



PART THREE
**Dealing with
recurring
challenges**

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How to maintain design integrity over time

11

Success is a journey, not a destination. It requires constant effort, vigilance, and re-evaluation. **MARK TWAIN**

It takes time and effort to complete an organization design: to ensure that the organizational purpose and strategic intent are clarified and then to define and build a balanced and aligned organization operating effectively as a whole. Organizational design integrity is about prolonging the life and design coherence of an organization so that it continues to deliver its organizational purpose and strategic intent. An organization will undergo many changes throughout its life; to cope with new opportunities, new challenges and adjustments needed. Some changes will be planned, others emergent and some will commence even as the design is being finalized. Over time how do you ensure that you keep the parts of the organization balanced and aligned? How can you use the organization design work that has been done to cope with changes, while continuing to deliver the organizational purpose and strategic intent? How do you do this in a way that does not limit the organization? This chapter aims to show you how to maintain the integrity of an organization's design over time by establishing and using a design authority. This chapter covers what design integrity entails; how a design authority can be used to maintain design integrity; and the roles and responsibilities of a design authority. Design integrity is important because organizations are complex; composed of many interdependent elements that must operate in a way which continues to meet the strategic intent over a period of many years, even decades, and yet must allow for continual evolution and adaptation. You should gain an insight into the role of a design authority in maintaining design integrity during design, implementation and operation.

What design integrity entails

In order to maintain design integrity, changes to the design need to be made with an understanding of all the elements of the organization design. These include an understanding of: why the organization has been designed in a particular way; the assumptions and compromises made by the designers regarding the organization's operation; the design's component parts; and the interactions that could impact the strategic intent. The necessary knowledge of the overall design has to be retained in a form that is practically and easily available to the operating organization over its lifetime, ie until the purpose and/or strategic intent change. Failure to retain this knowledge and to control design changes will, over the lifetime of the organization, result in decisions being made without a full understanding of the effect that these decisions may have on the organization. Unintentional consequences are much more likely to occur that could affect the organization's ability to deliver the strategic intent.

When an organization is first built or rebuilt, its design is shared between a team of differently skilled people, generally from across many parts of an existing organization(s) and often beyond. Most of the focus is on delivering the strategic intent and design brief. When the organization is operating, much of the detailed knowledge used in the design is transferred to the operating organization through design manuals and other design documentation. Some may be documented as principles, values, behavioural codes and standards to be followed. The OPTIMAL Organization Design Approach deliberately captures information for this reason. However, the knowledge that is transferred will not be complete. Much of the highly specialized knowledge underlying the design will remain with the original designers, as it is as much about why the decisions were made as what decisions were made. Over the operating lifetime of an organization the people involved in the design will move on and be unavailable to call on. The issue is compounded when interdependences between changes that are made over a period of time occur. These may affect several areas.

Maintenance of design integrity is understood very well in mission-critical situations by some professions; for example, in nuclear power and chemical plants, and some engineering and IT instances. Maintenance of organization design integrity is about assuring that the critical aspects of the design are followed and kept aligned, rather than about ensuring that every aspect is 100 per cent failsafe.

How to maintain design integrity

The impact of change on design integrity can be mitigated by having people involved in the design phase who will subsequently be involved in implementation and operation. However, particularly in operation, their focus is

likely to move on from maintenance of the design integrity to their new roles and responsibilities. In addition, all too frequently no single area takes on the role of ensuring design integrity after implementation. A frequent default for design programmes, as with other programmes is to hand over to the operating organization. It is assumed they will somehow adopt the role of maintaining design integrity. Another common assumption is that because it is an organization design programme, HR will maintain design integrity. However, in practice, it often falls to a variety of groups to manage elements of the design in perpetuity because no one area has all the detailed, specialized knowledge required of all the elements in a design. The operating organization or HR may therefore assign responsibilities for aspects to other entities that do have that knowledge. So functional areas with strategic responsibility for design elements inherit parts of the organization design as well. In terms of the Organization Design Compass responsibility may be assigned to a number of supporting areas for different segments; eg Structure and Norms and Behaviour to HR, Work to be done to Operations and IT, Enablers to the executive team.

Once this is done, the view of how the design works as a whole and stays balanced and aligned is often lost. It is a recurring challenge, because once this happens, the alignment of the whole becomes degraded over time. Informal and ad hoc handover results in informal and ad hoc results, as the intent behind the design is lost and the different elements drift apart. How do you bring the design together as you review changes? Where is the overall responsibility for the integrity of the design of the organization happening? How is this retained? Somehow you need to retain sufficient knowledge of all aspects of the design to enable those involved to understand the results of the designers' work; and to understand the implications of that work for the rest of the design.

Like strategy, responsibility and accountability for an organization's design and construction to deliver its strategic intent lies with the most senior leader(s); the top team in an organization. Once the design and implementation programme(s) are completed, responsibility for managing the organization as a whole needs to be allocated, ensuring that both the supporting elements and the whole remain aligned as changes happen. It is worth considering how this can be maintained. The key question is, to where do you hand over the design knowledge from organization design programmes? If this is to several parts of the organization, you will need to think through how to keep the design aligned and directed towards the strategic intent. Entities responsible for various aspects in turn need formal responsibility for maintaining their specialized knowledge of the design and their competence in the detailed design process.

The need to maintain design integrity and to preserve the necessary detailed and specialized design knowledge poses a significant challenge for many operating organizations and HR. They will therefore need to take specific steps to assure themselves that the design knowledge is maintained appropriately. They will need to manage a formal and rigorous design change

process so that the actual configuration of the organization throughout its life is consistent with changes to the design, that changes can be made with full knowledge of the original design intent, the design philosophy and of all the details of implementation of the design, and that this knowledge is maintained or improved throughout the lifetime of the organization.

The head of the designed organization needs to set up this formal process as soon as they take control. This is part of their role in delivering the strategic intent. The process of controlling changes to design and accessing design knowledge is not a trivial matter. The amount of data can be vast; see the list of outputs in Appendix 3 and 4 arising from the design phase alone. Further deliverables will come from the implementation phase and added to this many design change issues can be complex. The key question is how to maintain design integrity of the whole as you hand over to various parts of the organization. One solution is to set up a formal design capability within the implementation organization and, ultimately, somewhere in the new organization. This solution creates a formally designated entity within the organization that takes responsibility for design integrity. This entity needs to formally approve major design changes. To do this, it must have sufficient knowledge of the design and the design's role in supporting the strategic intent. In addition, it must have access through a defined process to all the underlying design knowledge to ensure that the original intent of the design is maintained. The entity that has this overall responsibility, approves design changes and is responsible for ensuring that the requisite knowledge is maintained, is referred to as the 'design authority'. The role is accountable for the integrity of the organization design. Its role is not to 'preserve' the design, allowing no change, but to work with others to maintain the design integrity while allowing change.

The roles and responsibilities of a design authority

The need for a design authority that maintains the design integrity over the operating lifetime needs to be fully acknowledged by the operating organization. The design authority role must be clearly defined and formally recognized. A design authority can be established with many structural forms: as a group, an individual on a team, an 'umbrella function' with delegated responsibilities across the organization and a virtual organization, eg akin to a business unit group. Its remit and responsibilities may cover the enterprise organization, a portfolio of changes, a programme design phase, a programme's implementation or some elements of the overall design. There can be considerable variability in these roles; so there needs to be clear roles defined and responsibilities and accountabilities set out. The scope and boundaries of the design authority's responsibilities in terms of

its assurance role versus its compliance role need to be established, ie over what advice does it provide and what it can veto.

As design hands over to implementation and operation, a systematic process is needed that takes into account the complexity of the design, the size of the information and allows for the process changing over time. The responsibilities and attributes of a design authority, and the type and nature of the formal responsibilities held needs to be delegated to be developed and maintained over the operating lifetime of the organization. Note that a design authority's remit does not normally cover legal, regulatory or compliance with bodies outside the organization. Table 11.1 provides suggestions for an enterprise-level design authority role definition. The design knowledge that is required within a design authority includes, but is not necessarily limited to:

- the design programme's inputs, particularly the design brief;
- the research knowledge and design exploration and iterations on which the design is based;
- a detailed understanding of why the design is as it is;
- the design outputs (Appendix 3 and 4 cover design phase outputs);
- analysis of change required;
- change specification;
- design blueprint;
- implications of operating experience on the design.

The role of a design authority changes at different periods of time and with different remits. There are three distinct, different phases: through the design phase of a programme; through the implementation of an organization design; and in operation. Over the design phase, the design authority can support the design leader providing mentoring and guidance, acting like a senior partner in an architecture practice, to ensure that:

- The design meets any higher level organization's needs; eg when the design programme is part of larger organizational change or when there are organization-wide principles, standards or structural rules in place.
- The design aligns with the requirements of the organization's wider frameworks such as its business model, operating models, people strategy, IT strategy and other change initiatives.
- The design process is executed correctly and that all steps are completed to an appropriate depth and quality.
- Relevant expertise is brought in to the design programme as required.
- There is advice and counsel to assist issue resolution or making calls on difficult choices when requested, offering wisdom and expertise. They are voices that can give a broader perspective.

TABLE 11.1 Role definition for an enterprise-level design authority

Activities and responsibilities

- Organization design leadership
- Assuring quality of the organization design process and outputs
- Ensuring that an appropriate knowledge base is established, preserved and expanded with experience
- Ensuring that the organization design knowledge is available to all parts of the operating organization
- Assuring quality of overall arrangements for the management, performance and assessment of designs
- Reviewing, verifying and approving (or rejecting) design changes in scope
- Maintaining (or ensuring that responsible designers maintain) design configuration control by up-to-date records of relevant drawings, specifications, manuals, design standards, calculations, supporting data, systems, structures and elements
- Provision of strategic-level governance and specialist advice.

Accountability: For what and to whom

- This will be organization-specific
- For the integrity of the organization design
- For design integrity (The capability and authority to reject proposed design changes that do not maintain the design integrity is a vitally important role of the design authority, or of a responsible designer in its assigned area. The scope and boundaries of this are organization-specific.)

- The final chosen design delivers the capabilities and strategic intent that the organization requires and that it aligns with the original vision.

Once the design phase is complete, the design leader or team can be tasked with a design authority role themselves, acting like an architect overseeing the construction. This is equally true whether they are overseeing the implementation phase of a programme, the implementation of a follow-on portfolio of change or implementation delegated to line units. As design authority,

TABLE 11.1 *Continued*

Behaviours required	Competencies / Skills Required
<ul style="list-style-type: none"> ● Seeks to understand organization's strategy and purpose ● Consistent with organization's leadership behaviours ● Collaborative ● Use of influence and persuasion ● Operate as a trusted advisor/non-executive director. 	<ul style="list-style-type: none"> ● Expert in organization design ● Deep understanding of the organization design model and process used in the organization ● Experienced in using chosen organization design models and processes and other approaches to design organizations in a variety of situations ● A broad perspective on organization design and organization change theory and practice ● Understanding of the organization ● Specialist element knowledge.

their role is to ensure the integrity of the design through implementation and to provide ongoing advice and oversight to follow-on projects as lower level design work is produced.

In operation, the design authority usually takes on a higher level role often embedded in the enterprise organization. This is akin to the architects replaced by high-level planning and building regulations and regulators. The concentration here is on major changes, the design authority has a more 'hands off' role and control is mainly maintained by rules, standards and policies, and processes. With subsequent design programmes, enterprise design authorities can help to assure that the design is constructed within existing broader contexts and utilizes appropriate design inputs. This is the role of the design authority that we have shown throughout Part Two of this book.

Conclusion

A design authority provides an effective means of maintaining design integrity over time:

- during implementation;
- during operation;

- during subsequent design programmes to assure the design is constructed within existing broader contexts and utilizes appropriate design inputs.

The outcome from following this chapter is that you are able to establish how a design authority can be used in your organization. Once you have completed this chapter you will have the knowledge to tailor an appropriate design authority for your organization. You will also be ensuring increased confidence that the organization has the capability to deal with change while ensuring design integrity is maintained. ‘The wisest have the most authority’, Plato.

How to size an organization

12

Look at me. Judge me by my size, do you? Hmm? Hmm.

YODA (FICTIONAL CHARACTER FROM GEORGE LUCAS' STAR WARS)

In developing the design options for an organization one recurring challenge is ‘What is the right number of people for the organization?’ Although there is no easy answer to this question this chapter sets out to give some advice for considering the size of the organization. The chapter covers what size means to the organization designer; why getting the size right matters; advice on looking at the work to judge the size; the impact of structure on size; and guidance on spans of control and number of layers. This is important to the organization because staff are both a resource and a cost to the organization. Every organization needs enough people to fulfil the organization’s purpose; too few people and it fails. But also it needs to do that in an economically viable way, too many people and it wastes money. By reading this chapter you will gain knowledge that you can apply when thinking about how to size an organization that you are designing.

What does size mean to the organization designer?

There are many measures of an organization’s size, including turnover, profit, production volume and market share. For the organization designer, though, the major definition of size has been the number of its employees. In today’s organizations it is more helpful to consider a broader definition of size and include all of the people resources that the organization has to manage including its own people and third parties and agency staff. As an illustration, in 2009 Microsoft reported its workforce to be 96,000 direct, regular employees worldwide. But it also utilizes third-party suppliers and temporary staff. According to numbers reviewed by *The Seattle Times*, Microsoft’s total headcount in 2009 was more than 175,700 people including contractors, vendors, agency staff, visiting researchers and interns (Romano, 2009).

Size affects many of the other dimensions of organization design and different sizes of organizations pose very different challenges for the organizations’

leaders. The relative size of the overall organization and its sub-units impact the ways the organization is able to coordinate its activities and the organization's need for formal enabling processes and procedures. Small organizations are often associated with innovation and entrepreneurship. There is often little in the way of formal roles and structure and everyone does what is needed. Rules are few and they rely on everyone having a very strong, shared purpose to succeed. Family firms are typical of this. Small organizations, though, have less influence on their environment and need to be able to cope with more volatile circumstances. This can lead organizations to strive for growth.

Growth ensures that the organization has better control over external resources such as raw materials, skilled staff and technological advancement. Big organizations can invest in research and new products so when older products lose market share, newer ones are in the queue to replace them. Internally in large organizations there are more specialized roles in the structure; for example the head office functions such as HR, Finance, IT, legal, risk and you see a greater proportion of non-production people. The structure requires more formalization, vertical hierarchies are seen and the management roles need to be more formalized, too. In the Enablers quadrant, there are more formal rules and procedures. Arising from the formalization of structure, roles and enablers these organizations can appear more bureaucratic. Bureaucracy has negative connotations but it is not always bad and the appropriate bureaucracy can allow degrees of decentralization as rules can replace the need for direct supervisory management.

So while size matters in that it affects much of an organization's design, having the right number of people is also a very specific question for the organization designer to address.

Why does getting the size right matter?

The cost of staff is a significant cost for all organizations. In many service industries – such as banking or insurance – staff salaries, bonuses, pension fund contributions and employer taxes can account for 40–50 per cent of the organization's operating costs. Often as well as actual salaries, the cost of premises, IT and a host of other costs are directly driven by staff numbers. The percentage of cost is not so high in manufacturing where raw materials are an important cost, but even so if any organization has too many people, then it is clear that its cost will be too high.

The flip side is problematic too. If an organization is too small then it will be inefficient and unable to deliver the revenue-generating activities that it needs. In an understaffed organization people are stressed, mistakes happen and quality suffers. Left unchecked it becomes a downward reinforcing spiral. Staff become more stressed and absenteeism and illness increase, customer complaints increase, costs rise and eventually the organization can

collapse. It is not just about money, either. The impact on staff is just as important. Making the right design choices about the size of the organization has a direct link with people development, succession planning and staff morale.

In a recession, there are pressures on organizations to reduce cost by reducing headcount. This can be a valid way of staying competitive and surviving. In economic dips, organization designers are working on projects associated with lean organizations, profitability improvements and organizational efficiency. Then as organizations come through the recession they grow again and the organization designer can be working on projects to create new lines of business or serve new markets. But how do you decide how big or small your organization should be? This question is often asked by organization designers. How do you know if an organization needs 1,500 people and not 2,000, or maybe 1,200? This is a question that your CEO will want you to answer, too. Also, since costs of an organization are directly related to headcount, you can be sure your CFO will take an active interest as well.

Getting the right number of people for the work to be done

The first thing the organization designer needs to consider is simply how much work needs to be done. This may sound obvious but the obvious is sometimes overlooked! Many strategic HR departments will already be using HRP (human resource planning) techniques and you should certainly be linking your organization design work with these. The usual start is to take a critical look at the organization's future plans, its strategy and its target volumes. What are the production volumes in a manufacturing organization? What are the sales volumes and number of customers in a retail organization? What are the call volumes in a call centre? By looking at the volume of work you can quantitatively estimate the amount of workforce required. It may not be an exact science but there are methods that help organization designers get close to the 'right' number. Incidentally, getting the sums right is one reason why it is often very helpful to have analytical types of people on your design team, they relish this kind of work.

Many HRP systems apply the approach of using a series of ratios looking at past data and future forecast to estimate workforce size. Some of the complex internal ratios taken into account are revenue per employee; employees to new customer orders; and employees to number of customers. Other ratios and factors to be taken into account while calculating the right headcount are the ratio between billable employees to non-billable employees; and the ratio between employees in support functions to the total headcount. For sales and pre-sales functions, the ratios are employees to new customer orders and the average value of the orders. Such ratios are transparent to all

stakeholders and are very credible and by looking at historical patterns within the organization, you can generally determine a reasonable range for these ratios.

Every organization has a different environment and processes. So, the ratios will be organization-specific. Nonetheless, external benchmarks and comparison between industry average and similar organizations are useful data points too. TQM (total quality management) and formal benchmarking approaches can be used to get at specific data and there are many published sources. Some examples that are readily available are:

- IT staff to user ratios;
- staffing levels for specialists, such as physiotherapists in UK health services;
- ratios of head office staff (HR, Finance, etc) to front-line staff;
- medical practice staff ratios per patient;
- call-centre sizing.

But, just a note of caution; when you benchmark, do make sure you are asking the right questions before you look at data points and come to conclusions. You do need to be sure that your peer organizations are really similar to yours and that you are comparing meaningful data points. The nature of the operating mechanisms has an impact too. More automation and standard processes lead to less people being needed. So again make sure the benchmarks you apply have similar technologies and tools to your situation.

Other workforce planning approaches may be already known to and used by your HR department – simulations, regression analysis, Delphi techniques, productivity measurements and probability analysis all have their place in predicting demand and designers can often exploit an organization's existing expertise in applying them.

Choosing spans of control and number of layers

In designing an organization you have decisions to make about structuring the organization, and one is the shape: tall and narrow or broad and flat? Every organization has two dimensions to its size: its width and its height. Width is to do with 'spans of control', meaning how many staff report to how many managers in a hierarchy. Height is the number of layers in the organization. Management activities are essential to the well-being and control of an organization but they do not directly result in productivity, they are an overhead, and span of control determines the size of that overhead. The goal is to have the right level of management without incurring unnecessary overhead costs. Table 12.1 shows the advantages and disadvantages of the two different shapes.

TABLE 12.1 Tall and narrow versus broad and flat organizations

Shape	Advantages	Disadvantages
Tall and narrow	<ul style="list-style-type: none"> • Allows manager to communicate quickly with immediate staff • Allows close supervision and directed control • Feedback of ideas between immediate supervisors and staff is more effective • The fewer the staff, the less the management skill required 	<ul style="list-style-type: none"> • Many levels of management mean higher cost of management staff • Large distance between top management and staff, poor executive communication and visibility • Less independence and decision authority for staff
Broad and flat	<ul style="list-style-type: none"> • Staff have better communication with the top management • Costs less as organization employs fewer managers • Flat organizations are associated with higher levels of employee morale and productivity • Encourages empowerment through delegation of authority and decision making 	<ul style="list-style-type: none"> • Creates more supervisory responsibility for the relatively few managers • Overloaded management leads to loss of control

In the 1770s Adam Smith wrote a set of ideas that would shape businesses and all organizations for centuries to come. He was responsible for the new business titles of ‘supervisor’ and ‘manager’ and with the recommendation that the ideal span of control would be 1:7; ie 7 staff report to 1 manager. You will still see this magic number quoted in some articles and publications of the last few years.

Yet, today, spans of control are often higher and there are many reasons for this – the workforce is generally better educated; managers too are better educated and trained; and production technology makes it easier to apply consistent standards to work. More recently the rise of self-directed teams, cross-functional teams and empowerment have had an impact. Add on top of that the explosion of technology with email, the internet, intranets and

wikis making communication and knowledge-sharing much easier. All of these combine and it makes sense to manage differently and to give more decision making and responsibility to teams. So gone are the days when people always needed a span of control of 1:7. Google is one example of an organization where the average manager in the product-development group has more than 50 direct reports. Another is the Bank of New Zealand, which reorganized in 2009 and now all 200 branch managers report to just three regional managers. There are even a few examples of spans of control of 1:200.

Factors that widen the spans of control include:

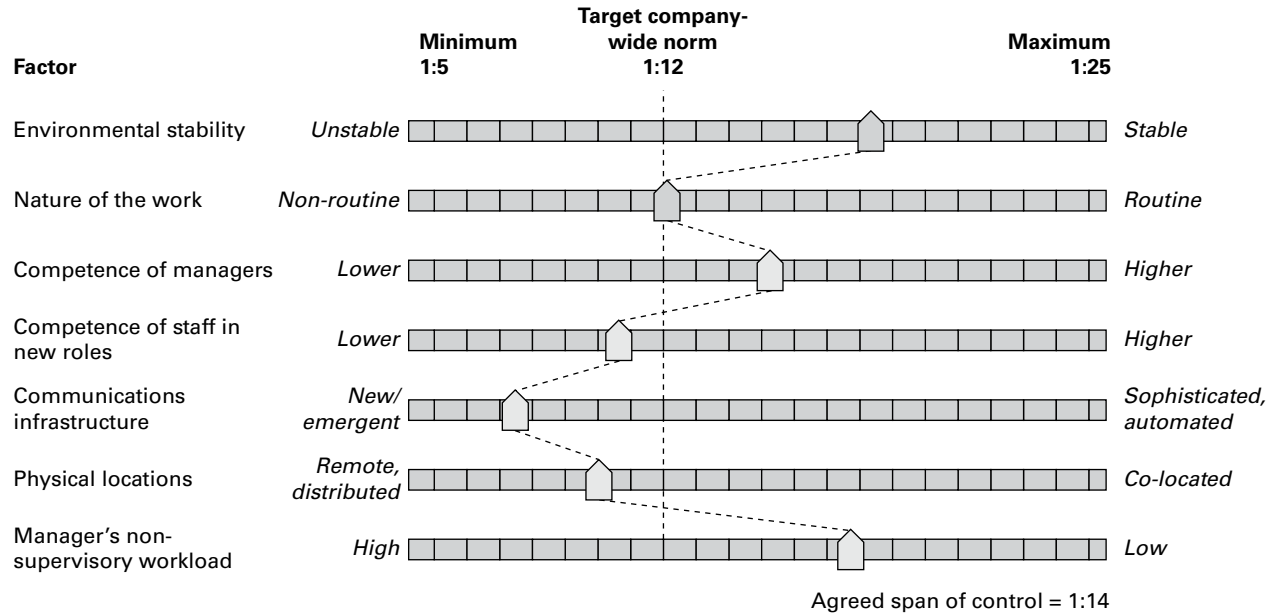
- Environmental stability: when the external environment is more stable than dynamic, more staff can be supervised by a single manager.
- Nature of the work: routine tasks that require limited skills require only occasional management and coaching, so they can have a wider span of control. On the other hand, the tasks that are inherently complicated; loosely defined and require frequent decision making require a narrow span of control.
- Competence of the manager: with higher competence leading to wider spans of control.
- Competence of the staff and experience level: again higher competence leading to wider spans of control as staff require little training or direction and they can take on delegated responsibilities.
- Good communications infrastructure between people in the organization and easy ways of sharing information allow wider spans of control.
- Budget constraints: when an organization is facing financial hardship or is downsizing, it needs to increase the span of control.

And factors that narrow the span of control include:

- Physical dispersion: the more dispersed the narrower the span of control.
- Extent of manager's non-supervisory work: the greater the non-supervisory workload the narrower the span.
- Variability of the work: more variable work needs narrower spans.
- Unclear goals and targets can lead to narrower spans of control.

When you are designing the structure of an organization look at each of these factors and think about what they mean for your situation. They will help set the spans of control that will work in your situation. Figure 12.1 shows an example of a guide developed for estimating spans of control, in this case clerical departments in a large organization. The target norm and range of spans of control was agreed in dialogue with the client. Then one of the authors worked with the leaders of the new departments to move the sliders to get to the span of control for each department.

FIGURE 12.1 Example of estimating a department's span of control



One way of looking at the number of layers and how they should be set up is in Elliott Jaques' *Requisite Organization* model (Jaques, 1998). Intuitively we know that some work is more complex than other work. Jaques' model gives a means to understand what it is that makes one role more complex than another and a scale for measuring the complex. The model has descriptions of different types of work and the time span of 'discretion' that elapses before the decisions made in a role are monitored. It describes eight strata (or levels), each characterized by a distinct type of work and a different time span. Stratum I is the least complex and roles in this stratum follow predetermined procedures and have the shortest time spans before any decisions are monitored. Stratum VIII is the most complex and describes a CEO role within one of the largest corporations. All eight strata are shown in Table 12.2.

This table can be applied when you are looking at structure and roles and responsibilities to map the right number of layers and the right roles for the organization you are designing. A role falling into any given stratum should report to a role in the next higher stratum, which calls for a more complex type of work. Within a reporting chain, only one role should fall into each stratum. When two roles fall into the same stratum, the roles should be set up as a peer relationship not as a manager/direct report relationship.

Conclusion

While there is no easy answer to 'What size should the organization be?' this chapter has set out some guidance on the numbers of people that you can apply to help you tackle this question in your design work. Starting with the work to be done you can make sure you have enough people to carry out the necessary work. Then as you design the structure, you make decisions on the spans of control and the number of layers in any hierarchy. Applying this, you should be better able to design a structure that is the right size for the organization.

TABLE 12.2 Elliott Jaques' work strata

Stratum	Time span	Description of work	Examples
I	1 day to 3 months	Following procedures. If an issue falls outside procedures, help is needed	<ul style="list-style-type: none"> • First-line manual roles • Clerical roles
II	3 months to 1 year	Defining tasks for others to follow	<ul style="list-style-type: none"> • First-line managerial • Specialist roles
III	1–2 years	Planning and executing a sequence of tasks where outcomes from one task impact following tasks	<ul style="list-style-type: none"> • Regional manager • Senior professionals
IV	2–5 years	Transforming in a defined system; balancing resources and activities	<ul style="list-style-type: none"> • General managers
V	5–10 years	Optimizing a total business system; understanding how a change in one part influences the whole system	<ul style="list-style-type: none"> • Single business CEO • Business unit president • Corporate staff VP
VI	10–20 years	Dealing with strategic initiatives; observing the external environment and providing guidance to subordinate business units	<ul style="list-style-type: none"> • Group VP
VII	20–50 years	Developing whole, large systems	<ul style="list-style-type: none"> • CEO of large corporations
VIII	50+ years	Transforming whole systems to enhance social value	<ul style="list-style-type: none"> • Super-corporation CEOs

13

How to choose between design options when the environment is very uncertain

It is better to be vaguely right than exactly wrong

ATTRIBUTED TO JOHN MAYNARD KEYNES

When the environment in which an organization operates is particularly complex or the future direction for the organization is very uncertain, or if a fundamental change of circumstances is possible, there is a greater likelihood of disruptive factors and turbulence derailing any chosen strategic direction. This chapter aims to show you how to increase the chances that the organizational design options you derive and choose can cope, by adding scenario planning and scenario testing. A scenario is a hypothetical story, used to help visualize futures that are not simple projections of the status quo. Scenario thinking is the basis for scenario planning and scenario testing. Scenario planning uses scenarios to help define future strategic visions and priorities, which in turn can influence organization design. Scenario testing assesses a proposed strategy or organization design against the circumstances described in various scenarios.

This chapter provides an overview of scenarios; looks at how to create them; how they can be used ahead of design to help frame debates on requirements and assumptions as well as influence design generation; and how they enable the assessment of design options. This is important because uncertainty reduces executives' confidence in their strategic intent and their ability to choose a design that can cope with any potential impact. Turbulence can make it difficult for them to formulate an appropriate strategy and decide whether to invest in the time, effort and money to design their organization.

It can also mean that the time, effort and money invested in design and changing an organization are inappropriately spent. By using scenario planning ahead of creating design options you will inform their development. By using scenario testing you will be able to understand how your design(s) work in practice so you can select the optimal design. You should gain an awareness of whether to add scenario planning and/or scenario testing to the techniques you use in the OPTIMAL Way and know when and how to use them.

Scenarios, scenario planning and scenario testing

Scenarios are not ‘the truth’, nor factual accounts of what is happening today or forecasts of what will happen in the future, rather they are a combination of analysis and judgement about future possibilities. Scenarios describe different, but plausible, futures and are developed using techniques that systematically gather perceptions about certainties and uncertainties. They are based on what is known to be happening and the application of imagination in order to predict what might happen in future. They need to be provocative to help decision making and have credibility in terms of their influence and impact. They are a way of thinking about the future based on robust evidence and a set of diverse viewpoints about what could happen in the future. Discussing scenarios with colleagues within your organization can lead to new insights on strategy or direction and can also flag-up possible constraints and obstacles that might be encountered in delivering a strategy. They can help you to think through a range of possible outcomes and the sequence of events that would lead to them. Developing scenarios in themselves generates deeper insights into the particularly powerful drivers of change that matter to a given situation. They allow you to free yourself from ‘groupthink’ and challenge conventional wisdom by reducing the impact of political constraints to discussions. Good scenarios have the following key characteristics:

- the scenario is based on a story with a compelling and informative title, a strong human element, important events and strong plots;
- the story is motivating and it includes information about the motivations of the people involved;
- the story is credible; it could happen in the real world and stakeholders can believe that something like it is plausible;
- the story involves a complex environment and/or captures the uncertainty facing the organization.

Strategic planners have long used scenarios to help define future strategic visions and priorities. They are particularly useful in highly complex and uncertain conditions. Scenario thinking assumes that the future can differ

greatly from what is known today. It is a useful methodology for strategy development and testing; for organizations or programmes acting in a highly dynamic environment taking complex and often risky decisions. Scenario thinking provides rigour while at the same time enabling those involved to draw upon their creativity, resulting in new views and interpretations of the future. It helps you to understand the nature and impact of the most uncertain and important driving forces affecting the world. Scenario thinking invites you to explore extremes by pushing thinking beyond ‘probable impacts in the near future’. By combining several plausible factors that may shape the organization’s future, you are drawn to envisage futures that would otherwise be ignored.

At different stages in the OPTIMAL Organization Design Approach you can pick up clues as to whether the organization you are designing needs to respond to significant uncertainty or change at this point in time. Scenarios and scenario planning can be particularly helpful as the organization completes its strategic thinking before or while the design brief is outlined. Scenario testing can be used to assess alternative designs; it complements the assessment step in the OPTIMAL Way, but is not a replacement for it. Scenario planning and scenario testing are group processes that encourage knowledge exchange and development of mutual deeper understanding of central issues important to the future of your organization. Scenario planning and scenario testing can either be used together or separately. Using scenarios either before or after design helps you to confirm requirements and assumptions and frame debates. They allow you to bring requirement-related issues to the surface, which might involve reopening old requirement discussions or surfacing requirements that have not yet been identified. They allow you to test your assumptions and structure dialogue in a constructive and creative way, involve a wider group of people, and test your thinking and designs to circumstances beyond the strategic intent. Scenario planning and testing are creative yet structured approaches.

Building scenarios

In building scenarios you go through the same thinking whether the scenarios will be used for scenario planning ahead of design or scenario testing post-design or both. It is possible to use generic scenarios that are available, but these are seldom sufficiently meaningful to justify the cost saving. Typically, building scenarios involves the development of visual representations of possible ‘different futures’, generated from combining known factors, such as demographics, with plausible alternative political, economic, social, technical, legal and environmental (PESTLE) trends that are key driving forces. Crafting scenarios involves clustering various driving forces and seeking extremes to which they may plausibly be driven. Tool 13.1 covers how to build scenarios that can be used to direct and assess organization designs.

TOOL 13.1

Building scenarios to direct and assess organization designs

Who to involve

We recommend that you use a scenario expert to build your scenarios. Bring one in, if you do not have one in-house. Include the strategic thinkers and senior leaders in the organization. If a design team is in place it may help to include them, so they can understand the discussions for the later steps.

Inputs

The inputs available will largely depend on when the scenarios are built, but include strategic insights.

Instructions

- Define the time horizon: are you looking ahead 5, 10, 15 years?
- Consider the driving forces acting on the organization. Look for the big forces that will impact the market the organization is in and therefore its shape. For example, globalization of markets and the use of IT will bring significant changes for many organizations.
- Identify the external and internal pressures that have been at play and consider the new pressures that may come into play.
- Construct scenarios by identifying the most critical uncertainties in driving forces (probably three to five).
- Each driving force has an opposing force effectively forming a pair. This will allow you to look at multiple combinations of the most critical uncertainties in two-by-two scenarios (a four-box model).
- Combine the highly correlated ones.
- Discard the ones that are not principal drivers of the scenarios.
- Aim to identify the two important pairs from your insights to become the axes that define the two-by-two scenarios to use.

It is sometimes helpful to construct an 'official future' as a base case.

Hints and tips

- Work from the external environment inwards; market, entity, division.
- Keep it simple.
- Keep it interactive.
- Plan to plan and allow enough time.
- Avoid probabilities or 'most likely' plots.
- Avoid drafting too many scenarios.

- Listen to the mavericks.
- Invent short, catchy names for the scenarios (aim for two to four words long).
- Encourage the decision makers to know and own the scenarios.
- Budget sufficient resources for communicating the scenarios.
- Make the scenarios global enough in scope.
- The scenario should have a reasonable probability of 'catching an error'.
- Factor-in scheduled events just beyond your viewing horizon.
- Push extremes of optimism and pessimism beyond what you think is possible.
- Scenarios chosen will factor in risk and probability, but do not ignore significant risks because of low probabilities.

Outputs

Scenarios: aim for about three.

Using scenarios before you design

Scenario planning may have been used in strategy development, before organization design work was even considered. However, if it has not, it can be helpful to do this before design work starts because the results may show that the organization needs to choose a more adaptable structure; one that is more responsive to environmental changes. The knowledge gained from the scenario thinking can influence the design brief and the organization designs generated; for example, you may use it to guide the development of the design principles and criteria. Identify how the scenarios may impact organization design options; for example:

- Do they change the target capabilities required?
- Do they change the nature or volume of the work processes?
- Are there discontinuities for the operating mechanisms?
- Are information flows impacted, eg do you need to change the input mechanisms if volumes change significantly?
- Do they change the choices of structure for the organization, in terms of size and configuration?
- How do you need to adjust Enablers to respond, eg incentives, using goals and metrics to measure anticipated areas against scenario predictions?
- Do you need to adjust Norms and behaviours to respond to possible changes?

Ensure this thinking informs any subsequent design work.

Using scenarios to assess alternative designs

Using scenarios after design enables you to test the robustness of organizational designs. In most instances the techniques shown in the chapter on assessing the alternatives will be sufficient for the organization to choose the optimal design from a number of options. Like the evaluation scheme built into the OPTIMAL Organization Design Approach, scenario testing assesses design options to improve your understanding about them and improve design decisions. As you assess alternatives at outline level in the OPTIMAL Way, it can be very insightful to add scenario testing. Scenario testing is a more sophisticated way of deciding between design options and a different type of assessment from that described in assessing alternatives. It is more qualitative and less quantitative and it allows a much deeper level of thinking. Instead of evaluating design options against the standards defined as design criteria, here they are tested against several extreme but possible futures. This tests the robustness of the options and can give the senior team (and other participants) confidence in the suitability of the proposed design before it is implemented. It can also indicate the limits of the conditions under which the strategy and the organizational design are viable. It provides judgement of how well a design meets your strategic intent under various environmental conditions. The resulting assessment assists learning and can be used for feedback, for decisions on progression, modification or indeed whether or not to pursue designs further. This is more complex than most of the techniques used in high-level design; it takes time and effort to do well.

Scenario testing is optional and used infrequently. Although there are many advantages to using it appropriately and executing scenario testing well; it does not provide all the answers. In fact, it usually generates more questions; often questions that have not been asked and for which there is no simple answer. This is why it is qualitatively better than a quantitative assessment. Scenario testing is a more expensive and more time-consuming way of assessing your design options, so use it with caution. Inexperienced users are prone to fall into traps, so do not undertake this assessment lightly, it must be properly planned and resourced to be of value. If you choose to use scenario testing, include it in your planning, so you can start gathering the information you will need when it comes to assessment. Used wisely, however, scenario testing helps executives ask better questions and prepares them for the unexpected. Because of its potential impact on the project, scenario testing and the interpretations of its results demand top management's personal input. Only they can take the responsibility to alter the design or reschedule the project, if needed.

The main objective of scenario testing is to understand how the design(s) produced are likely to work in practice, but it offers more than that. Scenario testing can also be used to:

- confirm requirements and assumptions;
- frame the debate on assessment;

- understand how the design(s) work in practice:
- learn about the design options;
 - study the end-to-end design;
 - explore and rehearse how things will be handled under future scenarios (in particular the circumstances under which they fail);
 - identify the designs' flexibility and ability to react to developments and challenges;
 - highlight strengths with the designs (in particular those features that are resilient in all scenarios);
 - identify and anticipate potential weaknesses, shortcomings, issues and unintended consequences of the designs including failure to deliver requirements;
 - discuss how problem areas may play out in the new organization;
 - plan creatively for future contingencies: by considering potential issues and situations in a context that allows careful thought and pre-emptive planning rather than reaction when the weaknesses appear;
- select an optimal design:
 - resolve the controversial issues explicitly;
 - reach consensus if possible, failing which, make clear decisions;
 - facilitate communication of the decision-making process;
 - prepare to modify design options or reconsider strategies.

Scoping for scenario testing should be done when you pull together the organization design programme. There you will need to ask:

- Is the context complex or uncertain or large enough to merit scenario testing?
- What are the questions or issues that need to be addressed?
- What are the objectives of using scenario testing?
- What will it add to the assessment of options?
- What are the key factors that you would like to know regarding the future that scenario testing will help you decide?
- What assumptions will be used for the testing?

The objective of the testing is to understand robustness: 'How well do these design options work out under these scenarios?' Some people call this 'wind tunnelling' and the image of a car undergoing 'wind tunnelling' is a great analogy for what is done here. As each design option is viewed under each scenario, future possibilities can be explored highlighting issues and strengths with the design option, identifying possible improvements, new possibilities, and constraints or risks and identifying any unintended consequences in the designs. The most valuable insights are used to improve the programme results and the design outcomes. It is best to test using a workshop, as this

will facilitate dialogue and exploration of what happens with the new organization design options in place under the potential scenarios. Tool 13.2 shows you how to do this and Table 13.1 provides a sample agenda for a scenario-testing workshop. In order to run a successful test it is essential to have clearly defined options; we use specifically selected elements produced at the design outline stage. At that stage you have sufficient detail to make the assessment worthwhile. We find it most helpful to focus on the outputs from the Structure and Work quadrants because significant impacts and discontinuities are often seen first in these. Once these are tested you can re-examine and realign the other quadrants following the OPTIMAL Way. Running the workshop usually takes about a day depending on how many scenarios and how many designs you wish to review.

TABLE 13.1 An agenda for a scenario-testing workshop

Activity	Who
Introductions (30 minutes)	
<ul style="list-style-type: none"> ● Outline of the day and logistics 	Facilitator
<ul style="list-style-type: none"> ● Recap the context ● Introduce the reason for the design work: its drivers and desired organizational outcomes 	Programme sponsor
<ul style="list-style-type: none"> ● Introductions (if necessary) ● State personal interests/involvement in the programme and hoped for outcomes from the day 	Participants
Present scenarios (30 minutes per scenario)	
<ul style="list-style-type: none"> ● Explain the scenarios and tell the story of each of them 	Facilitator
Understanding the scenarios (45 minutes in total)	
<ul style="list-style-type: none"> ● Discuss what each scenario means ● Capture any missing assumptions about the future that need to be made in the scenarios ● Capture any requested amendments to scenarios 	Participants in groups
<ul style="list-style-type: none"> ● Feedback assumptions and requested amendments to obtain agreement 	Groups to plenary

TABLE 13.1 *Continued*

Activity	Who
Break (During which facilitator will produce amended scenarios)	
Wind tunnel the design options (1 hour for first scenario against first design; max 3 hours in total)	
<ul style="list-style-type: none"> • Walk through each design option under each scenario • Capture findings using Tables 13.2 and 13.3 	Participants in groups
Review each design (15 minutes per scenario per design option)	
<ul style="list-style-type: none"> • Present findings on each design option to plenary 	Groups to plenary
<ul style="list-style-type: none"> • Discuss and summarize findings on each design option (updating Tables 13.2 and 13.3 as required) 	In plenary
Conclusion (30 minutes)	
<ul style="list-style-type: none"> • Vote to get decision on a design option to recommend • Is one better than the other at dealing with the different futures? • What should the organization do or not do to be successful under these scenarios? • Are there aspects of the design that can be amended to improve it? • Wrap up and agree next actions 	In plenary

Often in these workshops issues that will come up during implementation are raised. This is very useful data for later and it is wise to capture it. Make sure the facilitator has been given an overview of design option outputs that will be used.

TOOL 13.2 Wind tunnelling: testing design options under different future scenarios

Who to involve

Facilitator(s) experienced in using scenarios. Scenario testing is a specialist skill and the people doing the test need to be supported by a facilitator who is an expert in scenario facilitation. Ideally the facilitator will have been involved in compiling the scenarios (and scenario planning if done).

Participants should be people who can work happily with the uncertainty and have enough of a stake in making the future work to be honestly critical of the design options presented while still being committed to finding a solution. Consider using:

- The most senior or most insightful people in your stakeholder community as defined in your stakeholder management work.
- Typically, heads of business units and board members.
- Not necessarily your steering committee (they will see the results).
- Some people who have not been too close to the design to challenge as they can bring new perspectives.
- People upon whom implementation will depend where their involvement in testing can create a more rigorous test and facilitate a higher quality implementation.
- At least 10 people to allow you to subdivide groups.

Design team representation – one or more people who understand the options being presented and inputs. They will also need to capture the outputs and the thinking. Ideally include one person from the design team per subdivided group.

Inputs

The prepared scenarios.

For each design option: selected Work and Structure segment elements; for instance:

- Activity maps of key work processes.
- Outline organization chart.
- Role definitions for units and sub-units.

The design team representatives may need access to any of the earlier documentation and thinking.

Instructions

Using a workshop (see Table 13.1 for a sample agenda):

- Test two design options at most because it is very time consuming.
- Ensure participants understand the scenarios.

- Engage participants by mixing storytelling, visualization, enactment, techniques. Immersion into the scenario by participants is the best way for the potential impact and consequences of it to be experienced.
- Focus on the selected inputs from the Work and Structure segments only.
- Explore what happens under each scenario with the design option in place (break this into groups where each group sees all scenarios for one design option or all design options for one scenario).
- Brainstorm the possibilities, risks and issues.
- Inquire about and rate enabling and constraining factors.
- Summarize the results using Tables 13.2 and 13.3.

Marking scheme

- You only need a simple marking scheme here that enables you to rank more favourable features higher and to highlight show-stoppers.

Outputs

- Completed Tables 13.2 and 13.3.

TABLE 13.2 Commentary on how a design option performs under a scenario

Scenario	<i>Scenario name</i>
Design Option	<i>Design name</i>
Comments & Observations	
Favourable features	<ul style="list-style-type: none"> ● <i>Description of the aspect and why it is advantageous</i>
Stress points	<ul style="list-style-type: none"> ● <i>Description of the problem, explain why it is a problem, and risk</i> ● <i>How resilient is the option?</i>
Concerns	<ul style="list-style-type: none"> ● <i>Description of the problem, explain why it is a problem, and risk</i>
Key Findings	<ul style="list-style-type: none"> ● <i>Include a few sentences summarizing what the future looks like</i>

TABLE 13.3 Commentary on how a design element performs under a scenario

Scenario	<i>Scenario name</i>	
Design Option	<i>Design name</i>	
Design Element	Commentary	Mark
<i>Design Element</i>	<i>Commentary</i>	<i>Mark</i>

An action plan should be defined from the test results, based on the strengths and weaknesses identified. The next steps are likely to contain:

- the design team refining the chosen design option, including reviews on the impact on all quadrants on the Compass if necessary followed by a re-alignment;
- a recommendation to go back to steering committee (as set out in the chapter on Assessing Alternatives).

Following up these actions needs only a few members of the design team with some of the participants from the scenario testing.

Conclusion

Dealing with uncertainty in the organization's environment and complexity is never straightforward. 'The pessimist complains about the wind. The optimist expects it to change. The leader adjusts the sails', John Maxwell. One way, to 'adjust the sails' is to use scenario thinking before and/or after design. This enables executives to increase their confidence in their chosen

strategy, reduce their anxiety about the resulting design and change, and enhance the risk management of their organization. As well as these outcomes, there are a number of outputs from doing this:

- scenarios;
- insights for the design work;
- completed commentaries on how a design option performs under a scenario;
- completed commentaries on how a design element performs under a scenario;
- action plans;
- refined design options.

This chapter has shown you how to increase the chances that the design options you derive and choose can cope by adding scenario planning and scenario testing. Once you have completed this chapter you will be able to assess whether adding scenario planning and/or scenario testing to a design programme will be useful. You will know at what stage in design work to use them and how to apply them.

How to assess the level of capability maturity of an organization over time

Maturity is the ability to stick with the job until it's finished.

ABIGAIL VAN BUREN

Different strategic intents require different capabilities and underlying changes to deliver them. Capability maturity focuses on outcomes: achieving the final state your organization has targeted. Implementing your organization's capabilities well enables it to deliver its strategic intent and is important because it is hard for competitors to match. Although you may require all parts of your organization to reach a consistent final state, they may be unable to do so at the same time because implementation is too difficult or too expensive. Alternatively, you may require different target capabilities and their states/levels across your organization. Variances may be by area, by groups of people or by levels of seniority, and they may be working to different implementation timetables. In these situations it is important to establish defined states or levels of interim or ultimate achievement, as required: either for the whole organization or for particular areas and groups. Interim levels can be used as a means of measuring progress towards the states over time. If dates are established they can be used as input for planning.

This chapter aims to show you how to assess the maturity of your organization's target capabilities: either at a point in time or periodically. It covers a framework and process for assessing capability maturity at two different levels of granularity with case examples for each. These demonstrate two

ways in which capability maturity assessment has been used to good effect. You should gain an insight into how you can tailor a capability maturity assessment framework and assess capability maturity.

A framework for assessing capability maturity

Throughout the OPTIMAL Organization Design Approach we have shown you how growing capabilities involves building and developing across a range of aspects. Every capability impacts, for instance, the work done, the skills, competencies and behaviour required from your people and/or suppliers and how you measure and reward performance. You can look at capabilities at two levels of granularity: either at individual capability level or if an understanding of a finer level of detail is required, in terms of their design components. For instance, for an organization where a key capability is ‘set strategy and focus on outcomes’, you can look at this at that level or focus on what that phrase means in terms of the Organization Design Compass segments that need to change in your organization. For example: in Structure, an area with roles and responsibilities for strategic insight and planning as well as in Enablers, goals and metrics and rewards focused on outcomes.

Design maturity is simply a more detailed and specific way of looking at capability maturity, ie the final state required for a capability. You look at the maturity of a capability at the design segment level: this provides greater focus in terms of design implications making it easier to define and take appropriate actions. In this book, we first examined what capability maturity means for an organization when taking stock of the change required. There we looked at the maturity requirements at the design segment level. When you have completed the design phase of a programme you will have a much better understanding of what the design implications for your organization are and what maturity looks like for each capability.

When an organization establishes or re-establishes its strategic intent, it takes time for it to change and develop the required maturity for associated capabilities. A number of tools and techniques have been developed to allow you to measure the maturity levels reached and/or establish interim maturity targets. Some other disciplines have recognized de facto standards for capability maturity models/frameworks and assessments; for example, the Software Engineering Institute CMMI model. So far, though, no standards exist in this area for organization design work. Anyone using these types of tools and techniques has to develop their own and therefore there are many variants. Figure 14.1 shows a framework for capability maturity assessment you can use. The left-hand side records the capabilities at the level you want to look at them. Across the top, the maturity levels are captured.

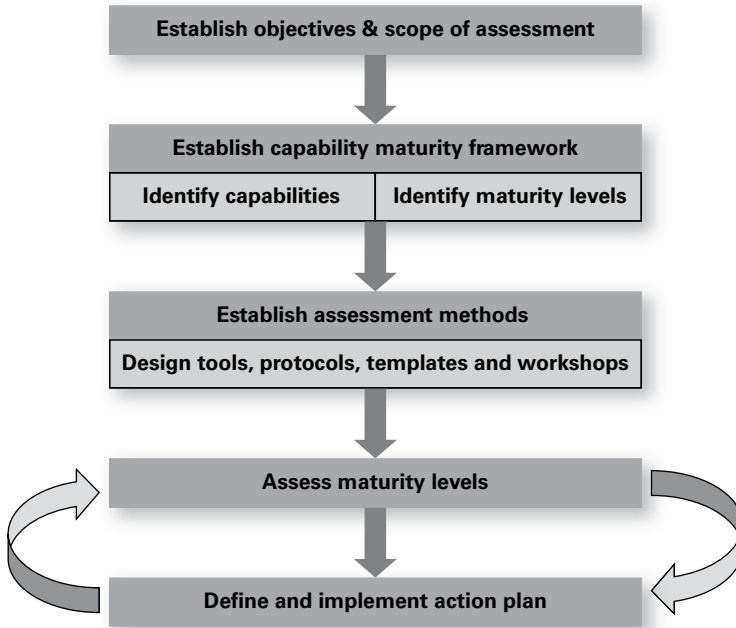
FIGURE 14.1 Capability maturity framework

Capability	Capability Maturity Levels			
	Level 1 <i>Name</i> <i>Description</i>	Level 2 <i>Name</i> <i>Description</i>	Level 3 <i>Name</i> <i>Description</i>	Level n <i>Name</i> <i>Description</i>
Capability name 1				
Capability name 2				
<i>Add Compass segments here if you use this framework to assess design maturity</i>				

How to assess capability maturity

The process for assessing capability maturity levels is shown in Figure 14.2. You start by establishing what you are assessing. What are the objectives and scope for your assessment? What do you need to know and why? What outcomes are you looking to assess? What organization(s) and time period(s) are you going to cover?

Next you want to establish your assessment framework, using Figure 14.1 as a template. Identify the capabilities you want to assess and include these on the left-hand side of the framework. If you have been through the OPTIMAL Organization Design Approach, these will probably be your target capabilities. Which capabilities need to be embedded? Do you want to focus on them all or just a subset? How detailed do you need to review them – at capability level or do you want to focus on some capabilities in some areas at design level? They are ‘horses for courses’: each appropriate at different times for assessing capability levels. Be careful: you may be swamped with too much information if you look at everything at design level. On the other hand you may not have enough understanding for appropriate action in some areas if you use capability level. The second aspect to the framework is considering the maturity levels you want to assess against: four to five levels are typically used. Adding meaningful names and descriptions helps to make them real for the situation you are assessing. A sample from a completed assessment framework is shown in Table 14.2. The framework shows the assessment criteria completed for design maturity for one capability across levels. The case is covered in more detail later in this chapter.

FIGURE 14.2 Process for assessing capability maturity levels

Now you need to look at how you will carry out the assessments and establish the assessment methods you will use in all the organizations being assessed. You will be repeating this across the organization over time: others may be carrying out the assessment, so make it straightforward and consistent. Create any tools and templates to be used, eg workshop designs, interview question sets, questionnaires and analysis proforma/spreadsheets. Set out any protocols to be used, eg written guidelines and instructions about how to carry out the work; instructions on who to involve, how to introduce the work to them, how to gather data, how to assess results, how to report results, who to report results to and when to repeat the assessment. Now the cycle of reviews using your framework and methodology can take place over the time and frequency you have set. After each review the assessed unit should draw up action plans and implement these in any areas that need addressing.

It is straightforward to assess capability maturity either during implementation or when embedding an organization design. It takes little time or effort to establish the assessment framework. Typically only one to two days once your strategic thinking is done, with a couple of people involved whatever the size and complexity of your programme. The time taken for assessment depends on how many areas are involved and how many times it is carried out.

Case example: assessing capability maturity

In 2005 the UK Government's Cabinet Office established a programme of capability reviews. The objective and scope were a set of consistent capabilities and associated levels to be reached by all central Civil Service departments. It was recognized that across individual departments capability maturity would vary: so the Cabinet Office set out levels against which they could assess each department. The intent was for each department to use the assessment as an organization diagnostic as input to planning and implementing improvements. The Cabinet Office defined their capabilities around three groups: leadership, strategy and delivery and identified five levels of maturity. The maturity levels were:

- Strong – good capability for future delivery in place, in line with the capability model. Clear focus on the action and improvement required to deliver transformation over the medium term.
- Well placed – well placed to address any gaps in capability for future delivery through practical actions that are planned or already under way. Making improvements in capability and expected to improve further in the medium term.
- Development area – the department should be capable of addressing some significant weaknesses in capability for future delivery by taking remedial action. More action is required to close those gaps and deliver improvement over the medium term.
- Urgent development area – significant weaknesses in capability for future delivery that require urgent action. Not well-placed to address weaknesses and needs significant additional action and support to secure effective delivery. Not well-placed to deliver improvement over the medium term.
- Serious concerns – serious concerns about current capability. Intervention is required to address current weaknesses and secure improvement in the medium term.

(National Audit Office, 2009)

They also developed the assessment methods: the process to be used, the criteria for each capability, a set of test questions to ask, and marking scheme to be applied in all reviews and the reporting structure. Initial reviews were carried out by a team drawn from within the Civil Service with strong external representation. Typically these review teams have included: two Directors General from other government departments; two members drawn from the private sector; and one from local government. The reviews consist of a number of activities for the team. They examine documents and surveys produced by the department under review. Over a couple of weeks, they hold

challenge workshops, interviews with (mainly senior) staff from the department, their suppliers and stakeholders, and visit parts of the department. Then they review the information gathered against the criteria, test questions and marking scheme to ascertain the department's capability assessment. A formal report, approximately 20 to 40 pages long, is produced containing the assessment and findings for each capability. Table 14.1 shows an example of a summary capability assessment for one department. Following the review, each department then defines their response and action plan; and is responsible for implementing it.

TABLE 14.1 Example of summary capability assessment

Leadership		
L1	Set direction	Well placed
L2	Ignite passion, pace and drive	Well placed
L3	Take responsibility for leading delivery and change	Well placed
L4	Build capability	Development area
Strategy		
S1	Focus on outcomes	Well placed
S2	Base choices on evidence	Strong
S3	Build common purpose	Development area
Delivery		
D1	Plan, resource and prioritize	Well placed
D2	Develop clear roles, responsibilities and delivery model(s)	Development area
D3	Manage performance	Development area

By 2009 the capability maturity of every department had been assessed once and a review of the Capability Review Programme was carried out by The National Audit Office. As result of this, the lessons learnt from initial reviews, and to reflect the latest strategic thinking, a slightly modified version of the original capabilities was introduced in 2009 for all future assessments. At the time of writing this book, the cycle of implementing planned actions, reassessing capability maturity levels and defining action plans is continuing.

Capability maturity assessment was ideal for this situation. So far reviews have been carried out on 24 departments, each looking at all 10 capabilities. At this scale, there is sufficient information to take action without getting swamped or the assessment costs exceeding the benefits to be derived. Also the reviews deliberately set out to engage with the leaders of the departments and this was achieved because the focus was limited to a few high-level capabilities and a more strategic review. At first sight, the Civil Service departments are very different; however, a shared framework exposed common gaps enabling the development of shared responses. According to the National School of Government's Sunningdale Institute, 'Capability issues are being discussed more widely and openly, partly because the Capability Reviews process has identified common capability gaps across departments' (Sunningdale Institute, 2007).

Case example: assessing design maturity

Here we show an example where design maturity assessment was absolutely the right technique for the situation. The case was a large global corporation setting up an IT and operations shared-service centre for their business units and head office functions. They identified that a capability in demand management needed to be in place in eight business units using the new shared-service organization. This particular capability was critical to the success of the new organization and yet it spanned boundaries beyond the shared-service unit being designed. These future 'customers' of the shared-service unit had all been represented in the shared-service organization design programme to ensure an optimal design for the whole organization. But in implementation phase, the programme needed a deeper engagement with each business unit to influence how they carried out demand management, while allowing for varying current maturity levels and future maturity targets based on the degree of their use of the shared service centre.

So the objectives for the design maturity assessment were clear. To establish the current, interim and ultimate maturity levels for demand management capability. The scope of the assessment covered eight business units. The design team then established which segments of the Compass were the priorities for this capability. Seven segments were included: Processes, Information, Structure, Roles and Responsibilities, Resourcing, Incentives and Rewards, as well as Goals and metrics. Four levels of maturity were set: skeletal, emerging, mature and advanced. The framework was completed by defining how each level would be assessed for each segment: 'the marking scheme'. The completed result for some of the segments is shown in Table 14.2. Next the programme team turned to the assessment process, methods, protocols, tools and techniques. The programme team designed a detailed one-day workshop to be run in each of the business units to complete the existing capability assessment.

TABLE 14.2 Extract of the design maturity framework used in assessing demand management capability

Compass Segment	1 Skeletal Ad hoc	2 Emerging Not formal, but some regularity	3 Mature Formal: basics are documented	4 Advanced Formal: fully documented, fully functioning, anticipates future needs
Processes	<ul style="list-style-type: none"> ● No process documented and adhered to ● Activities and hand-offs done in an ad hoc manner and are 'invented from scratch' each time and in general are not repeated 	<ul style="list-style-type: none"> ● A general process followed but not documented and explicitly controlled 	<ul style="list-style-type: none"> ● Process is defined and documented ● Process targets are defined and monitored 	<ul style="list-style-type: none"> ● Process is defined and documented, and reviewed on a regular basis to meet changing business requirements ● Deviations are quickly detected and removed before impacting the end customer
Information	<ul style="list-style-type: none"> ● All requests for information are new ● Each request is different from the last ● High degree of clerical work to extract and collate information ● Group meetings and face to face used extensively to share and understand information 	<ul style="list-style-type: none"> ● Information requirements are similar to last time's request ● Reuse of forms starting ● Quality and timeliness of information may become questioned as level of understanding improves 	<ul style="list-style-type: none"> ● People have easy, ready access to the information they need to complete their activities ● Group meetings and face to face used for problem solving and innovation rather than routine information sharing 	<ul style="list-style-type: none"> ● Routine documented processes supported by routine automated information systems ● Information shared in coherent format across organization boundaries ● Future forecasts readily available

TABLE 14.2 *Continued*

Compass Segment	1 Skeletal Ad hoc	2 Emerging Not formal, but some regularity	3 Mature Formal: basics are documented	4 Advanced Formal: fully documented, fully functioning, anticipates future needs
Structure	<ul style="list-style-type: none"> ● Structure is poorly defined and staff cannot describe it clearly ● Ad hoc task groups are pervasive and take >40% of staff time 	<ul style="list-style-type: none"> ● Structure is becoming easier to explain to others outside ● Roles and responsibilities and their lines of command are reflected in the business as usual structure 	<ul style="list-style-type: none"> ● Structure supports effective coordination of responsibilities ● More formal processes allow wider spans of control to be implemented 	<ul style="list-style-type: none"> ● Effective horizontal linkages with other departments emerging as maturing ● Organization no longer needs to channel interface through managed points of contact
Roles & Responsibilities	<ul style="list-style-type: none"> ● Roles are missing ● No responsibilities ● Not documented 	<ul style="list-style-type: none"> ● Roles exist ● Responsibilities and lines of authority not explicit or do not align 	<ul style="list-style-type: none"> ● Roles are documented ● Responsibilities and lines of authority exist, but not always aligned 	<ul style="list-style-type: none"> ● Roles are documented ● Appropriately located ● Accountable and with appropriate authority

With this complete, reviews could start. At each business unit, the workshop was attended by the business unit leaders and people who would be responsible for implementing the demand management capability in that business unit. It was facilitated by members of the design team for the shared-service unit. At the workshop, the business unit's team were given an overview of the programme, its objectives and the Organization Design Compass. They were then taken through a structured question set to analyse their current demand management capability. The question set examined a number of processes that contributed to demand management capability:

- demand definition and gathering;
- demand consolidation to service business requirements;
- demand analysis to understand high-level impact on current services;
- demand analysis for impact on new services required;
- translation of business demand strategy into detailed requirements following standardized templates, processes and structures.

The workshop went through an examination of whether the processes were already being carried out and their maturity level in the seven identified compass segments. The output for each business unit was summarized as a single score, from one for 'skeletal' to four for 'mature' for each Compass segment.

Following the completion of the workshops across all eight business units, the shared-service design team (including the business unit representatives), developed a hypothetical target capability maturity for each business unit showing progression over time to enable the shared-service unit to achieve its goals. A second set of workshops and dialogues was then held with each of the business units where that theoretical target was refined to take account of the business unit's other change demands. Table 14.3 shows a target timeline for one business unit. Each business unit then developed its own action plan to implement their required capability level in the required timescale. Periodic checkpoints were built into the implementation programme and the assessment was repeated at checkpoints so that the business units and the shared-service centre could effectively track and monitor progress. Two major factors drove the timing of these checkpoints: priority to business units with greatest demand on the shared-service centre to reach higher levels of maturity for the overall organization to function and the internal drivers within each business unit.

Design maturity assessment was ideal for this situation. It was highly targeted, looking at just one capability. It gave a depth of understanding and guidance by drilling the capability down into the key design segments. The engagement of people from both the business units and shared-services unit built a shared understanding across all the areas of the requirements to make the organizations as a whole successful. It provided a consistent approach across the eight business units so that they could compare themselves and learn from each other. It allowed for, indeed overtly recognized, the fact that

TABLE 14.3 Sample timeline produced to drive demand management maturity

Demand Management Capability for Business Unit A																		
Segments	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
Processes	1				2					3		4						
Information	1					2						3					4	
Structure		1		2				3						4				
Roles & Responsibilities		1			2				3						4			
Resourcing			1			2						3						4
Incentives & Rewards	3				4													
Goals & Metrics	1						2			3		4						
Checkpoint			1				2					3						4

At each checkpoint all capabilities for that maturity level to be in place across the business unit.

not all business units needed the same level of capability and that they could develop their capability at different times in different ways. By focusing on outcomes rather than tasks it allowed the business units a degree of autonomy, giving them some control over their own destiny and the ability to develop in their way while working in a broad framework.

Conclusion

Capability maturity frameworks provide an effective means of assessing progress towards your organization's strategic intent and the delivery of its optimal design. The outcomes from following this chapter are that you are able to:

- define capability maturity framework(s) tailored for your organization's requirements with appropriate choices of level of granularity (broad or fine) and associated capability maturity levels;
- establish assessment methods – for instance, protocols, processes, templates and questionnaires – so there is a means of repeating the assessment over time where required;
- support organizational units in drawing up action plans and timetables to deliver their increased capability maturity.

You will be able to lead your organization in developing and implementing capability maturity assessments. As Charles Kettering pointed out, 'high achievement always takes place in the framework of high expectation'. These assessment tools are really useful once your high-level design is complete, in implementation or in embedding a design. Once you have completed this chapter you will have the knowledge to tailor capability maturity assessments for your organization and be able to repeat it over time while helping others understand the outcomes required of them to deliver their part of the organization's capability. You will also be ensuring increased confidence with stakeholders that the organization designs developed are implemented.