consists of deciding on ethical courses of action for ten minicases. (Time: 50 minutes: 5 minutes per case. If time is limited fewer cases can be used.)
nstructions	Form groups of 4 to 6 people and select a group leader who will lead the discussion of the first case. Your group will have 5 minutes to reach a decision for each case before moving on to the next one. Rotate leaders for the case discussions.
Note	These cases reflect real-life situations. Consequently, you may sometimes feel that a case lacks clarity or that the precise choice you would have made is not available. Some cases have more than one satisfactory solution and others have no good solutions. In all cases, however, you must decide on the one best solution from those presented.
Debriefing	After the decisions have been made for all the cases, the class should discuss each case in order. For each case, groups share their decisions and explain why they think their choice is the best. Then the tutor provides the point values and rationale assigned for each option

by the Martin Marietta PLC trainers. Each group keeps track of its score for each case. At the end of the discussion, groups add up their points for all 10 cases and the group with the highest score wins. (Time: 60 minutes. Less time is required if fewer cases are assigned or the total class discussion of group answers is omitted.)

Minicase 1 A defence programme has not yet been formally approved nor have the funds been allocated. Nevertheless, because it all looks good and you need to get started in order to meet the schedule, you start negotiating with a supplier. What do you tell the supplier?

Potential answers

- *a.* 'This is a "hot" programme for both of us. Approval is imminent. Let's get all the preliminary work under way.'
- b. 'The programme is a certainty. I want you under contract as soon as possible.'
- c. 'Start work and we will cover your costs when we get the contract.'
- *d.* 'If you want to be part of the team on this important, great programme, you, like us, will have to shoulder some of the start-up costs.'
- Minicase 2 Two of your subordinates routinely provide their children with supplies from the office. How do you handle this situation?

Potential answers

- *a.* Lock up the office supplies and issue them only as needed and signed for.
- *b.* Tell these two subordinates that office supplies are for office use only.
- *c.* Report the theft of pens and paper to the head of security.
- *d.* Send a notice to all employees that office supplies are for office use only and that any disregard of the notice will result in disciplinary action.
- Minicase 3 Your operation is being relocated. The personnel regulations are complex and might influence your employees' decisions about staying on the 'team'. Relocating with no experienced staff would be very difficult for you. What do you tell your employees about their options?

Potential answers

- *a.* State that the relocation regulations are complex: you won't go into them right now. However, you tell them that everything probably will come out alright in the end.
- b. Suggest that they relocate with you, stating that a job in hand is worth an unknown in the bush.
- c. Present them with your simplified version of the regulations and encourage them to come along.
- *d.* Tell them only that you'd like them to relocate with you to preserve the team, which has worked so well together.
- Minicase 4 Your price is good on a project contract you are bidding for, but you think it will take you several months longer than your competitor to develop the system. Your client, the Ministry of Defence (MOD), wants to know the schedule. What do you say?

Potential answers

a. Tell the MOD your schedule is essentially the same as what you believe your competitor's will be.

- *b.* Show the MOD a schedule the same as what you believe your competitor's is (but believing you can do better than what your engineers have told you).
- c. Explain to the MOD the distinct advantage of your system irrelevant of schedule.
- *d.* Lay out your schedule even though you suspect it may cause you to lose points on the evaluation.
- Minicase 5 A friend of yours wants to transfer to your division, but he may not be the best qualified for the job. You do have an opening, and one other person, whom you do not know, has applied. What do you do?

Potential answers

- *a.* Select the friend you know and in whom you have confidence.
- *b.* Select the other person who, you are told, is qualified.
- c. Request a qualifications comparison of the two from the human resources department.
- *d.* Request the human resources department to extend the search for additional candidates before making the selection.
- Minicase 6 Your new employee is the niece of the director of finance. Her performance is poor, and she has caused trouble with her co-workers. What do you do?

Potential answers

- a. Call her in and talk to her about her inadequacies.
- *b.* Ask the human resources department to counsel her and put her on a performance improvement plan.
- *c.* Go see her uncle.
- *d.* Maybe her problems are caused by the newness of the job; give her some time to come around.
- Minicase 7 You work in finance. Another employee is blamed for your error involving a large amount of money. The employee will be able to clear himself, but it will be impossible to trace the error back to you. What do you do?

Potential answers

- a. Do nothing. The blamed employee will be able to clear himself eventually.
- b. Assist the blamed employee in resolving the issue but don't mention your involvement.
- c. Own up to the error immediately, thus saving many hours of work.
- *d.* Wait and see if the matter is investigated and at that time disclose your knowledge of the case.
- Minicase 8 After three months you discover that a recently hired employee who appears to be very competent falsified her employment application in that she claimed she had a university degree when she did not. As her supervisor, what do you do?

Potential answers

- *a.* You are happy with the new employee, so you do nothing.
- b. Discuss the matter with the human resources department to determine company policy.

- c. Recommend that she be fired for lying.
- *d.* Consider her performance, length of service, and potential benefit to the organisation before making any recommendation to anyone.
- Minicase 9 A close relative of yours plans to apply for a vacancy in the department that you head. Hearing of this, what would you say to that person?

Potential answers

- a. 'Glad to have you. Our organisation always needs good people.'
- *b.* 'I would be concerned about the appearance of favouritism.'
- c. 'It would be best if you did not work for me.'
- *d.* 'If you get the job, expect no special consideration from me.'
- Minicase 10 A current supplier contacts you with an opportunity to use your expertise as a paid consultant to the supplier in matters not pertaining to your company's business. You would work only on weekends. You could:

Potential answers

- *a.* Accept the job if the legal department poses no objection.
- *b.* Accept the job.
- c. Report pertinent details to your supervisor.
- *d.* Decline the position.

CASE STUDY Call for review over Sats test cheating

Teachers' leaders called on the education secretary, Charles Clarke, to urgently review national tests and league tables, after a *Guardian* newspaper investigation found widespread allegations of cheating in tests for 11year-olds.

Teachers' union heads said the government relied too much on external exams – including standard assessment tests (Sats) – and a rethink was long overdue.

Chris Woodhead, the former chief inspector of schools, said the government had ignored evidence that teachers were boosting children's results in primary school tests as long as five years ago. Methods included opening papers ahead of time, coaching children and helping them during tests.

'As chief inspector, I met heads who wanted to tell me that they knew cheating was a major problem. However, when I raised these concerns with the education department, they didn't want to know.'

He said the government's exam body, the qualifications and curriculum authority, was also 'not keen' to look into the matter. 'I do feel the QCA has a vested interest in minimising the problem', he said.

John Bangs, the assistant general secretary and head

of education at the biggest classroom teaching union, the National Union of Teachers, said: 'The NUT is deeply concerned about "the terrible trio", testing, targets and tables, which drive the curriculum into a hole at the end of primary school and put enormous pressure on teachers. We cannot condone any teachers bending the rules, but this shows the climate the tests have created, whereby our children's futures are dominated by teachers "teaching to the test". We would urge Charles Clarke to launch a serious review into the entire testing system.'

David Hart, general secretary of the National Association of Head Teachers, said he felt cheating occurred only in a minority of schools: 'But the qualifications and curriculum authority must monitor the situation and not pretend it is not going on. This evidence does show the enormous pressure teachers are under, and the impact of the government's target-setting and league table agenda, linked with the performancerelated pay system.'

Damian Green, the shadow education secretary, said the government must launch an immediate investigation and reveal what evidence of cheating it already had.

Phil Willis, Liberal Democrat education spokesman, called for a Royal Commission to investigate the entire exam system.

A spokesman for the Department for Education and Skills said: 'The government is absolutely committed to maintaining the integrity and security of the national curriculum key stage tests and takes any allegation of malpractice very seriously. The extremely small number of isolated incidents every year are investigated thoroughly, but it is clear there is absolutely no evidence of widespread cheating.'

The QCA released figures showing that 479 cases of cheating in exams were reported this year, more than double the complaints in 2001. However, only seven schools had their results annulled. The body appealed for teachers to report concerns.

Source: Angelique Chrisafis and Rebecca Smithers The Guardian, 29 October 2002, p. 3.

Questions for discussion

- 1. Why is there pressure to cheat and whose responsibility is it to control cheating?
- 2. How can the creative problem-solving process develop an action plan to prevent the problem of cheating in schools?

WWW exercise

Manager's Internet tools

Web tips: Problem-solving skills on the Web

This chapter provides a variety of tools for helping you solve problems and make decisions. They range from knowledge of the rational problem-solving process to group decision support systems consisting of electronic and computer-supported data processing tools. Today there are many more databases and information processing tools available on the Internet which can expand your problem-solving capabilities. Complete the exercises that follow to become more familiar with these alternatives.

World Wide Web search There are many sites on the Internet, including many specific companies, devoted to improving problem-solving skills. Using a search engine, find some sites that are targeted to helping people develop their problem-solving skills. What do these sites and/or companies have to offer, and what are the similarities to the concepts presented in this chapter?

Specific website Creative Problem Solving Group – Buffalo The Creative Problem Solving Group – Buffalo is a consulting group that, among other things, helps organisations solve problems creatively. On their website, the company has a pictorial representation of its problem-solving methodology. Go to the company's website, examine its mission, and then look at its problem-solving methodology (in their Services section).

Company: http://www.cpsb.com/

Problem-solving: http://www.cpsb.com/cps.html

Discussion questions

- 1. What are the key components to Buffalo's creative problem-solving approach? To what types of problems does the company think the model can be applied?
- **2.** Is the model static, with defined beginning and end points, or is it a dynamic model? What difference does it make?

Specific website – The Future Problem Solving Program The Future Problem Solving Program (FPSP) is an organisation established to expand students' thinking on problems.

The organisation hopes to inspire students to look at problems in different lights, and generate new and creative solutions to problems. The organisation developed a six-step process as a guideline for problem-solving. Go to the FPSP website and examine its six-step process on the Overview page. Then, look at the graphical representation on its FPSP History page.

Company: http://www.fpsp.org/

Problem-solving: http://www.fpsp.org/overview/history.html

Discussion questions

- 1. What are the key components of FPSP's approach to creative problem-solving? Are they different from Buffalo's components identified on the previous website?
- 2. What are the differences in the two models, and what might account for the differences? How significant are they?

Learning checklist

Before moving on to the next chapter can you:

- Explain the nature of managerial problem-solving.
- Identify the five steps of the rational problem-solving process.
- Appreciate the value of ethics and morality in decision-making.
- Describe the strengths and weaknesses of different decision styles.
- Utilise quality management tools for problem-solving.
- Apply techniques to stimulate creativity and innovation.

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