

The discipline of strategic thinking in healthcare

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Introduction

This chapter has been written for those who lead healthcare services or hope to in the future. Some of the conceptual and methodological challenges associated with good strategic thinking are considered. The purpose is more of an opening up of a discussion of the subject and not a bundle of 'how tos'. Although the demands and constraints on leaders can introduce many complications for strategic thinking, strategic management will benefit if the six pillars of strategic thinking discussed are firmly established.

Strategic thinking helps us to interpret what a pattern of investment decisions (time, talent, and money) means for the capabilities of an organisation. The shape and form of these decisions reveal what the organisation has initiated and institutionalised in terms of tacit knowledge, specialised skills, trust relationships, social capital and the depth of experienced clinical leadership. When the realised strategy becomes a true strategic service vision, when it has truly become embedded in the culture, management practices and behaviour of the organisation, it becomes very hard for others to imitate.

Strategic activity in healthcare is on the rise worldwide. In recent years, hospital and clinic mergers, innovative alliances, and the outsourcing and spinning off of new (and old) clinical services exemplify this rise in strategic activity. The increase in strategic thinking in healthcare also includes making decisions about the mix of medical pathologies, patients and care processes, improving the service process and repositioning care programmes aimed at local, regional or international patients.

In the United States there were 153 hospital mergers in the 1980s and 176 hospital mergers in the first seven years of the 1990s.¹ During the last decade, more than 100 private hospitals in Western Europe merged or were acquired within single domestic markets such as England, Germany, or France.² Ownership structures have also changed as some public hospitals have become private hospitals or have hired private management companies. Technological, demographic, regulatory and/or consumer forces have led medical groups, clinics and hospitals to shape the new rules of healthcare competition.

Some healthcare organisations have begun to identify global markets for their brand.³ For example, in 2000 Johns Hopkins National University Hospital International Medical Centre opened an oncology unit in Singapore and in 2004 the Mayo Clinic opened a cardiac disease unit in Dubai. Bumrungrad Hospital,

founded in Thailand in 1980, was one of the first hospitals to focus on attracting foreign patients, caring for over 300 000 non-Thai patients each year.⁴

Between 1997 and 2001, Sweden's Capio acquired hospitals throughout Europe including 17 in Sweden, 12 in Norway, three in the UK, 12 in Spain, one in Switzerland and one in Denmark. India-based Apollo Holdings established clinics in Kuwait, Qatar, Saudi Arabia and Bangladesh, and are targeting more clinics in Dubai, Bahrain, Nigeria, Tanzania, Ghana, Singapore, Philippines, London, and Chicago.⁵ These strategic innovators are reinventing the industry by becoming Europe, Asia and Africa's leading independent providers of general hospital services, specialty hospitals and diagnostic clinics.

There are several ways to undertake these strategic activities:

- Building the capacity and managing for cultural consistency.
- Acquiring other organisations and offering the service faster and more effectively.
- Forming alliances and offering a less costly but expedient service.

These decisions require the practice of strategic thinking and planning as a discipline, i.e. a rigorous approach and methods for inquiring, identifying, selecting, and implementing courses of action in the pursuit of long-term strategic goals and objectives.

While health leaders are involved in many aspects of organisational life, above all they are judged on the quality of their strategic thinking and planning. The ultimate test of leadership is adapting healthcare organisations to novel and unexpected events by making strategic changes successful. The following examples illustrate a typical mix of decision challenges for healthcare managers:

- Planning a merger of four local hospitals into one entity.*
- Developing and launching a breakthrough care process or clinical service.*
- Deciding which care programmes should be established as focused factories.*
- Planning major capacity expansions for diagnosis and surgical treatment centres.*
- Increasing research grants for the transplant surgery programme.
- Establishing real-time MRI units for surgical procedures.
- Solving primary care access issues.
- Optimising clinical staffing.

Not all of the managerial decisions listed above are strategic. On the one hand, some of the decisions listed above necessitate adaptive responses to changes in the 'marketplace' and pressures in the task environment. On the other hand, the decisions with the asterisks (*) have more permanent effects over longer time periods⁶ and require strategic thinking. These problems involve high stakes, uncertainty or ambiguity, complexity or novelty, differences of opinions and a long-term commitment of effort, talent, money, reputation or other assets.

While these types of strategic changes can have a direct impact on healthcare quality and costs, organisation goals and employee work life, poor planning and/

or execution of these strategies can alter or destroy an organisation's future. These decisions require a strategic thinking process. The discipline of strategic thinking is not about a 'widely accepted organising structure and a growing body of empirical knowledge';⁷ rather it is meant to convey a rigorous thinking process to organise tacit knowledge and existing information and to move from intuition and unchallenged assumptions to learning from experience.

Although the strategic intent of hospital mergers may be to stem the growth in costs or create better healthcare services, mergers can also lead to a clash of cultures, inefficiency and organisational failure. The case described in Box 12.1⁸ illustrates the point.

Box 12.1 Case history

In 1996, two major US hospitals with two very different cultures merged into one entity. Hospital A was a warm, caring, yet high performing academic teaching hospital sponsored by the Jewish community. Hospital B was a high performing general hospital, with strong Protestant roots. Although the strategy was called a 'merger of equals', the academic hospital took control over most of the front stage, clinical departments.

The physicians at Hospital B said, 'We merged with Hospital A'. The physicians at Hospital A said, 'We acquired Hospital B'. Soon afterwards, the environment became increasingly competitive; budgets were tightening and costs controls were needed, many clinicians resigned and many loyal patients went elsewhere. By 2000, the merged hospitals' organisational practices were labelled 'cumbersome and inefficient', and the hospital was losing 50 million a year. Despite a staff of 1200 physicians, annual revenues over one billion, and a very strong reputation for quality, the merged hospital had lost its strategic focus and was close to disintegrating.

In 2002 the new CEO saw that hospital management had acquired incapacity to make and execute strategic decisions. Within two years the new leader restructured, taught the clinical leaders how to think strategically. During this time he taught the clinical leaders how to align operational strategy with the corporate strategy, he put a new team in place, and redesigned the strategic decision-making process. The CEO created several ground rules for strategic thinking such as 'voice your concerns during the meeting, not afterwards' and 'challenge assumptions in a respectful way'. As of 2006, the hospital continues to be successful and to contribute to the community.

The case illustrates several important lessons. First, merging two great hospitals may sound like a good strategic move but someone must organise a thinking process to anticipate the inevitable pitfalls of a merger. Without executive leadership teaching everyone the discipline of strategic thinking, any potentially 'great' strategic move can fail. Second, mergers require a consistency and alignment among three levels of strategy: corporate, competitive, and operating strategy. And third, the discipline of strategic thinking must consider how culture and organisation influence successful implementation of any strategic change.

Why do organisations exhibit different behaviours and results when facing similar environmental conditions? Strategic behaviour is not highly associated with the 'requirement of the environment' but is largely determined by the quality of the strategic thinking process.^{9,10} This chapter addresses several strategy questions that should be understood by every healthcare manager. What does strategic thinking and planning in healthcare mean? What are the demands and constraints on strategic thinking? What are the pillars of effective strategic thought? What are some of the avoidable errors that healthcare leaders can make during strategic policy making and planning?

A word about strategy and management

Recently a clinical director presented the strategic problems that his medical centre had been confronting over the last decade.¹¹ He said:

In 1997 when we were having a serious financial crisis, we hired strategy consultants to help us to restructure and to restore confidence. At the time we had been losing patients to local community hospitals. The medical centre reorganised into patient-centred care programmes and made many changes that resulted in service quality improvements, as well as improved hospitality and patient friendliness. Following these changes, the situation improved by 1999.

After restructuring, we were afraid that the physicians would leave the hospital. Patient volume increased, and the financial situation improved. But then we experienced bed capacity problems and a serious shortage of nurses. Moreover, the increase in volume not only brought additional patients but a more complex patient mix that consumes the most expensive clinical resources: support services, intensive care beds, and operating room time.

The strategic question is: Are we in a vicious cycle that will lead to future financial problems?

The quote reminds us that although the 'ostensible strategic problem' is discovering a better way to relate the organisation to the environment from an economic perspective, the 'real problem' is unanticipated consequences of implementing strategic changes – a problem of strategic thinking and organisational behaviour.

Healthcare organisation must confront these issues because they are embedded in a task environment, which refers to anything relevant 'out there' that can affect (or can be affected by) an organisation's desired long-term goals and performance. Every healthcare delivery system establishes its own strategic service domain that implicitly or explicitly targets the type of illnesses and diseases covered and type of populations served and formulates how the services will be delivered. Therefore, strategy is the way decision makers respond to a 'task environment' that results in a skilled sequence of activities intended to achieve long-term goals.¹²

The task environment can be local, regional or international and includes: patients and their families, referring clinicians and employees, medical suppliers, rivals and/or competitors for patients and resources, government and regulatory agencies, unions and professional associations, and the like. A successful strategy not only creates long-term value for patients and employees, but also creates

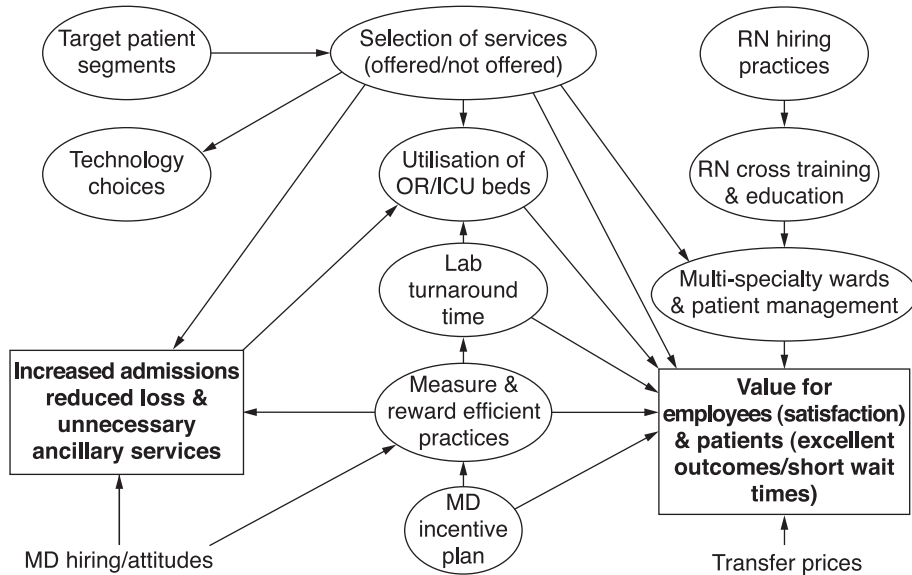


Figure 12.1 Hospital strategy as a skilled activity sequence

strategic visions that are hard to imitate. Some strategies are hard to imitate because they result from *ad hoc*, incremental, decision making.

Like it or not, looking at your pattern of investments over time, a strategy emerges. Figure 12.1 is an example of what a hospital looks like in terms of developing a skilled activity sequence. The question is: how well can you manage these strategic decisions?

These decisions often involve three levels of strategy: corporate, competitive and operating strategy.

- 1 **Corporate strategy:** refers to a healthcare organisation's choice of 'businesses' or clinical services and populations and how these businesses or services are managed. Corporate strategies include managing medical devices and suppliers, creating clinical standards, branding the name, transferring skills and sharing activities, vertical integration, diversification, mergers, alliances, partnerships, etc.
- 2 **Competitive strategy:** refers to how an organisation will create value in a given market by meeting the needs of patients and consumers, while meeting the needs of the clinical and non-clinical employees and the organisation as a business.
- 3 **Operating strategy:** refers to the formulation of policies, processes, technologies, human resource practices and the organisation of work, people and resources that influence the way the service is seen by patients and the results achieved on a day-to-day basis.

The challenge for strategic thinking is to align all three levels of strategy into an effective activity system.



Figure 12.2 Five dimensions of star quality. Source: Chilingerian.¹³

In exploring how to compete, a fundamental question is: What creates value for patients? From a patient perspective, perceptions of value can take many forms. One source of value for patients is perceived quality; however, quality is not a simple concept but best understood in terms of five underlying dimensions shown in Figure 12.2.

If we analyse a cardiac surgery programme in terms of these five dimensions, patients might want the following results.

- 1 Excellent outcomes:
 - low recurrence rates: less than 1% over last ten years
 - complications rates less than 0.5%
 - on average patients go back to work sooner.
- 2 Extremely high patient satisfaction – exceeding patient expectations:
 - 98% are extremely satisfied with the care and 2% ‘merely’ satisfied
 - excellent pain management
 - 100% willing to recommend the service again.
- 3 Efficient decision making:
 - high degree of co-ordination of patient care across operating units
 - average cost per case is less than the average local community hospital
 - quick diagnosis to treatment
 - optimal involvement of the patient in the care process.
- 4 Some amenities:
 - short waits once admitted
 - excellent dining services and food.
- 5 Excellent relationships, psychological support and information:
 - high degree of trust and confidence
 - clinical staff time spent answering questions
 - annual patient reunions/long-term relationship.

The essence of an effective healthcare strategy is finding a path that creates long-term value for patients, employees and the organisation. Value, when viewed from the patient perspective above, can be defined as the results achieved (outcomes) plus the service experience (e.g. service process, amenities, relationships, decision-making efficiency) divided by the sacrifices (e.g. wait time,

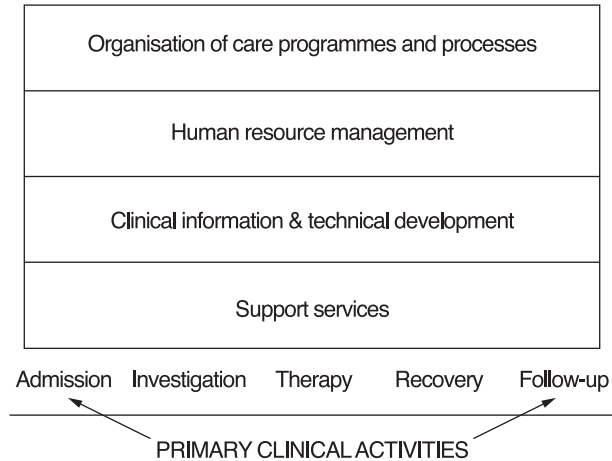


Figure 12.3 Primary clinical and non-clinical activities

inconveniences, diagnostic uncertainty, disrespect, amount of pain) plus the out-of-pocket costs of acquiring the services.^{13,14} Value creation depends on the quality of relationships and reputation that a service delivery organisation has with organisations, groups and individuals in a given task environment.

In healthcare, there are two sources of strategic advantage.

- 1 The basic clinical activities are performed.
- 2 Choice of the mix of medical specialties.

In healthcare basic clinical activities are: admission, investigation, therapy, recovery and follow-up. Cardiology, pathology and general practice are examples of medical specialties. Porter¹⁵ argues that strategy is different from operational effectiveness which he defines as performing basic activities better than your competitors. The essence of strategy is strategic positioning which, when applied to healthcare, is when a decision-making unit offers different medical services and/or performs the basic clinical activities in novel or unique ways.

Seeing the task environment as global suggests some distinct advantages in adapting or integrating medical specialties and/or clinical activities, Figure 12.3 identifies the five primary clinical activities and four secondary activities.

In addition to offering a medical specialty, a healthcare organisation that wants an international presence has to think about how to co-ordinate these nine activities internationally. Can these nine activities be done differently? Can the primary clinical activities be positioned (and perceived) as 'better services'?

Strategic thinking requires a consideration of the separate and unique characteristics of an organisation's situation and the development of a series of interrelated activities tailored to the constellation of those features that are present. While strategy is often thought of as deliberate choice to improve the long-term success of an organisation, in practice strategy can be an accumulation of trends and adaptive actions taken over time without much deliberation or conscious purpose.^{16,17,18} For some health organisations, strategy might also require challenging standard practices, re-writing the rules, or re-inventing the theory of health services. The following case exemplifies how good strategic thinking effects long-term success for the organisation and consumers.

An example of effective strategic thinking

In 1972, Dr James Black, a scientist working at a British lab for the pharmaceutical company SmithKline, discovered a new class of anti-ulcerants called H₂-antagonists.¹⁹ In 1976 SmithKline launched the new drug called Tagamet (or cimetidine), which by 1981 accounted for 780 million dollars of SmithKline's sales. They were excited and optimistic because they understood the theory of the business – the pioneer with the patent has a distinct advantage over all competitors and this was a blockbuster drug.

Between 1976 and 1986, the results were not what the strategic planners at SmithKline anticipated. By 1986, SmithKline's competitor in the United Kingdom, Glaxo Holdings plc, despite being priced 20% to 75% higher, overtook Tagamet in global sales with a 'me too' drug called Zantac. It was Zantac not Tagamet that became the first drug to earn one billion dollars in global pharmaceutical sales, despite the fact that when the Food and Drug Administration approved Zantac they said it offered 'little or no' contribution over Tagamet. In 1989, as Dr James Black was awarded a Nobel Prize in Medicine for cimetidine, Zantac dominated the world-wide market taking 42% of the global market, beating Tagamet's sales in Italy, UK, the United States, France, and Japan.

How could Glaxo be so 'consistently lucky'? Alternatively, what went wrong for SmithKline? How could SmithKline, with first mover advantage, patent protection, and a Nobel Prize, have lost the battle for global sales? This case holds many lessons for strategic thinking. In the early 1980s the US was 37% of the worldwide market. Tagamet easily captured 90% of sales in the United States.

Strategic thinking must make sense of temporal patterns as changes (such as sales) unfold. People have difficulty seeing and interpreting developments over time.²⁰ Between 1982 and 1989, Glaxo was taking away SmithKline's business yet SmithKline's managers appeared not to notice until it was too late.

In 1972, when Glaxo heard about Dr Black's discovery, they decided to improve on Tagamet. In 1978 they began clinical trials in 20 countries and in 1981 they launched Zantac. When Glaxo's research revealed that physicians saw Zantac as a 'me too' drug with no added medical benefit, the marketing decisions makers wanted to follow the assumptions underlying the prevailing theory of the industry – if it is an inferior product then price it 10% below Tagamet's daily treatment cost. The CEO of Glaxo agreed that Zantac added no medical outcomes benefit, but the simplified once-a-day dosage regime and the lack of side effects made the drug far more convenient and safe. The CEO insisted on charging a 75% higher price. Based on published studies, they positioned their drug as having superior effectiveness with the tag line: 'faster, simpler, and safer'. Finally, Glaxo had a much stronger international sales force, by creating co-marketing strategic alliances with companies in Japan, Germany and France.

There are two explanations. First, by challenging classic marketing assumptions about price strategy, Glaxo analysed the competitive situation better than SmithKline. Second, the early commercial success of Tagamet led SmithKline to become 'inattentional blind'. While distorted interpretations of performance trends is a widespread phenomenon, as illustrated by the Bristol Royal Infirmary Inquiry Final Report,²¹ high-spirited organisations like SmithKline, with a proud and successful history, are more likely to display psychological denial and cynical reactions to incremental bad news. Clearly in this case strong leadership gave the

strategic planners permission to challenge old assumptions. The lesson for strategic thinking is to train everyone to challenge assumptions about the task environment. Strategic thinking about healthcare organisations is not exceedingly complex if the basic steps in strategic thinking are followed.

A new framework for strategic thinking: demands, constraints, and choices

When healthcare leaders talk about strategic planning aimed at furthering the objectives of the health system, often they base their decisions on intuitive judgement, which is compressed experiences and/or perhaps an ill-defined 'gut' feeling for current trends. Evolutionary psychologists have observed that the human brain, developed during the Stone Age, works against 'average' managers trying to resolve complex strategic problems.^{22,23} If managers are under time pressure they cope with uncertainty by either taking random actions or becoming paralysed by processing too much information.^{24,20}

The human brain may have its limitations, but cognitive psychologists argue that there is hope for strategic thinking. Health leaders should bear in mind that:

Real improvement can be achieved, however, if we understand the demands that problem solving places on us and the errors we are prone to make when we attempt to meet them . . . Dorner²⁰

Strategic thinking places such high demands on managerial attention that strategic planning processes are predisposed to make analytical mistakes. By understanding the faulty way that human beings solve problems, bad habits can be broken and managers can learn how to avoid the worst mistakes.

Figure 12.4 displays what has been observed by students of managerial behaviour: although managers make strategic choices, they are limited by the number of demands and the nature of the constraints.^{25,26,27} Strategic demands are those activities such as meeting performance criteria that must be undertaken for legal reasons (because of national policy or legislation), the local community, clinical employees, and competitive pressures from other stakeholders. The characteristics of the demands reveal how easily the mind can grasp or comprehend the requirements of a strategic situation.

The search for high-quality decisions is always restricted or limited by constraints. Constraints define the 'permissible' combinations of solutions that meet the basic demands. The dominant constraints are determined by the situation but might include lack of expertise, the amount of time or executive attention available, 'lock out' due to prior resource commitments, organisational culture, the need for consensus due to the balance of power in an organisation, and the assumptions underlying the theory of the service.

Figure 12.4 also shows how strategic action and behaviours are limited by the constraints in a situation. Situation A and B are an opportunity to launch some new services such as a non-invasive MRI centre, a bone biopsy clinic, and a new eye clinic. Situation B has more constraints; for example, there is a senior registrar who has requested the bone biopsy clinic and threatened to leave if you do not start one this year. Since this physician is among the most productive staff, the search for a high-quality decision is constrained; it feels that there may be no

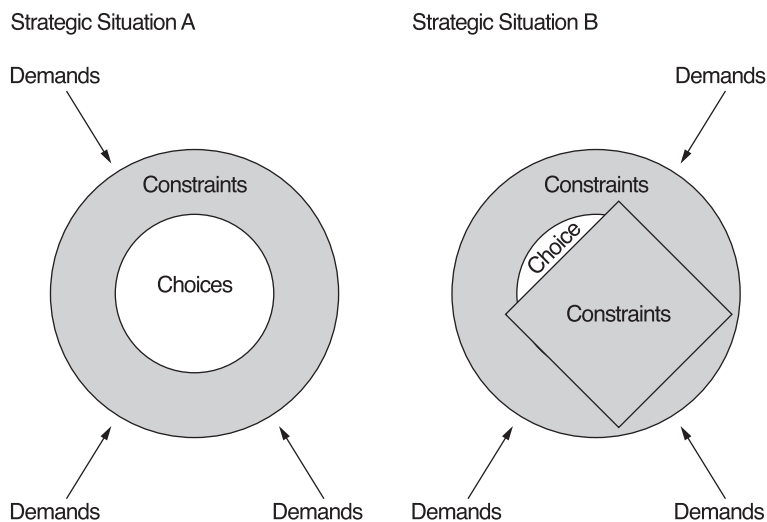


Figure 12.4 Demands and constraints on strategic thinking

choice but to adopt the technology. Good strategic thinking can help to uncover the options for any alternative.

Although demands and constraints cannot be ignored, good strategic thinking can require decision makers to explore all the options that are available.

Generic strategic demands on leaders

Every strategic problem places unique requirements on decision makers. When we look beyond the particular strategic issues of any given healthcare organisation, we find at least four generic demands on leaders. The key demands that underpin strategic analysis include: time pressures, multiple stakeholder values, complexity and uncertainty. Each of these demand characteristics will be discussed briefly.

Time deadlines put pressure on decision makers. Strategic thinking can be more vigilant if there is an adequate amount of time available (neither too much nor too little). Psychologists tell us that when deadlines overwhelm people such that they perceive an imminent crisis, mounting fear and helplessness can lead to poor judgment.²⁴ On the other hand, when the issue is off in the distant future, there is less vigilance. *Stakeholder values* reflect an individual's understanding of 'what ought to be'. There is no easy way to deal with the problem of multiple values in healthcare. When the culture of a medical practice includes a high regard for individual autonomy, a belief in professional accountability, a high degree of collegiality, plus a strong 'business' emphasis, the goals and interests will be in conflict. Negotiation may be necessary to achieve a consensus. When there is no clear goal and the situation is unclear, the result is *ad hoc* incremental or 'repair service' behaviour.²⁰ Managers get in the habit of solving the problems that people bring. A manager guided by complaints may focus on the symptoms and miss the underlying disease. Consequently, when multiple stakeholders are involved, a process is needed to build commitment to a shared set of goals with clear criteria of success.

Another demand on a leader's strategic thinking is complexity. *Complexity* has been defined as a situation in which there are many interrelated variables with multiple feedback loops. The greater the quantity of variables and the interdependencies, the greater the system's complexity.²⁸ With complex, novel or unstable situations either we lack knowledge, skills and experience, or we reach the limits of human ability. When confronted with a new situation, one should look for the history that fits by finding analogies, and then clarifying 'likenesses' and 'differences'.²⁹ The approach and methods should be discovered while taking action, which requires 'reflective thinking'.³⁰

A good example of a complex problem is thinking about the consequences of changing the mix of non-elective and elective surgical patients. One problem is managing patient flow when there are many interdependent work steps with randomness or statistical fluctuations. To think about this problem there are many elements. First there is the random arrival rates of acute patients that shifts the mix of clinical pathologies treated. There is also the utilisation of the fixed capacity such as operating rooms, intensive and regular beds. Three more variables include the talents of the clinicians, the variation in the service process, and the co-ordination of the activities throughout the care processes. The effect on performance of changing one or more of these variables is counterintuitive, making the hospital one of the most complex types of organisation known.

While complexity is real, it is also highly subjective. Since complex structures are hierarchical in structure and redundant, so the interactions among some sub-systems are weak, loosely coupled and trivial for any given problem.³¹ For example, we can focus on co-ordination between two departments without analysing the physiological and psychological differences among the stakeholders. Simon³¹ proposes that we can map the parts of the system and the parts that interact and collapse some of the complexity.

In science there is a presumption that strategic contexts and critical events can be measured or observed. The inability to visualise or observe an event or the consequences of change²⁰ with uncertainty being another demand on a leader's strategic thinking. In healthcare many do not have good information about clinical outcomes and satisfaction levels of various patient population segments and may have no information about clinical efficiency, service convenience or the amount of trust relationships between providers, patients and managers. Hence, some strategic decisions are made with a lack of knowledge about what will happen, because some events are difficult to measure or observe.

Generic strategic constraints on leaders

Every strategic problem places situational and generic constraints on decision makers. The time and effort required to work through strategic issues increase with the number of constraints on the problem. Three types of constraints will be highlighted: executive attention, wrong conceptual models, and the constellation of strategic sub-goals.

The first generic constraint on strategic thinking is the availability of *executive attention*. We live in a world that has an overabundance of strategic information. The internet has made information nearly a free good. The constraint is that healthcare managers are so busy that executive attention has become a scarce resource and a bottleneck for strategic thinking.²⁷ According to Cyert and

March,³² each member of the organisation has more demands on their time and attention than they can handle:

At any point in time, the member attends to only a rather limited subset of his demands, the number and variety depending again on the extent of his involvement in the organisation and on the demands of the other commitments on his attention.

External pressures, for example, competitive, legal or legislative, may decide the order of attention to strategic goals. However, people in organisations attend to certain parts of the environment and ignore other parts. Given the limits of executive attention, multiple conflicting values (or other conflicting demands) are rarely seen as a major problem for strategic thinking.

A second generic constraint on strategic thinking is choosing the *wrong reality model* or theory that explains performance. Forrester²⁸ described a reality model or theory as structural knowledge; that is, the decision maker's understanding of how the variables in a system are related in cause–effect relationships. Strategic decisions are constrained by structural knowledge and conceptual models and theories that may be wrong or incomplete.²⁰ In general, managers spend too much time staying current by updating information and too little time revising conceptual models.³¹

Every health service must answer three implicit questions: How do we create value for patients and employees? What is our ultimate destiny as a service provider? What makes our services distinct? The answers to these questions define the general theory that governs the performance of the service. The root causes of strategic failure are unchallenged assumptions about the variables that influence strategic thinking.³³

A further constraint for strategic thinking is the existence of *multiple sub-goals*.³⁴ Every health decision is subject both to budgetary and resource constraints and many other sub-goals as well. Though one sub-goal may be singled out as the primary 'strategic goal' for political or cultural reasons, the other sub-goals will constrain strategic decisions. If policy makers choose improved access over efficient clinical decision making or better outcomes as the desired goal, the other two immediately become constraints right away or during implementation. So the managerial domain seeking to offer efficient access to care confronts the clinical service domain seeking to offer the best quality of care. Both domains are constrained by the requirement that the care process should not exceed the budget, otherwise either volume or some amenities must be reduced. Though clinicians and managers may not share the same primary goal, finding an alternative acceptable or 'satisfactory' to both parties translates sub-goals into constraints.³⁴ Therefore, every strategic decision is concerned with finding alternatives that satisfy a large set of constraints.

Although there are unique demands on strategic thinking there is always residual choice. In the next section six pillars of effective strategic thinking are introduced. Having the discipline to use these pillars to support strategic thinking will expand the range of alternatives and options and increase choice.

Six pillars of strategic thinking

People are programmed to begin strategic planning by advocating or talking about solutions, preferred alternatives or obvious strategies. Leaders must avoid

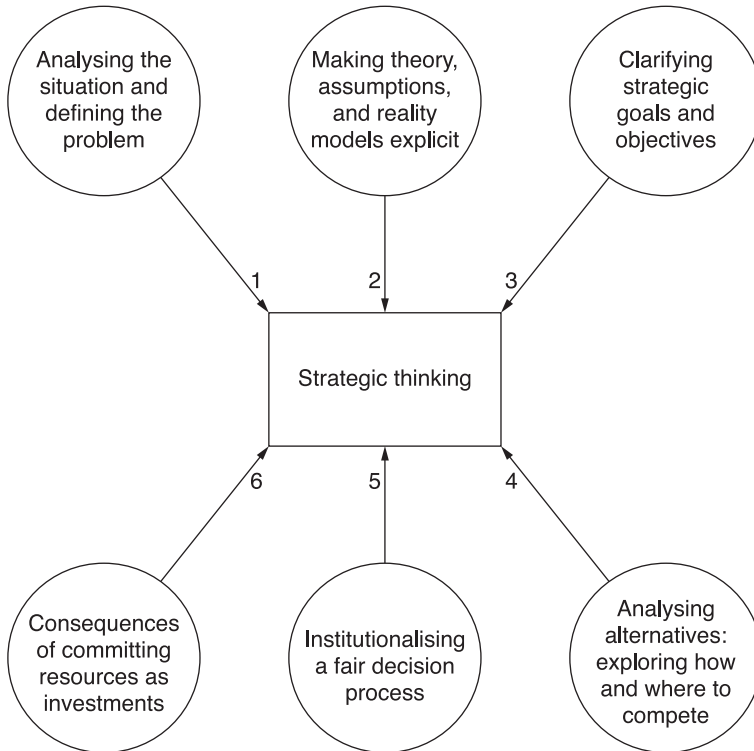


Figure 12.5 Six pillars of strategic thinking

premature discussion of strategic solutions for two reasons. The first is that people begin by strongly advocating one opinion. Assumptions and uncertainties in the situation become indistinguishable from known facts. A primary source of strategic mistakes is hidden assumptions.³³ Second, hidden assumptions will lead to two types of ineffective decision processes. If the decision makers have the same assumptions they will reach closure very fast without considering the full set of consequences; if they have different assumptions, the discussion will be never-ending and emotionally charged, at least until the deadlock is broken by abandonment or force.³⁵

Strategic thinking shifts the group from premature discussion of solutions to an exploration and understanding of the problem, the assumptions and the goals, before deciding on the alternatives. By shifting everyone's focus from solutions to effective strategic thinking, the decision makers have a better understanding of what is at stake and who holds the various points of view. Although strategic thinking slows down the decision process, the pool of information is enlarged as people have more time to think around what the decision is really about.

Figure 12.5 identifies six pillars that support effective strategic thinking. These pillars are the foundations of strategic thinking. Each one will be discussed in turn.

Pillar one: analysing the situation and defining the problem

Strategic thinking must begin with an inquiry into the context or predicament of the decision makers along with the basic conditions that define the immediate

situation. Managers begin by acquiring, focusing and analysing information and inferences about the situation. The goal is to separate the known facts from the assumptions and the uncertainties. Can anyone detect a pattern in how the situation is evolving? What are the time series or trends such as changes in patient attitudes, community demographics, demand for services, or new technologies?³⁶

Although environments are complex, most strategic problems can be broken down into smaller problems. As Simon⁹ has argued:

. . . there are millions of variables that in principle could affect each other but most of the time don't . . . in most situations we face we can detect only a modest number of variables or considerations that dominate . . .

To determine some of the key issues and dominant variables it is necessary to engage the decision makers by beginning a round-robin conversation with their stories about the key trends.²⁹ Tichy³⁷ suggests asking thought-starter questions.

- What is the environment you are working in today and in the future?
- Given the environment, what is the 'business' theory today and tomorrow (see Pillar Two)?
- How well do people understand the business theory? What do you need to teach them to change the theory for tomorrow? How will you do that?

The leader asks each decision maker to think about these questions and to tell 'their' story about the current strategic situation using three basic rules.

- 1 Take the best information into account.
- 2 Tell (or write out) the story in three or four sentences.
- 3 Make sure the facts can be verified.

As the story unfolds, determine the timeline, by asking when it started.²⁹ The group can ask each other 'who', 'what', 'when', 'where' and 'why' questions. After these discussions begin, the information must be interpreted. If the narratives are complicated by uncertainty, exploratory tools are needed to make sense of the situation.

There are three other tools to help strategic thinkers define problems and analyse situations:

- 1 Stakeholder analysis.
- 2 SWOT analysis.
- 3 Problem reframing.

Stakeholders are individuals, groups, coalitions, and organisations internal and external to the decision makers and 'who either affect or who are affected by a corporation's actions, behaviour, and policies'.³⁸

To undertake a stakeholder analysis, list all the internal and external stakeholders and identify their perceived stake or interest in the strategic situation such as needs, hopes, fears, and/or worries.³⁹

There are three advantages in understanding stakeholder interests. First, this analysis helps to determine the full set of consequences and the possibility for reconciling various interests. Second, thinking about stakeholder interests provokes the question; what will it take to get people to accept this decision or see this decision as in their best interest? Third, it helps to identify the options within

each strategic choice. Hence the analysis can help to make a connection between strategic thinking and strategic planning and implementation.

SWOT analysis identifies the strengths, weaknesses, opportunities and threats in the situation. Strengths are internal capabilities that enable and weaknesses are internal characteristics that prevent the organisation from performing. Opportunities and threats are external trends, ideas and events that create relative advantages and/or disadvantages.

The problem with SWOT analysis is that after all the relative advantages and disadvantages have been identified, decision makers end up with four lists. In order to make the SWOT analysis useful three questions should be raised.⁴¹

- 1 Where did the information on strengths, weaknesses, opportunities and threats come from?
- 2 How do we know they are correct?
- 3 Are they enduring and unchanging known facts or are they assumptions?

The group should go through the lists and separate each item into categories:

- Known facts.
- Interpretations.
- Uninformed opinions.
- Assumptions.

After a stakeholder and SWOT analysis have been undertaken, the problem or opportunity has been defined. Decision theorists have observed that defining a problem frames the situation and biases strategic thinking.⁴¹ More importantly, the way a problem is framed limits the identification of alternatives.⁴² They suggest writing down the problem, re-analysing the problem, considering other frames. Hammond et al⁴³ offer the following suggestion.

Begin by asking what was the triggering event? Then ask and answer four questions.

- 1 How have we framed the opportunity or problem we are trying to solve?
- 2 Which stakeholders or what conversations activated or provoked the need for a decision?
- 3 How are the two related?
- 4 Are there other ways to 'see' or reframe the problem?

One device to bring greater discipline to the analysis of situations is to separate known facts from uncertainties and assumptions.²⁹ The Oxford Dictionary defines a fact as 'a datum of experience as distinct from conclusions'. Facts are final and reliable realities, but there are several problems with facts. First, there is always a paradox: too many yet too few facts.³¹ Often we know more about the recent past and not enough about the remote past.³⁶ Second, we may know a lot about activity this month, but very little about the conditions or processes that caused an increase or decrease in activity. We can count the number of visits but these do not speak for themselves. We can find statistical association among variables, but rarely attain real contextual knowledge about the past. To help organise the facts, we need a theory or reality model, the second pillar of strategic thinking.

Pillar two: making theory and assumptions explicit

Having begun an initial analysis of the situation and formulated a definition of the problem it is important to uncover the hidden theory or reality model. Theory is a constellation of many relevant or important variables in cause–effect relationships; that is, it identifies the critical variables that interact with a large number of other variables. Theory preserves the relevant facts and eliminates the irrelevant facts. Unconsciously, people may turn their backs on acquiring new information because a hidden theory ruled those facts out. If the business theory no longer fits the current reality or the facts of the situation, strategic failure is likely.

Theories are limited by the decision maker's definition of the problem situation and vice versa. In this sense, the theory of the business is like a trap designed to catch one type of animal.⁴⁴ Just as a lion trap will not catch a mouse or a butterfly, you design the trap based on the type of animal and you just might catch that animal. Theories are either incorrect owing to evidence to the contrary, or not yet known to be incorrect, but will eventually be proven wrong. It is important to make theory explicit.

Drucker³³ proposed that every successful organisation has developed an implicit theory of the business that is a proven formula that guides strategic actions. For any given situation, past experience has taught decision makers to differentiate variables that exert a strong influence on performance and success from the variables that exert little or no influence. They have learned that if they make small changes in those variables, outcomes can be influenced.

According to Drucker the theory of the business is based on aligning three types of assumptions.

- 1 Assumptions about the task environment (i.e. what society is willing to pay for).
- 2 Assumptions about core competencies (i.e. primary activities that the organisation must succeed at performing).
- 3 Assumptions about mission (i.e. how success is defined).

An assumption is an unconscious or tacitly expressed apprehension of the world. Assumptions are taken for granted to be evidence-based conclusions and therefore, final and reliable realities. Incorrect assumptions preclude some viable alternatives; consequently they are self-imposed constraints. Although many assumptions are hypotheses, and therefore tentative, hidden assumptions become unquestioned conclusions that block inquiry and promote advocacy. When people have rival hypotheses, facts can be used to test each hypothesis. If people hold different assumptions, facts do not resolve the issues but are drawn selectively to confirm what people assume.

Mitroff³⁸ was once brought in to help a healthcare organisation whose executive team were trying to solve some strategic problem. Although the decision makers had collected and analysed the same information, each faction reached different conclusions. What caused the deadlock? Mitroff discovered that each faction relied on different assumptions.

More data only served to activate underlying differences. It did not test or resolve them, it only made things worse. We have a perfect example of where more can lead to less. Since for the most part the assumptions

remained buried and implicit, the groups themselves were largely unaware of what was happening. All they knew was that time and again they had disagreed and were immensely frustrated.

In healthcare organisations challenging assumptions is not always so straightforward. Financial information, budgets and other historical ‘facts’ explain success or failures. Since all of this information requires interpretation, even the hard facts are actually assumptions. Sometimes what we believe to be facts are only ‘agreed-on’ assumptions that we treat like facts to move things along. Assumptions provide people with psychological security that they can predict what will happen, or what to expect. Psychologists argue that since people avoid uncertainty, they may not accept the possibility that their assumptions may be wrong or incomplete.²⁰

Identifying assumptions as hypotheses

The cure is not only to separate facts from assumptions, but to prioritise and challenge these assumptions. There is one trick to challenging assumptions. Having identified strengths (S), weaknesses (W), opportunities (O) and threats (T) in the SWOT analysis, ask everyone to take each item under SWOT and label it as either (1) a known fact or (2) an assumption. Next ask them to identify the most important or critical assumption in each of the lists. Next call this assumption a hypothesis and ask the group to think of rival hypotheses. Then allocate each person an imaginary £100 000 to invest and ask them how much of that £100 000 they would bet on the critical assumption. Review the assumptions according to the amount of money people would wager.

Pillar three: clarifying strategic goals and objectives

In every strategic problem there are a few key result areas that define success. Strategic goals are desired outcomes and objectives and help to specify a way to get there. In this sense, goals are the ‘value premises that can serve as input to decisions’.³⁴ Therefore, when leaders undertake strategic thinking, nothing is more important than setting clear and engaging goals.

Goals play a role in problem solving because they define the purpose of the inquiry in terms of what people truly ‘hope’ to accomplish. Goals help to find the right alternative by answering the question: what would constitute a path to solving the problem? When we want to improve the quality or efficiency of a service, clear goals can become a guiding light for strategic activity.

When goals are unclear, managers will never know whether the goal has been attained.²⁰ ‘To improve the quality of care’ or ‘to make the clinic more accessible’ are examples of ill-defined and arbitrary goals. Consider the ‘quality of care’ goal: although it is vague managers will take a random series of actions to fix whatever complaints about quality arise. This is ‘repair service’ behaviour – unclear goals that lead to fixing whatever problems are brought forward. The potential consequence is fixing trivial quality problems and becoming a prisoner of the moment, which may mean ignoring underlying problems until they become catastrophic quality issues.

There has been a vast amount of research on the importance of defining explicit goals or criteria of success. There is clear evidence that specific and challenging

goals lead to better performance than less difficult goals, but goal setting does not guarantee success, because goal setting has to think about the demands and constraints on decision making. Here are three techniques to establish goals.

One approach⁴³ is to engage all of the key decision makers in an idea-building and brainstorming session aimed at uncovering desires and concerns. Given the analysis of the situation, what do the decision makers really want? Ask the key decision makers to list their concerns, desires, hopes and fears. Ask them to clarify what they really mean by their concern or desire.

Hand out a summary of the stakeholder and SWOT analysis (Pillar One). What are the concerns and interests of the stakeholders? Have each person tell a story about the best-case and worst-case outcomes. How would we explain these outcomes to the stakeholders? Finally, what would be needed to explain the rationale to the stakeholders for an alternative?

Once a list of goals exists it is possible to develop a sense of the relatedness or unrelatedness among goals, and priorities if they exist. Some goals are a means to an end, for example, if a healthcare programme identifies the following goals offering results as important performance areas.

- Offering excellent health services to patients.
- Obtaining superior clinical outcomes.
- Limiting long wait times.
- Providing rapid responses to emergency situations.
- Ensuring all clinicians are experts in their sub-specialty.

Upon closer scrutiny we find that some of these goals are instrumental, that is, the means to get to some end, and others are terminal goals. The instrumental goals are: limiting wait times, providing rapid responses and ensuring clinical expertise. If achieved they will enable provision of excellent health services and obtain superior clinical outcomes.

One technique to help identify relationships among terminal goals and instrumental objectives is to ask the 'five whys'. The process works as follows: ask 'why' and when an answer surfaces, ask the second 'why' about the answer given, and continue until you discover the hierarchy of relationships among the key result areas. By asking 'why' do we want to limit long wait times, 'why' do we want to ensure all clinicians are experts, decision makers may discover that shorter waits and clinical reputations are related to customer perceptions of excellence but not related to other key results.

Once the constellation of concerns and desires surfaces into key result areas, they need to be converted into well-defined strategic goals. According to goal theory, strategic goals should have six characteristics.^{46,47}

- 1 Begin with the word 'to' followed by an action verb aimed at producing a single key result.
- 2 Write in explicit language such that the goal can be measured.
- 3 Set goals that are difficult to reach but attainable.
- 4 Ensure the goals are logically related to the key performance areas and connected to the defined problem.

- 5 Specify four features of each goal: a target date, the people accountable, some quality standards, and maximum cost factors.
- 6 Establish a consensus that the goals are acceptable to the decision makers (see Pillar Five).

Pillar four: analysing alternatives: exploring how and where to compete

This pillar gets decision makers to think about strategic alternatives. Healthcare organisations have to think about two basic strategic questions: where to offer their services and how to offer the services. There are several tools that can be used to think about how to redesign healthcare programmes and activities. A complete discussion of these tools is beyond the scope of this chapter. To achieve strategic advantage, Porter¹⁷ has argued that there are some basic strategic alternatives: strategies aimed at serving a mass market and/or strategies aimed at serving a targeted market segment. Two mass market strategies are cost leadership and differentiation. The advantage of cost leadership developing an activity system is that it produces a product or offers a service that is below the cost of similar organisations. The advantage of differentiation comes from increasing the perceived value of a product or service relative to the value of other organisations' products or services. Since there are only two generic strategies, having unique qualities or being very efficient due to a unique cost structure, if you have neither of these qualities you are 'stuck in the middle'.

Market segmentation strategies are sometimes called focus strategies and are targeted to meet the needs of a specific patient population. The advantage of focus is to achieve either cost leadership and/or a differentiation strategy.

Traditionally, general hospitals have been organised around medical departments: orthopaedics, medicine, surgery, paediatrics and departments such as laboratory services, radiology, therapy services, nursing departments, and so on. As a result, healthcare organisations and clinicians have a habit of 'doing everything for everyone' and their strategies have been limited. They neither achieve cost leadership or real differentiation. In healthcare, each clinical programme should develop focused strategy that strives to meet the health needs and wants of a specific patient population in a way that achieves both very high quality and efficiency.

To begin thinking about this aspect of strategy, it is helpful to organise the vast amount of healthcare information in new ways. For example, to develop insights and to organise their thinking about strategic alternatives, Intermountain Health System in Utah in the United States developed a new system for categorising their work. They identified 600 clinical work processes. Upon closer examination, they found that 62 care processes accounted for 93% of acute volume and 30 processes accounted for 85% of outpatient volume.⁴⁸ Moreover, after grouping work processes into nine clinical programmes built around the 600 tightly coupled work processes, they found that nine of the most common work processes in the cardiovascular clinical programme accounted for nearly 19% of the health system's inpatient and outpatient costs. By applying the Pareto Principle, they discovered that a minority of causes, inputs, and/or effort usually lead to good

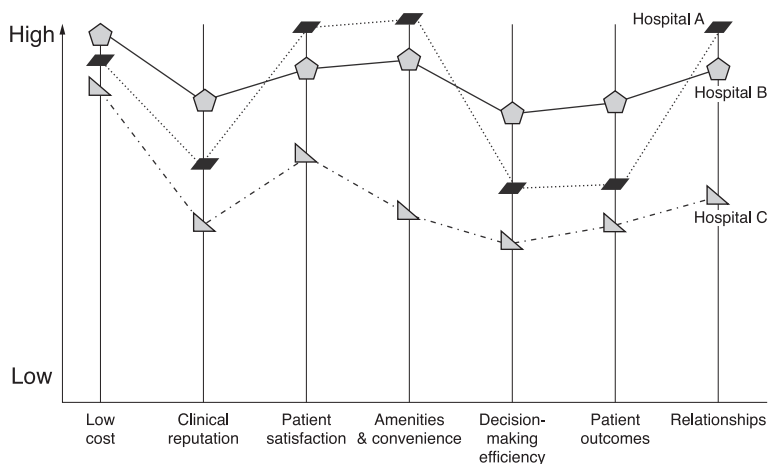


Figure 12.6 Value curves of three major providers of healthcare services

results. This helped Intermountain to achieve more with much less effort and to develop breakthrough strategic thinking.

Visualising quality and costs can also help strategic thinking. Kim and Mauborgne⁴⁹ advocate unlocking the creativity of people by showing a visual profile (or value curve) of the factors that influence competition and the location of current and potential competitors. The attributes assumed to be important to patients are low cost, clinical reputation of the hospital and attending doctors, as well as five consumer-driven dimensions of quality that have been elucidated by Axelrod and Cohen.¹² The five dimensions of quality are: patient satisfaction, amenities and convenience, decision-making efficiency, patient outcomes and relationships: information and emotional support.

Figure 12.6 depicts one Asian hospital's portrait of the competition's value curves.⁴ Hospital B's physician-centred rather than patient-centric culture results in its poor performance in patient satisfaction, amenities and convenience and relationships. However, it dominates A and C on four key dimensions: cost, decision-making efficiency, patient outcomes and clinical reputation, reflecting its status as an academic medical centre. Hospital A is more expensive but dominates B and C on amenities and convenience, relationships, and patient satisfaction. Clinical reputation is moderate, reflecting its lack of publications and teaching and its approach of replication rather than innovation. Hospital C is inferior on all seven dimensions. In particular, its decision-making efficiency is assessed to be lower than A and B as the fee-for-service method of billing creates an incentive to perform a higher volume of procedures, investigations and longer stays in hospital.

Another simple tool to help strategic thinking is to observe the evolution of case mix trends in the healthcare organisation. Based on degree of complexity and severity of the health services provided, all clinical programmes could be segmented into three pathology categories from low to high: A, B and C. For example, in the case of medical centres, tooth extractions are simple, routine procedures and fall into an A category of care. On the other hand, the transplant programmes are very complex, dealing with many uncertainties, and would fall

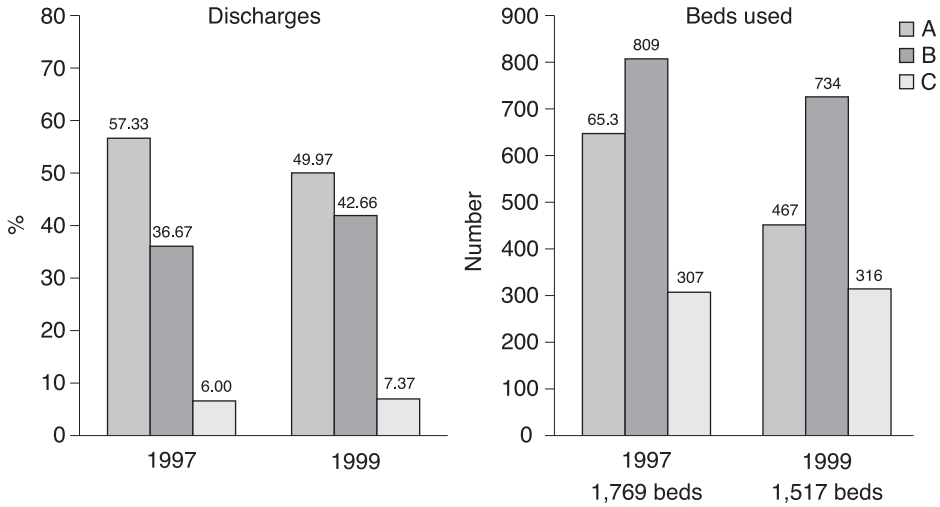


Figure 12.7 Evolution of pathology severity (A, B, C pathology)

into the C category of care. Category B represents moderately complex and resource-intensive patient care, such as cardiac surgery. Figure 12.7 shows how the evolution of pathology at one medical centre had been shifting from A to C care in terms of beds and admissions.¹¹

ABC patient pathology is categorised by degrees of complexity, based on patient’s resource utilisation, the co-ordination requirements, complexity of clinical findings, rarity of disease (requiring sub-specialty attention) and risk of complications. A-cases are the least complex, C-cases are the most complex (adapted from Chilingierian and Vandekerckhove¹¹).

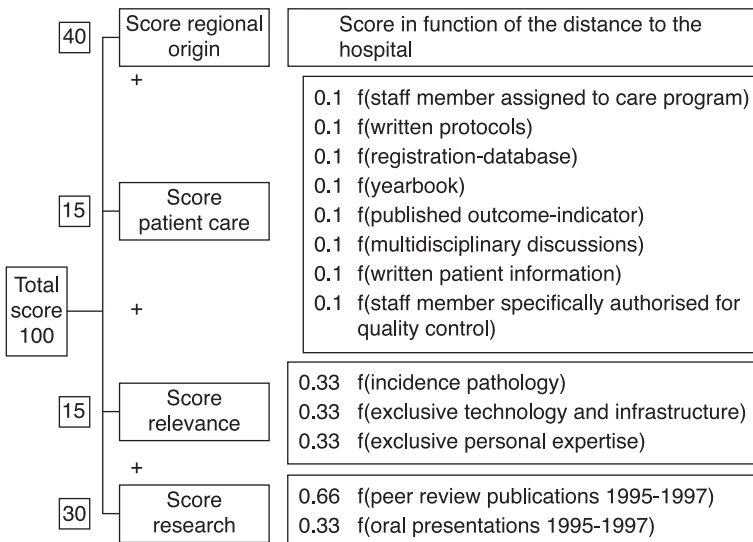


Figure 12.8 Strategic thinking in healthcare: profile score. Adapted from Chilingierian and Vandekerckhove¹¹

A comparative analysis of the care programmes' performance might help the clinical leaders to think more strategically about how the medical centre has been positioned. Figure 12.8 illustrates how one medical centre developed a system for comparing each care programme to all others on two dimensions:

- 1 The financial attractiveness or profitability of the service.
- 2 The clinical or academic profile.

The clinical profile was developed by the clinicians based on several dimensions:

- the average distance the patient travelled to the hospital
- the quality of patient care
- the research attached to the care programme
- the amount of expertise in relation to competitors.

Therefore some care programmes can be profitable and have a high profile, or less profitable and have a less distinctive profile.

Another hospital in Belgium began strategic thinking by organising their clinical work into 250 care programmes, such as transplantation, tumours and obstetrics. To take a more objective approach to making choices in medical strategy, the medical centre utilised portfolio analysis to evaluate all of the care programmes. Figure 12.9 illustrates how a portfolio approach can help healthcare organisations think about their competence priority and resources that they should give to the different clinical programmes in their portfolio.

Figure 12.9 reveals that obstetrics and transplantation are both financially attractive. Although transplantation has a high profile the obstetrics programme is not differentiated. Ambulatory care is neither distinct nor financially attractive. With the help of the next tool, decision makers can generate alternatives aimed at strategic changes; growth, improvement, outsourcing, etc.

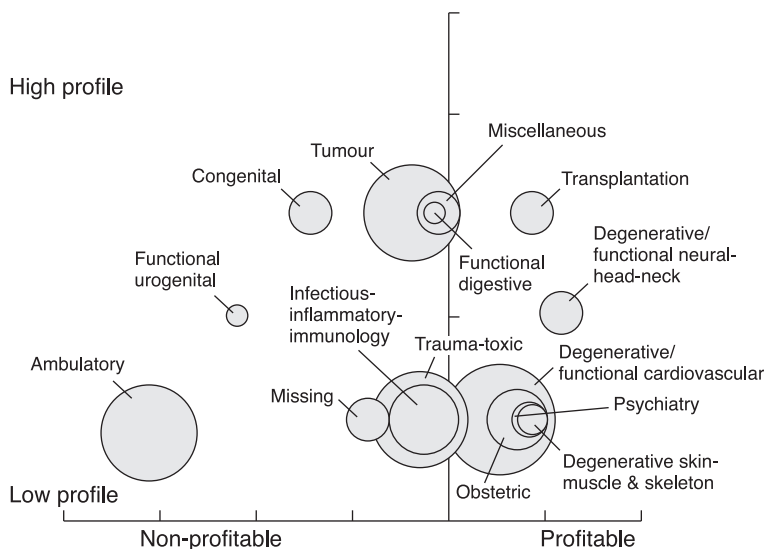


Figure 12.9 Strategic evaluation of care programmes. Adapted from Chilingirian and Vandekerckhove¹¹

When thinking about where to compete, Porter¹⁷ argues that diversification, whether through acquisition, joint venture or start-up, has not been a successful strategy. He argues that before an organisation considers diversifying it must answer these questions.

- How attractive is the industry in terms of an organisation’s ability to create value?
- What is the cost to enter this industry?
- Who will be better off after the decision?

Each question is a hurdle and each one must be passed. Consider the attractiveness of the industry in terms of ability to create value. There are five forces governing industry competition:¹⁷

- 1 Threat of few entrants.
- 2 Bargaining power of suppliers.
- 3 Bargaining power of customers.
- 4 Rivalry among others offering similar products and services.
- 5 Threat of substitute products and services in the future.

The collective pressure from these forces determines whether or not the industry is attractive. An attractive industry has high barriers to entry, modest buyer/supplier power, few substitutes and stable rivalry.

If the industry is attractive, then the second cost to enter this ‘test’ must be passed. The cost of the investment decision (which includes time, talent and reputation as well as money) must not ‘capitalise’ all future benefits. Again, if this second test is passed and the opportunity still seems very attractive, the ‘better off’ test must be passed. In the case of acquiring a new business or service, either the organisation or the new business must be better off after the acquisition. Given the current merger mania, this approach can be very helpful for healthcare organisations.

Another tool to help thinking about where to compete is shown in Figure 12.10. This figure identifies a matrix that guides strategic thinking based on the

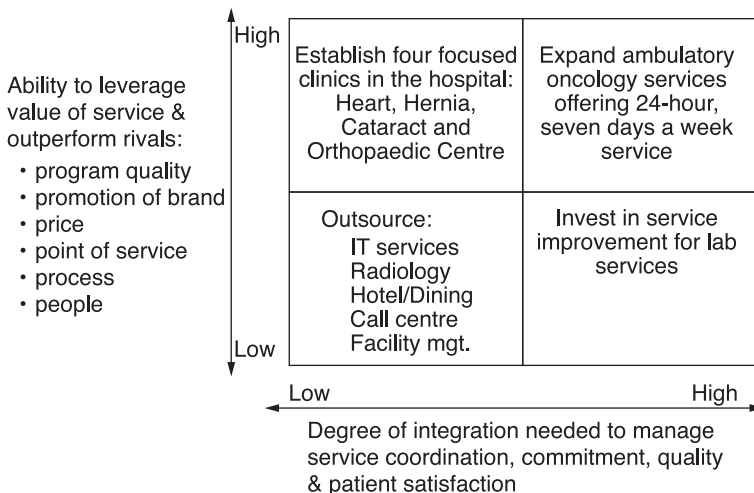


Figure 12.10 Rethinking the mix of services

ability to leverage the value of the service and outperform others, and the degree of integration needed to manage service co-ordination, commitment, quality and patient perceptions. This tool can help to identify four redesign activities:

- 1 what health services are core services
- 2 where to invest and improve
- 3 where to outsource
- 4 where to focus the strategy.

Figure 12.10 shows how a healthcare organisation can use this matrix to rethink the mix of services and develop a new strategic service vision.

Strategic thinking applied to international healthcare

Globalisation takes place if there is some distinct advantage in integrating medical specialties and/or clinical activities worldwide.⁵⁰ If healthcare organisations effectively transition into global players, they could have global access to: knowledge, financial capital and social capital. As Alsagoff⁴ points out:

An organisation that employs doctors in many geographical locations can exploit ICT to overcome the inertia of doctors to knowledge sharing or their incapability to husband and harvest widely dispersed information. More effective knowledge management accelerates the development of its medical specialties and clinical activities, which are important sources of advantage.

In other industries, large global organisations like Wal-Mart compete aggressively with low prices, depth of inventory and/or their unique product offerings. The incipience of global healthcare presents a credible threat to every country where a foreign provider could offer better value. Some foreign providers bring efficient clinical decision making, tacit knowledge and innovation, lower prices, or all four. For example, a South African cataract team was brought into a hospital in the National Health Service for six weeks to manage the backlog of patients. After six weeks the surgical team from South Africa eliminated a six-month backlog of cases, achieving clinical efficiency four to five times higher than the resident ophthalmology staff.

Like it or not, local healthcare providers will face even greater international competition in the future. Will small domestic healthcare providers stay the course, merge, go out of business, or get acquired? Will globalisation lead to national health policy restrictions of professional licences to practise or be open to global providers?

Whatever the outcome, health leaders have to think strategically about whether their organisations need an international strategy. Figure 12.11 is a tool to think about expanding on an international scale.² Each quadrant is a strategic approach to meeting local needs while integrating international health practices with domestic know-how. The strategy represented in the bottom left quadrant would merely buy or build a health facility in another country and would not draw on its home-oriented advantages by sharing services, transferring clinical or non-clinical know-how. If the hospital or faculty was successful, they kept it; if it was not, they divested. In the past, several hospitals that tried this international approach have not been successful.

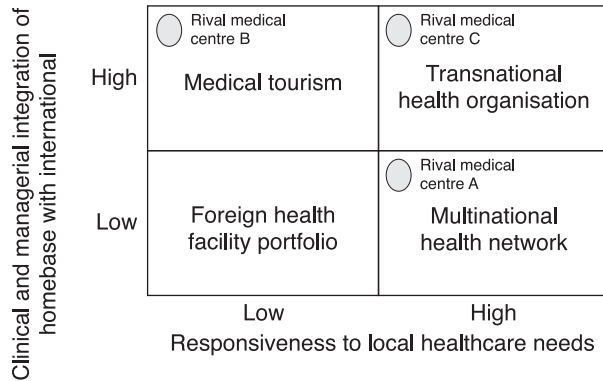


Figure 12.11 Thinking about a multinational strategy: standardisation versus adaptation. Adapted from Chilingirian and Savage²

The upper left quadrant emphasises scale efficiency with a high degree of co-ordination and integration between operating strategies and the delivery of clinical services. This may be where most healthcare organisations are today. For example, to create value in international one-stop shopping, medical centres must set up an integrated set of activities that includes: airport pick-up; appointment co-ordination; and leveraging the value of diagnostic, surgical and medical services.

The bottom right quadrant develops an alliance with local providers but attempts little or no integration with headquarters' operating strategies and delivery systems. The upper right quadrant achieves both clinical and managerial integration between the operating strategies and delivery of care while targeting their services and service concepts to meet local needs.

Figure 12.11 can also be used to develop an international growth plan. Doz, Santos and Williamson⁵¹ theorise a three-phased approach to global organisation, based on the degree of standardisation versus customisation. In Phase One, organisations build on innovations and financial success of their domestic operations. Phase Two sees them expanding geographically into nearby markets, usually through leveraging local success in order to provide low-cost services. In Phase Three, they expand into more markets and balance local responsiveness with global integration. Alsagoff⁴ used this approach in his analysis of medical centres A, B and C in Asia in order to develop an international growth plan (see Figure 12.11). Medical Centre C is a transnational healthcare organisation that established many hospitals outside of its home-base country and is integrated with its flagship. Medical Centre A is still a multinational health network, since its overseas hospitals are not well integrated with its home-base hospitals, while Medical Centre B is focused on medical tourism with little interest in meeting local needs.

Pillar five: institutionalising a fair decision process

When organising for strategic thinking, there are several questions that a manager/leader must answer.

- 1 Who has 'organisational rights' to be involved with this decision?
- 2 Who has the expertise to help us think about this decision?
- 3 Who should be consulted prior to or during the decision making?
- 4 Who will be informed of the rationale for decision and the expectations?

Once these questions are answered, the fifth pillar of strategic thinking is developing a collaborative problem-solving approach termed 'fair process'.⁵² This is a pillar in which students of organisation theory have observed that strategic behaviour is not highly correlated with the so-called 'requirements of their environmental situation' but is contingent on the type of decision processes.^{24,9,10} There are many varieties of ineffective decision-making processes; three will be highlighted.

The first ineffective decision process has been labelled 'group think'. This process focuses on a problem – however, the group is insulated from external scrutiny, displays strong advocacy as opposed to inquiry norms, and has a history of authoritarian leadership. The process leads to rapid convergence and the product is decision-making failures.^{24,10} A second type of decision process identifies a problem, the group then begins what is perceived to be an endless discussion, until it is clear that a political deadlock is reached, and the only tangible product is the identification of 'friends and foes' rather than an effective decision. A third decision process is the so-called garbage can process, which begins with a solution in search of a problem.⁵³

Many things are happening at once; technologies are changing and poorly understood; alliances, preferences, and perceptions are changing; solutions, opportunities, ideas, people, and outcomes are mixed together in ways that make interpretations uncertain and leave connections unclear.

The decision context is characterised by turnover of decision makers, unclear preferences and measures of success, and no sure enough way to succeed. People permanently attach themselves to issues and, depending on who shows up, any solution can be associated with any problem. When there is an opportunity to resolve a problem, some set of the permanent issues takes over the debate and time is the source of order.

In contrast to the other decision processes, fair process has several characteristics. Fair process engages key people to analyse the situation resulting in a framing of the decision problem, explores and narrows the list of new ideas, explains the rationale for decisions, setting expectations about roles and responsibilities, and implementing the strategy with an eye toward evaluation and learning.⁵⁴ Studies of decision making have found that commitment to strategic goals is directly related to the perception that the decisions process was 'fair' even if decision makers disagree with the final outcome or alternative selected. Commitment to strategic goals means that the key people are drawn to the strategic goals because they believe the strategy is important. Moreover, they will persevere to implement the strategic activity even when there are severe constraints.⁵⁵

Consider the role of leadership. Strategic thinking management is not about strong and brilliant leaders telling people where we should go and why, it is all

about framing and asking powerful questions and applying concepts and analytic techniques. It is presumptuous and arrogant for any top leader to tell people what they should aim for and how to deliver health services but asking 'what should we aim for?' and 'how can we deliver health services?' are powerful questions.⁵⁶ Even in a crisis, the top leaders do not make strategic decisions unilaterally. The work of the leader is to establish the conditions that enable key internal stakeholders to develop a capacity for planning and execution, and to coach and facilitate a process to be sure that closure is always reached.

There are several behavioural principles involved in fair process. The first is the idea that while people are the source of novel ideas and strategic innovations, no individual can evaluate the added-value of their own contributions. A process is needed to determine whether everyone agrees and there has to be time to take a dialectical approach and build on the areas of agreement and allow the sources of disagreement to be aired.

A second principle of fair process is setting clear expectations about roles and responsibilities. As Kim and Mauborgne⁵² argue: 'it matters less what the new rules and policies are and more that they are clearly understood'.

A third behavioural principle is the need to build (not request) commitment to a strategic direction. Commitment to strategic direction is enhanced when people believe that the strategy (i.e. skilled sequence of activities) is achievable, important and meaningful to the group or organisation.⁵⁵ When strategies are seen as achievable, people have more self-confidence. When people are self-confident they take on much larger strategic challenges. To make strategic goals important and meaningful to people, leaders must persuade, clarify and explain the rationale for the strategic choices selected. Goals assigned with a clear rationale as to why they are desirable and achievable can be as motivating as strategic goals arrived at via mutual participation.

Fair process combines two ingredients in a single process: rational process and interpersonal process. Rational process has been explained in the previous five pillars. To reiterate, it begins with an analysis of the situation and a clear separation of the facts from assumptions before alternatives and consequences are discussed. Good interpersonal process involves engaging people in an analysis of the problem: actively listening to various points of view, understanding the contributions of everyone, reviewing and summarising what has been said.

Management of the emotional aspects of decision making does not require controlling or suppressing inappropriate feelings, rather it requires accepting the inevitability of emotions and using emotion to motivate the group to commit to the shared goals that the group wants to attain.⁵⁷ The idea is to create challenge and dissent in a way that conveys 'I may not agree with you, but I do understand why this is important to you'. Ultimately, fair process will help the leader build commitment to the strategic goals and decisions.

Pillar six: consequences of committing resources as investments

A careful analysis of the situation, separating facts from assumptions, identification of strategic goals, and thinking about how and where to compete should identify where the organisation should invest time, energy, and talent. Since major strategic commitments are not easily reversed, the consequences of

each alternative should be analysed against the strategic goals. However, each alternative has a set of consequences; some clear, others more ambiguous.

It is important to distinguish types of resource allocation decisions: expenditures and investments. Expenditures are irreversible prior decisions that accumulate and are consumed by annual operating budgets. Investments not only buy new tools, catheterisation labs, positron emission tomography scans and DaVinci robots, they also commit money, reputation and talent to an uncertain future.

Every organisation has an implicit strategy that results from a pattern of investment. There are two interesting outcomes of an investment pattern. First, you can become a prisoner of your past decisions. Commitment refers to major strategic decisions that affect resources in a way that influences future choices and limits opportunities.⁶ For example, once an organisation has decided to develop or acquire a diagnostic treatment centre, launch a new MRI service, or add beds to the surgical intensive care unit, the menu of future options has been dramatically reduced. Strategic choices force a 'lock in', a cost based on a past strategic choice. Investments that sink clinical and managerial talent, human effort, capital, and reputation into uncertainty should not be made intuitively or impulsively.⁵⁸

Strategy represents the capabilities that an organisation has built and how an organisation has been able to use those capabilities to create value. A pattern of investment also creates specialised skills, patents, tacit knowledge, unique work processes. A second outcome of a pattern of investments is that these specialised assets are hard to copy or imitate.

The sixth pillar of strategic thinking considers the 'full set' of consequences, as well as the risks and uncertainties before committing resources to a strategic direction. By definition, decisions are 'strategic' for two reasons: they are made without knowing exactly what is going to happen; and the decisions are 'important' because the decision involves a commitment with risk. Risk can be defined as a decision maker's exposure to a chance of a loss. The phrase 'chance of a loss' (or probability of loss) refers to the degree of belief that people have that the loss will take place.⁵⁹

In considering risk, decision makers should ask each other what kind of resource commitment would be made.⁶⁰ Any strategic decision can be divided into:

- **large risks:** commitments that could have large payoffs in some scenarios, or large losses in other scenarios
- **sustainable risks:** commitments with a large positive payoff in some scenarios, or small losses in other scenarios
- **win-win risks:** a commitment that offers various benefits in virtually every scenario.

To understand the full set of consequences, strategic thinking must uncover the amount of uncertainty; the lower the amount of uncertainty, the better the understanding of the likely consequences. Uncertainty, as it is used here, is defined as a lack of sure knowledge about past, present or future events. Consequently, every strategic situation could be categorised by the amount of uncertainty in framing the problem and finding a solution.^{56,59,60} Table 12.1 displays strategic situations by five classes of uncertainty. For example, in class 1, which represents the lowest levels of uncertainty, decisions are mechanical and do not require a great deal of strategic thinking. The problem is well-defined and

Table 12.1 Strategic situations by degree of uncertainty

<i>Situation</i>	<i>Degree of uncertainty</i>	<i>Problem</i>	<i>Solution/Execution</i>
Class 1	Low	Well-defined	Clear/straightforward
Class 2	Low–Moderate	Well-defined	Few discrete approaches
Class 3	Moderate	Several frames	Few discrete approaches
Class 4	High	Many frames	Many scenarios
Class 5	Ambiguous	Many frames	Unknown solutions

the trends are clear enough to be able to predict what might happen if a strategic opportunity is exploited. An example of low uncertainty would be determining the costs and benefits of shifting acute cases over to day surgery, such as simple inguinal hernias or eye surgery, or developing clinical guidelines for ACE (angiotensin converting enzyme) inhibitor therapy. There are other strategic situations that have much higher levels of uncertainty.

The second class of uncertainty problems can be framed and diagnosed easily but there are alternative methods and a few discrete consequences or outcomes, when one or more of the alternatives have a likelihood of a discrete success or failure. For example, developing clinical protocols for cardiovascular care, such as diagnosis and management of heart failure-systolic dysfunction.

The third class of strategic problems contains even more uncertainty. The problems can be framed in a variety of ways, and there are a few discrete alternatives available. For example, developing an integrated patient care management system that includes electronic protocols, electronic clinical charting, and a centralised patient data base.

Class 4 uncertainty has many ways to frame the problem and many ways to predict the outcomes based on the ‘what ifs’. Few technical tools are available; the situation requires more of a pilot testing and learning approach. Class 4 problems are complex because the number of scenarios rises exponentially with the number of inputs.⁵⁹ For example, if there are 10 uncertain variables, each with only three discrete event outcomes, there are $3^{10} = 59\,059$ scenarios. In these cases it makes sense to develop three scenarios: a ‘base’ case, a worst case and best case. Each scenario should have a decision tree that makes the likelihood of the various outcomes or consequences more explicit. Examples of this type of uncertainty would be exploring opportunities to franchise hospitals, or expanding international healthcare delivery and medical tourism in developing countries in Asia.

Class 5 uncertainty has been called true ambiguity because ‘multiple dimensions of uncertainty interact to create an environment that is virtually impossible to predict’,⁶⁰ as unknown variables that would define the future. Examples would include developing public health programmes to respond to bombings or bio-terrorist action. Fortunately, class 5 decisions occur infrequently.

In class 2, 3 and 4 there is trial and error and learning from experience. If assumptions are understood and made explicit, learning can occur. Although class 5 uncertainty is largely unstructured, managers should identify what is known, what is unknown but knowable, and how the trends (if any) have evolved over long periods of time.

Connecting strategic thinking with strategic planning for health services

Throughout the last section the six pillars have brought organisational strategy into sharp relief. Each pillar has something to contribute on that score. The pillars invite the decision makers to take adequate time to explore and reflect. After the six pillars of strategic thinking have been attended to, the care programmes must develop a service vision or plan for implementing strategic ideas.

Strategic planning relies on creative thought. In this sense, planning requires solving a simultaneous equation that considers how to formulate a service to meet the wants and needs of some target patient population. Planning also means imagining the consequences of implementing a strategy. How close will strategic activities get to the desired long-term goals? What organisational and cultural changes are needed to implement the strategy?

A brilliant framework developed by Heskett⁶¹ can help to bring all of the work of strategic thinking into a bona fide plan of action. The strategic service vision is a way to organise people, process, and other assets to offer patients and consumers better value.

In health services there is an internal and an external service vision. The external refers to creating value for patients, their family and friends. The internal service vision refers to the creation of value for clinical and non-clinical employees. A service vision contains four basic elements: a targeted market, a well-defined service concept, a focused operating strategy and a well-designed service delivery system.⁶¹ In addition to these, there are three integrative elements, woven through the model, that connect the four basic elements in order to become a fully developed framework for both planning and executing strategic thinking. These are: strategic positioning, leveraging of value over cost, and integration of strategy and systems. Although these integrative elements are a part of the overall strategic planning process, they also serve as a means to analyse a service and its level of success. The following discussion draws heavily on Heskett's work.⁶¹ Each of the elements of the strategic service vision will be discussed.

Figure 12.12 showcases how all of these elements work together in an organisation's strategic service vision.

The first element of service planning is identifying a targeted market segment. Market segmentation groups categories of patients into smaller, stable, homogeneous groups. The size of a group should be large enough to provide an efficient service – 'critical mass'. Patients can be categorised by illness and further segmented by psychographics; personality, attitudes, lifestyles or demography; age, education, gender behaviour; or loyalty or utilise.

Market segmentation defines a distinct group of consumers who require special products or services. Segments can be based on needs and are evaluated both in terms of financial attractiveness and in a group of consumers identified by one or more characteristics that allows the organisation to design a product or service to meet their needs. Having a 'targeted' market is important because a service should not pretend to serve every need for every type of patient.⁶¹ Patient segments can have both demographic and psychographic – actions prompted by thoughts and feelings of fear, pleasure, boredom, vanity and so on – dimensions

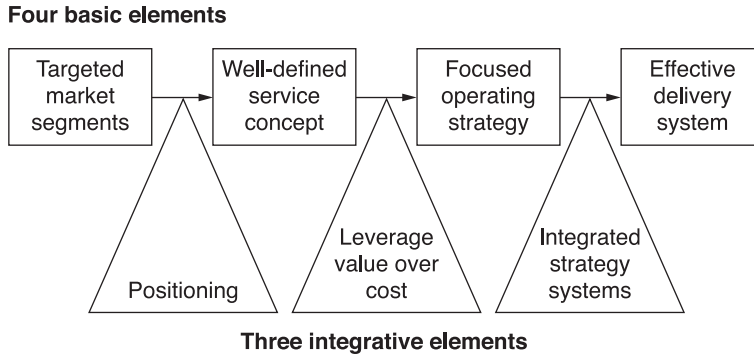


Figure 12.12 Strategic service vision. Adapted from Heskett *et al*⁶¹

in common. In healthcare there are disease segments: diabetes, cancer, asthma, sports medicine and care of the elderly, for example.

Beyond age, race and diagnosis, there are many new attitudinal and behaviour segments to consider. For example, discovering who are the ‘most or least proactive’ or ‘most or least demanding’ or ‘most or least stoic’ patients. Exploring which patients are capable of self-care, which patients may want a great deal of information and which patients want more convenience but may not be overly demanding; and which patients want fact-based reassurance but may have a tendency to overutilise care. Once patient wants and needs are understood, they connect with a well-defined service concept, the second key element of the service vision.

A service concept represents a bundle of ideas that is perceived by a patient segment to satisfy their healthcare needs. The service concept answers the question, ‘What service are we providing?’. The concept also describes how the provider wants to be perceived and how the service will be perceived by key stakeholders. Heskett⁶¹ states that a ‘well-defined’ service concept means that it is stated in terms of results that the organisation produces for its stakeholders, allowing them to evaluate the work. Because needs tend to be complex, service concepts are multidimensional and almost never unidimensional. A busy patient not only expects good outcomes, they want convenience, emotional support, and quick diagnosis-to-treatment. Hence a service concept translates these ideas into clinical results such as outcomes, information, relationships, amenities, convenience and efficient treatment.¹³

The targeted patient segments and well-defined service concepts are integrated by strategic positioning. Positioning answers three key questions.

- 1 What does a valuable service mean to your customers?
- 2 How does your service concept create value?
- 3 Can other providers meet those patient needs better than you?

Strategic positioning designs a service so it will occupy a meaningful and distinct place in the mind of the consumer. A position is more than branding, because it connects the service concept with the target market. It answers questions such as:

What is a good service in the eyes of patients in that segment? How well do competitors provide the service? Can the proposed service concept provide better?.

The third element of a strategic vision is ‘focused’ operating strategy that sets forth the way the service concept will be achieved and is the product of many decisions about operations, financing, marketing, human resources and control. Organisations should not focus on all of these things; rather, one or two of these operational strategies will be identified as strategically important. To integrate the service concept with the operating strategy the decision makers must leverage the value of the service over cost of delivery. Leverage, as it is used here, means the perceived value of a service is greater than the actual cost of delivering the service.

An organisation’s service delivery systems are the necessary elements utilised to fulfil the organisation’s mission. This system can include the clinical work processes, role of people, technology, equipment, facilities and procedures. Delivery systems should develop sufficient capacity and manage the quality of care.⁶¹ Finally, the service delivery system should be integrated with the operating strategy; culture, people, clinical processes, and the like.

The formulation of the strategic service vision means leveraging the value for patients over the cost to deliver the service. Teboul⁶² argues that the best way to understand the relationship between value and the service proposition is to analyse the fit between the two. Figure 12.13 plots the service proposition against the value proposition. In this example, the healthcare organisation established a new cardiac surgery centre that focused on eleven dimensions of the value proposition: rapid turn-around of tests, problem-free admissions, decision-making efficiency, excellent outcomes, convenience, continuity of relationships, easy communication with physicians, attentive nursing, highly co-ordinated care, state-of-the-art facilities and a highly skilled clinical team.

This healthcare organisation selected nine elements of the service delivery system and the operating strategy. One focus of the operating strategy is brand

Service Proposition →

		Marketing		Operating strategy & work process				Human resources	
		Brand communication	Selective recruitment	Electronic medical records	World class physician	Continuing education	Staff committed to goal	Telemedicine support	Higher than average wages
Speed	Rapid turn-around of tests	<input type="radio"/>		<input type="radio"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Hassle-free administration	<input type="radio"/>					<input type="radio"/>		
Quality	Decision-making efficiency	<input type="radio"/>			<input type="radio"/>			<input type="radio"/>	
	Excellent outcomes	<input type="radio"/>			<input type="radio"/>			<input type="radio"/>	
	Convenience	<input type="radio"/>			<input type="radio"/>				
	Continuity of relationship	<input type="radio"/>				<input type="radio"/>			
Reputation	Easy communication w/physician	<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	<input type="radio"/>
	Attentive nursing	<input type="radio"/>				<input type="radio"/>		<input type="radio"/>	<input type="radio"/>
	Coordination of care	<input type="radio"/>					<input type="radio"/>		<input type="radio"/>
	State-of-the-art facilities	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>			<input type="radio"/>	
	Skilful care team	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>

↓ Value for Patients

Figure 12.13 Matrix for connecting patient value with service delivery

communication, which offers a wide range of promotional information and video cassettes that communicate the data on speed of service, quality, and reputation. Each of the other key elements of the service formulation connects with the value proposition. For example, the electronic medical record provides complete patient records, which helps ease of communication with physicians, rapid testing, the impression of a state-of-the-art facility and the skills of the care teams. The electronic medical record also supports the goal of excellent technical outcomes by allowing clinical staff and managers access to information such as rates of ventilator-associated pneumonia per 1000 days in the CCU, and unscheduled readmissions within 10 days.

The same type of matrix should be used to analyse the interaction between service formulation and value to the organisation; that is, clinical efficiency, costs and capacity utilisation. Likewise the same matrix should be used to analyse the interaction between service formulation and value to the employee; that is, employee satisfaction, employee growth and development, self-managing teams and an inclusive workplace.

Although this tool can facilitate the connection between strategic thinking and planning, the analysis of 'fit' can be difficult to comprehend. The connection may not be understood during transition or implementation and value creation for patients and employees is always somewhat hidden or undetectable. Nevertheless the ability to translate a service vision into value for patients, employees and the organisation runs to the heart of strategic thinking.

Conclusions

Strategic thinking is not about leaders establishing and persuading everyone to buy the new vision. It is all about framing and asking powerful questions and applying concepts and analytic techniques. It asks 'what should we aim for?' and 'how can we deliver health services in the long run?'. Strategic thinking separates the known facts from the assumptions and uncertainties and develops a discipline to challenge assumptions about the environment, assumptions about the mission, and assumptions about what makes the organisation distinct from other organisations.

To analyse where and how to offer services, there must be a clear set of strategic goals and objectives. However, knowledge of strategic goals and objectives, while important, is not enough. Key stakeholders should be committed to those goals and therefore a fair process runs to the heart of evoking effective strategic thinking.

To undertake strategic thinking key stakeholders must make the reality model explicit. Reality models are based on presumed experiences, habit and organisational culture. The role of the leader in strategic thinking is to give people permission to be sceptical, to challenge assumptions and to learn from small failures. The manager/leader allows people to ask, 'how closely does the reality seen in here match the reality out there?'. These six pillars are the building blocks for effective strategic thinking and planning.

Finally, strategic thinking is not about the numbers, the big ideas, or the visions of brilliant leaders. Nor is it about a widely accepted applied theory and a growing body of empirical knowledge. Strategic thinking is a discipline that develops new habits and work practices rather than the application of scientific principles. The

practice draws on analysing situations and learning from experience, making assumptions explicit, exploring how and where to compete, uncovering tacit knowledge, fair process, and diligence.

This view of strategic thinking and planning suggests that while the 'economics' of strategy is informative, it has little to do with the practice of strategic management. Moreover, although important, the successful match of a strategic service vision and the task environment is not a guarantee of competitive advantage. Strategic management takes discipline, leadership and hard work.

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References

- 1 Spang HR, Bazzoli GJ, Arnould RJ. Hospital mergers and savings for consumers: exploring new evidence. *Health Affairs*. 2001; 20(July/August): 150–58.
- 2 Chilingirian J, Savage GT. The emerging field of international health care management. In: Savage GT *et al.*, editors. *International Health Care Management*. New York: Elsevier; 2005.
- 3 Burns LR, D'Aunno T, Kimberly J. Globalization in healthcare. In: Gatignon H, Kimberly J, editors. *The INSEAD-Wharton Alliance on Globalizing: strategies for building successful global businesses*. Cambridge: Cambridge University Press; 2003.
- 4 Alsagoff F. Singapore General Hospital: on local shores and beyond. Unpublished Masters thesis. Fontainebleau, France: INSEAD; 2005.
- 5 Apollo to recast medical tourism, targets Asia, US. *The Economic Times*. 2004; 18 Sept.
- 6 Ghemawat P. *Strategy and the Business Landscape*. New Jersey: Prentice Hall; 2005.
- 7 Kay J. *Why Firms Succeed: choosing markets and challenging competitors to add value*. New York: Oxford University Press; 1995.
- 8 Roberto MA, Garvin DA. *Taking Charge of the Beth Israel Deaconess Medical Center (Multi Media Case)*. No. 303-058. Boston: Harvard Business School Press; 2003.
- 9 Simon H. *Reason in Human Affairs*. Stanford: Stanford University Press; 1983.
- 10 Janis I. *Crucial Decisions: leadership in policymaking and crisis management*. New York: The Free Press; 1986.
- 11 Chilingirian J, Vandekerckhove P. *Managing a Transplant Decision at University Medical Center Leuven: (A)*. Fontainebleau, France: INSEAD; 2004.
- 12 Axelrod R, Cohen MD. *Harnessing Complexity: organizational implications of a scientific frontier*. New York: Free Press; 1999.
- 13 Chilingirian J. Who has star quality? In: Herzlinger RE, editor. *Consumer-Driven Health Care: implications for providers, payers and policy-makers*. San Francisco: Jossey-Bass, Inc; 2004.
- 14 Heskett J, Sasser E, Schlesinger L. *The Value Profit Chain*. New York: Free Press; 2004.
- 15 Porter M. What is strategy? *Harvard Business Review*. 1996; Nov/Dec.
- 16 Mintzberg H. Patterns in strategy formation. *Management Science*. 1978; 24(9): 934–48.

- 17 Porter M. *Competitive Advantage: creating and sustaining superior performance*. New York: The Free Press; 1980.
- 18 Robertson M. *Why Great Leaders Don't Take Know For An Answer: managing for conflict and consensus*. Philadelphia: Wharton School Publishing; 2005.
- 19 Angelmar R, Pinson C. *Zantac (A)*. (European Case Program) Fontainebleau, France: INSEAD; 1992.
- 20 Dorner D. *The Logic of Failure: recognizing and avoiding error in complex situations*. Reading, Massachusetts: Perseus Book; 1996.
- 21 Kennedy I. *Learning from Bristol: The Report of the Public Inquiry into Children's Heart Surgery at the Bristol Royal Infirmary 1984–1995; Cm5207-1*. The Stationery Office, Norwich; 2001.
- 22 Ridley M. *The Origins of Virtue: human instincts and the evolution of cooperation*. New York: Penguin Books; 1998.
- 23 Nicholson N. How hard-wired is human behavior? *Harvard Business Review*. 1998; Jul-Aug; 76(4): 134–47.
- 24 Janis I, Mann L. *Decision Making: a psychological analysis of conflict, choice, and commitment*. New York; The Free Press; 1977.
- 25 Stewart R. Demands, choices and constraints: a model for understanding managerial jobs and behavior. *The Academy of Management Review*. 1982; 7(1): 7–13.
- 26 Mintzberg H. *The Nature of Managerial Work*. New York: Harper and Row; 1973.
- 27 Chilingirian J. *The Strategy of Executive Influence*. Unpublished PhD dissertation. Massachusetts Institute of Technology (MIT); 1987.
- 28 Forrester J. *Urban Dynamics*. Cambridge, MA: The MIT Press; 1969.
- 29 Neustadt RE, May ER. *Thinking in Time: the uses of history for decision makers*. New York: The Free Press; 1986.
- 30 Schon D. *The Reflective Practitioner*. New York: Basic Books, Inc; 1983.
- 31 Simon H. *The Sciences of the Artificial*. 2nd ed. Cambridge, MA: MIT Press; 1981.
- 32 Cyert RM, March JG. *A Behavioral Theory of the Firm*. New Jersey: Prentice Hall Inc; 1963.
- 33 Drucker P. The theory of the business. *Harvard Business Review*. 1994; Sep–Oct: 95–104.
- 34 Simon H. On the concept of organizational goal. *Administrative Science Quarterly*. 1984; 9(1): 1–22.
- 35 March JG. *Decisions and Organizations*. Oxford: Basil Blackwell; 1988.
- 36 Carr EH. *What is History?* New York: Vintage Books; 1961.
- 37 Tichy NM. *The Cycle of Leadership*. New York: Harper Collins; 2002.
- 38 Mitroff I. *Stakeholders of the Organizational Mind*. San Francisco: Jossey-Bass Publishers; 1983.
- 39 Fisher R, Ury WL. *Getting to Yes*. Boston: Houghton Mifflin; 1988.
- 40 Geneen H., with Moscow A. *Managing*. New York: Avon Books; 1984.
- 41 Tversky A, Kahneman D. Rational choice and the framing of decisions. In: Bell D, Raiffa H, Tversky A, editors. *Decision Making: descriptive, normative, and prescriptive interactions*. New York: Cambridge University Press; 1988.
- 42 Russo JE, Schoemaker PJ. *Ten Barriers to Brilliant Decision Making and How to Overcome Them*. New York: Simon and Schuster; 1989.
- 43 Hammond J, Keeney S, Ralph L, Howard R. *Smart Choices: a practical guide to making better decisions*. Boston: Harvard Business School Press; 1999.
- 44 Cohen J, Stewart I. *The Collapse of Chaos: discovering simplicity in a complex world*. New York: Penguin Books; 1994.
- 45 Ackoff R. *The Art of Problem Solving*. New York: John Wiley and Sons; 1978.
- 46 Morrisey GL. *Management by Objectives and Results in the Public Sector*. Reading, Massachusetts: Addison-Wesley; 1976.
- 47 Olson DE. *Management by Objectives*. Palo Alto, California: Pacific Books; 1968.

- 48 Bohmer R, Edmondson A, Feldman LR. *Intermountain Health Care*. Boston: Harvard Business School Press. Case Number 9-603-066; 2003.
- 49 Kim, WC, Mauborgne R. *Blue Ocean Strategy: how to create uncontested market space and make the competition irrelevant*. Boston: Harvard Business School Press; 2005.
- 50 Porter M. *The Competitive Advantage of Nations*. New York: The Free Press; 1990.
- 51 Doz Y, Santos J, Williamson P. *From Global to Metanational*. Boston: Harvard Business School Press; 2001.
- 52 Kim WC, Mauborgne R. Fair Process: managing in the knowledge economy. *Harvard Business Review*. 1997; **75**(July-August): 65–75.
- 53 March JG, Olsen JP. *Rediscovering Institutions: the organizational basis of politics*. New York: The Free Press; 1989.
- 54 Van der Heyden LB, Randel CS. Fair Process: striving for justice in family business. *Family Business Review*. 2005; **18**(1): 1–21.
- 55 Latham GP, Locke EA. Goal setting: a motivational technique that works. *Organizational Dynamics*. 1979; **Autumn**: 68–80.
- 56 Heifetz R. *Leadership Without Easy Answers*. Cambridge, MA: Harvard University Press; 1994.
- 57 Gottman JM, DeClaire J. *The Relationship Cure*. New York: Three Rivers Press; 2001.
- 58 Heau D. Class lecture and notes at INSEAD: Fontainebleau, France; 2005.
- 59 Morgan MG, Henrion M. *Uncertainty: a guide to dealing with uncertainty in quantitative risk and policy analysis*. New York: Cambridge University Press; 1992.
- 60 Courtney H, Kirkland J, Vigurie P. Strategy under uncertainty. *Harvard Business Review*. 1997; **November–December**: 67–79.
- 61 Heskett J. *Managing in the Service Economy*. Boston: Harvard Business School Press; 1986.
- 62 Teboul J. *Le Temps des Services: une nouvelle approche de management*. Paris: Editions d'Organisation; 2002.