

The logo for infokit, featuring the word "infokit" in a white, lowercase, sans-serif font, oriented vertically within a large orange rounded rectangle.

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## Analytical Tools & Templates

5 Whys

7S Model

Assumption Surfacing & Testing

Backward Planning

Balanced Scorecard

Benchmarking

Change Variables

Clarimission

Clariscope

Prioritisation Matrix

SMART Targets

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## 5 Whys

Five Whys is a simple tool which addresses single-problem events rather than broad organisational issues. It attempts to analyse a problem or issue by asking a series of 'Why (did this happen)?' questions.

If a problem occurs, the first 'Why?' question is asked: 'Why did this happen?' A number of answers may be found and for each of these the next 'Why?' is asked: 'Why is that?' The whole process is repeated until five consecutive 'Why?'s have been asked and answered. In most instances it has been found that five repeated whys are necessary to get to the real root cause of the problem.

A simple example – students are spending two hours queuing to enrol. The analysis might be:

*Why are students spending so long queuing?*

Because administrative staff take a long time to process enrolment forms

*Why do staff take so long to process each form?*

Because the forms are complex and the information needs to be checked

*Why are the forms complex?*

Because we need lots of information so the forms are not easy to use

*Why aren't the forms easy to use?*

Because some of the questions aren't clear and are left blank or incorrectly completed and these always have to be checked

*Why are some of the questions difficult to answer?*

Because the wording is not clear and the students don't understand what's being asked for.

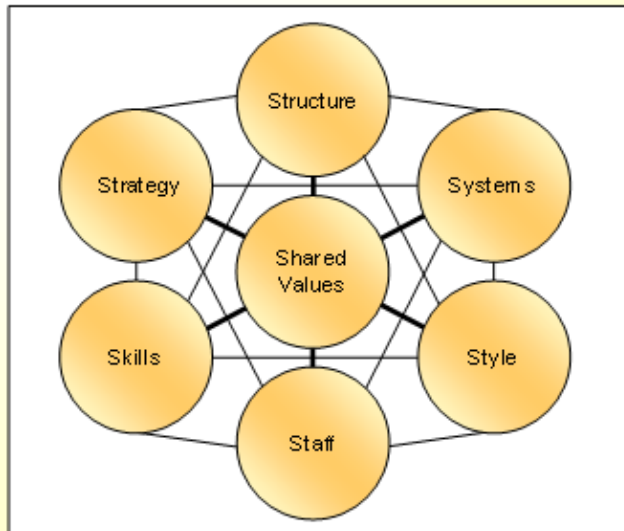
Possible answer: redesign some of the questions on the form.

At each stage there can be multiple reasons – all of which need to be probed further.

## 7S Model

The 7S approach suggests there are seven aspects of an organisation that need to harmonise with each other, to point in the same direction like the needles of seven compasses. If each aspect supports the others then the organisation can be said to be 'organised'. As each of these aspects can be titled with a word beginning with S this list or web has become known as the 7S Model (Waterman, R. H. Peters, T. J. and Philips, J. R. (1980) Structure is not organisation. Business Horizons. June. Foundation for the School of Business, Indiana University.)

## 7S Model Based on Peters & Waterman (1982)



The constituent parts of the 7S Model are:

**Strategy:** plan or course of action leading to the allocation of an organisation's finite resources to reach identified goals.

**Structure:** salient features of the organisational chart (e.g. degree of hierarchy, extent of centralisation/decentralisation) and interconnections within the organisation.

**Systems:** procedures and routine processes, including how information moves around the organisation.

**Staff:** personnel categories within the organisation, e.g. academics, administrators, technicians.

**Style:** characterisation of how key managers behave in order to achieve the organisation's goals.

**Shared values:** the significant meanings or guiding concepts that an organisation imbues in its members.

**Skills:** distinctive capabilities of key personnel and the organisation as a whole.

The 7S Model can be used in two main ways.

Firstly, the strengths and weaknesses of an organisation can be identified by considering the links between each of the Ss. None of the S components is a strength or a weakness in its own right; it is only its degree of support, or otherwise, for the other Ss which is relevant. Any Ss which harmonise with all the other Ss can be thought of as strengths, any dissonances as weaknesses.

The image below can be used to undertake this cross-analysis. In each box the action that needs to be taken to align the two elements is recorded. Click on the image to view the 7S Model template.

## 7S Model

	Skills	Shared Values	Style	Staff	Systems	Structure	Strategy
Strategy							
Structure							
Systems							
Staff							
Style							
Shared Values							
Skills							

Secondly, the model highlights how a change made in any one of the Ss will have an impact on all of the others. Thus if a planned change is to be effective, then changes in one S must be accompanied by complementary changes in the others.

## Assumption Surfacing and Testing

It is all too easy to treat the routines or rules which we use in certain types of situation as inevitable and ordained. The aim of this tool is to bring to the surface and make more visible the assumptions underlying our choices and actions.

Make a list of some of the 'rules' by which you make decisions: for example, who you consult, where you would look for best practice, how you go about getting approval, etc.

Ask yourself why you feel it is the best choice and on what critical assumptions your customary behaviour depends.

List the assumptions, and beside each formulate a counter-assumption – not necessarily its negation, but rather the opposite pole of the construct (issue) it represents. Write these down alongside the corresponding assumptions.

Now consider what would happen if the counter-assumption was in fact the case. Would it make any difference to your behaviour? If not, the pair of items can be ignored as irrelevant to your actions.

Work down the list and delete ineffective assumption/counter-assumption pairs i.e. where it would make little difference to your choice whether the assumption or the counter-assumption was actually the case.

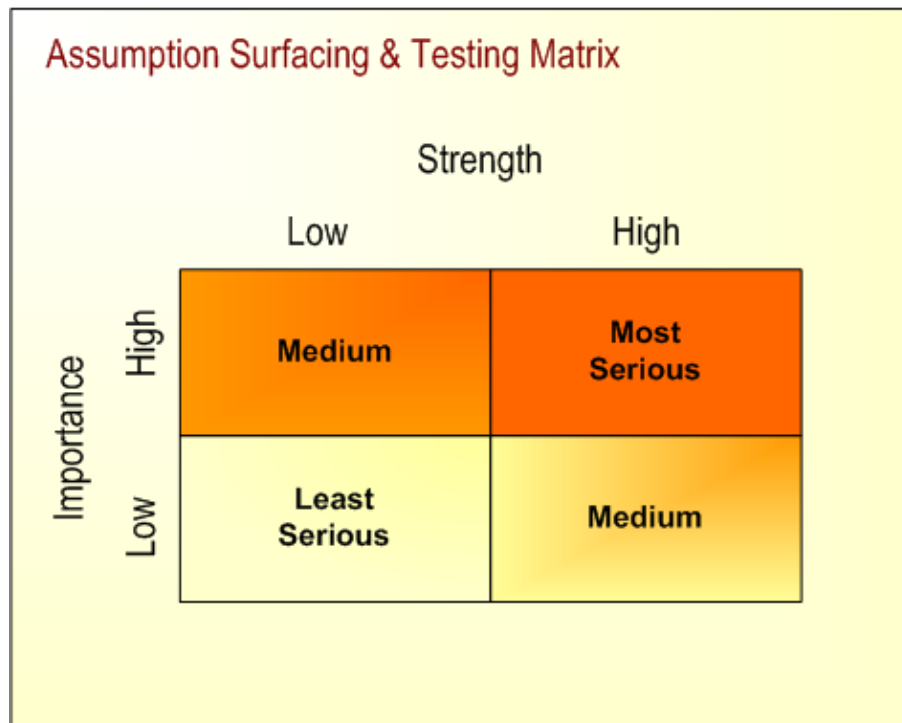
Assess each of the remaining assumptions in terms of high or low importance (how critical is its truth justifying your pattern of behaviour?) and high or low strength of conviction (how confident are you that it is, the case).

**Example.** You may always consult colleagues about decisions.

One assumption might be that you do this because it is a good way to get agreement and 'buy-in' to your plans. The counter assumption is that consultation is not important to getting 'buy-in'. If the counter assumption were true then you wouldn't consult colleagues so this would be an important assumption for you and you can assess how critical an assumption it is to your style of management and your strength of conviction.

A second assumption might be that your colleagues want to be consulted. The counter assumption is that they don't want to be consulted. Even if the counter assumption was true you might go ahead and consult because you believe it will increase co-operation and acceptance. Hence this is not a critical assumption (even though it may be true).

Plot the assumptions on a 2x2 matrix: high/low impact on one axis, high/low plausibility on the other.



Look carefully at those assumptions which lie to the top on the matrix. These justify your actions. What could change them? What benefits would there be in this and for whom?

Look at the assumptions which lie in the top-left quadrant. These could be crucial to your behaviour but you are unsure as to their validity. Can you check them out in some way? If they turn out to be false, what impact would this have on the way in which you operate?

The assumptions in the low impact cells seem less important but it might just be worth checking they aren't being underestimated.

To test your interpretation as well as surfacing the assumptions you can do this exercise in groups. This exercise is often known as SAST (Strategic Assumptions Surfacing and Testing – after Mason, R.O. Mitroff, I.I. (1981) Challenging Strategic Planning Assumptions: theory, cases and techniques, New York, Wiley) and is based on the following principles:

#### *Adversarial*

based on the premise that the best way to test an assumption is to oppose it.

#### *Participative*

based on the premise that the knowledge and resources necessary to solve and implement the solution to a complex problem is distributed among a group of individuals.

#### *Integrative*

based on the premise that a unified set of assumptions and action plan are needed to guide decision making, and that what comes out of the adversarial and participative elements can be unified.

### *Managerial mind supporting*

based on the premise that exposure to assumptions deepens the manager's insight into an organisation and its policy, planning, and strategic problems.

*'During the early stages of the VLE implementation...there was a naïve assumption that, following awareness and training sessions, teaching staff would be able to autonomously generate their own material and repurpose existing material for use on the VLE. In the light of experience it is obvious to the project team that this would not have worked but there is evidence of other schools and colleges who embarked on a VLE implementation with the same unsafe assumption.'*

*ILT Co-ordinator, FE College*

## **Backward Planning**

Backward planning starts with where you want to get to and then asks what needs to be done to create that environment from where you are now. It can be helpful in a number of ways in particular:

- it can help identify the key processes, structures or cultures that need to change; and
- it can help move people out of a mind-set where they are focussed more on what can't be done than what can be done.

This is best done with a small group of people with an interest in the area under consideration.

Imagine the area of the institution/department etc on which you want to focus in say five years time and that it is working well. Then ask the following types of questions:

- how do we know it's working well?
- what will be its impact on other areas of the institution?
- what will staff say about it?

There are a range of activities which can help this process of 'visioning' the future such as:

- writing positive headlines or articles on the topic that are appearing in national, local or internal publications;
- using internal performance indicators and saying what they will be in five years.

The next stage in the process is to ask:

- What needs to happen to get us to the new scenario?

A brainstorming activity around this or group work can be helpful here with each group presenting its version on the route adopted.

The final stage is

- agreeing the steps along the way to creating the new vision of the future.
- identifying the priority areas – which actions must be taken to enable this to happen in the real world, which should be taken and which might assist
- identify whose responsibility each would be and possible barriers clarify how the process

will be monitored

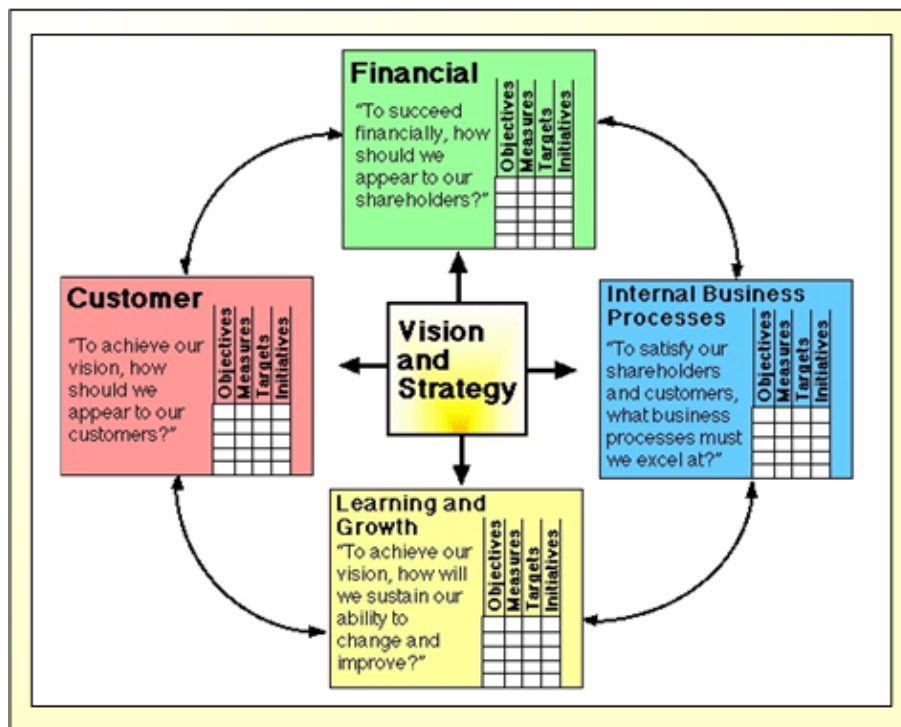
## Balanced Scorecard

The "Balanced Scorecard" is a strategic management approach developed in the early 1990s by Dr Robert Kaplan of Harvard Business School, and Dr David Norton.

Drs Kaplan and Norton describe the approach – "The balanced scorecard retains traditional financial measures. But financial measures tell the story of past events, an adequate story for industrial age companies for which investments in long-term capabilities and customer relationships were not critical for success. These financial measures are inadequate, however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technology, and innovation."

The balanced scorecard identifies four perspectives from which to view an organisation. These are:

- The Learning and Growth Perspective
- The Business Process Perspective
- The Customer Perspective
- The Financial Perspective



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Further information on the Balanced Scorecard can be found at [The Balanced Scorecard Institute](#) and at [the Balanced Scorecard Collaborative](#).

Liverpool John Moores University, in collaboration with Oracle, is developing an "Executive Dashboard", a strategic management tool based on the Balanced Scorecard approach. John Townsend, of the University reported in a paper to [EUNIS 2005](#) that "The Balanced Scorecard approach and the associated Oracle technology provide a very powerful tool for managing change – and force you to ask hard questions with inevitable consequences: "Where are we going?...How will we know when we get there?... How will we get there?... Are we there yet? ... How can we tell where we are now?... The data must be accurate and meaningful... Who gets the data?... Change

management... means changes in the way we work... but this doesn't happen of its own accord and there is a major communication and marketing effort to go with any such initiative... This change is not a foregone conclusion... What about people?"

Follow the link to find out further information on [Liverpool John Moores University's Executive Dashboard](#).

## Benchmarking

According to the Public Sector Benchmarking Service (PSBS) (a collaborative partnership between the UK's Cabinet Office and HM Revenue & Customs) benchmarking essentially involves "learning, sharing information and adopting best practices to bring about step changes in performance. So, at its simplest, benchmarking means: "Improving ourselves by learning from others".

Benchmarking usually involves

- Regular comparison of functions or processes with best practice examples
- The identification of gaps in performance
- Exploring new ways of improving how things are done
- Introducing and using the improved processes
- Monitoring and reviewing of processes, measuring progress and beneficial outcomes.

For the best results, the PSBS encourages focusing on the learning and sharing that goes on during the benchmarking process.

Follow the link for related information on the [Public Sector Benchmarking Service](#).

There are a number of benchmarking tools available, several of which are sector or industry specific. An example of benchmarking within the Education sector is the tool used by the [Space Management Group](#) to look at institutional estates. Another good example is the [e-learning benchmarking](#) exercise, an initiative led by the HE Academy in partnership with the Joint Information Systems Committee.

## Change Variables

Large scale change may require changes in a number of aspects of the way in which the institution, faculty or department operates. This tool provides decision-makers with a picture of what the consequences might be if the change is, is not, or is partially implemented in each of these areas. Looking at the change variables and possible implementation outcomes can provide a supportive argument when creating a compelling case for change and hence gaining support.

A change elements matrix can be prepared for the whole of the institution, for a particular stakeholder (staff, or students, or businesses), or a particular department or grouping undergoing change.

The tool looks at different aspects of planned changes and asks for each:

- What would happen if the change is not implemented?
- What would happen if the change is partially implemented?
- What would happen if the change is implemented?

(The degree of differentiation will depend on how detailed a picture you want to create.)

The first stage is to identify the 'change elements'. What is it we can control and will need to change to effect the intended change? Examples might include:



- Strategy
- Policies
- Processes
- Tasks
- Services
- Service delivery
- Staffing issues
- Financial resources
- Training and development
- Structure
- Collaborative links
- Culture

Use the following link to view the [change variables template](#).

What would happen if we

Do not  
change?

Partially  
change?

Change  
effectively?

Select list from questions above plus your own suggestions.

## Clarimission

The change process can benefit from a mission statement which tries to encapsulate the key elements of the intended change in a few short sentences.

Arriving at a mission statement can help:

- clarify the aims of the intended change;
- assist with its communication up, down and across the management structure;
- assist with the decision-making process by asking 'how does this relate to our mission for change?'.

It can be used by teams or individuals and at all levels within the organisation.

The aim is to provide a clear and succinct description of the scope of the change initiative, programme or project.

The characteristics of a good mission statement are:

- It should be clear.
- It should be catchy.
- It should represent succinctly 'what we are trying to achieve'.
- It should be short – describing the change in no more than five sentences.

There are a number of ways in which the writing of the mission statement can be accomplished. It is useful if some ground-work has been done on the nature of the change before attempting to write the statement and it can be helpful to set a specific time limit for this activity since it can be extended almost indefinitely.

Although it can be accomplished individually (by a good word-smith on behalf of the team) it is perhaps better if each member of the team starts by writing the key phrase or phrases that they would like to see in the final statement. These are then shared and the best one(s) selected and the final overarching statement written.

Once agreed, you may want to consider how to communicate the 'mission' to other interested parties.

## Clariscope

All too often change does not succeed because there is no clarity as to what exactly it is trying to achieve; checking stakeholders' perceptions and reinforcing clarity in communications and the scope for the change helps ensure that the message is clear, and that those involved are working towards the same goal.

Clariscope is a decision-making tool that can help to build consensus and enthusiasm around the change initiative, provide a clear message of what is wanted of whom by when, and check perceptions and understanding of the scope of change. It assumes that the intended outcome of the change is known – but not the means by which the change will be achieved.

It is best used in a group context and can be used at the team, departmental, faculty or institutional level.

The scope of the planned change is the topic for a brainstorming session. The key question to be asked is:

What is it that we could do to effect the change we are seeking?

Once the ideas have been collected (on a flip chart or even better each on a series of post-it notes) the next step is to decide which of these ideas are necessary for effecting the desired change, which are desirable and which are out of the change process.

In making this decision there will be a number of factors to be considered:

- How far should we stretch ourselves?
- What time do we have?
- How much resource will be available?
- Do we have the staff expertise?

This should lead into a discussion which clarifies precisely what the change means. There are a number of ways in which this step can be handled but it's probably better to get each member of the team to work individually and follow this up with creating a shared vision. This allows the different perceptions and priorities of the individual members to surface and be discussed. The final set of priorities is then owned by the team rather than being seen as driven from the top down.

One possible approach is:

1. Each member has Post-it notes and writes one thing which could be done on each.
2. These are put on the walls and people walk around and review them.
3. Each member is given ten votes to apportion to those ideas which he/she feels are most important.
4. These are then divided into three groups: essential, desirable and rejected. Rejecting ideas at this stage may be ruthless, but at the same time crucial for the success of the change. Rejection does not mean that the ideas aren't good ones – just that they're not central to the change or are unrealistic at the current time.
5. Finally agree on what is in and out of the change process and how each area will be taken forward.

# Prioritisation Matrix

Often there are many ideas for change around. Deciding which one(s) have priority can be difficult – especially when there are many vested interests to consider.

Whether the idea for change comes from an individual, a team or department, the enthusiasm and buzz created at the idea generation stage can prevent these individuals seeing clearly someone else's priorities. People start asking 'Why can't everyone see that this is the way forward?' and this can create friction between the innovative team and everyone else.

So that the enthusiasm and buzz isn't lost and the individual, team or department are not discouraged, there will need to be a process, perceived to be fair and equitable, to set priorities for change ideas and programmes.

The Prioritisation Matrix is designed to:

- Examine different change processes and allocate priorities.
- Be inclusive in recognising the work of different teams and individuals.
- Improve the decision-making process.

Our thanks for this tool go to the University of York where it is being used to help their decision-making processes.

To construct your own matrix, you will need to decide on the factors for priority setting. This is something which will be dependent on your own circumstances but factors you might want to consider include:

- Is there a link between the proposals and the strategic objectives of the Institution?
- What would be the impact of the changes on stakeholders in terms of, for example:

*Process improvement*

*Cost savings*

*Time saving*

*Student satisfaction*

*Student retention*

What are the financial implications for the institution?

*Conduct a cost benefit analysis*

*What would be the implementation costs?*

- What risks would the institution be taking if the idea is developed in a change programme?
- What is likely to be the level of resistance? Is there a danger of undertaking too much change at any one time?
- Do we have the human resources with adequate skills to develop, implement and maintain the changes?
- Is there a need for training and development to be put in place for staff to lead and/or facilitate the change process?
- What is the urgency of the change?
- What is the wider level of support for the change? What level of approval will be needed to develop the initiative? Will it be difficult to get this support?
- Is there a community of practice, steering committee that can assess objectively/back up the change proposals?
- Is the timing right?
- How long is it going to take to implement the change?

The Prioritisation Matrix involves:

1. Agreeing a process for developing and implementing the matrix.
2. Deciding on what the priorities are.
3. Deciding on the weighting/rating scale to be used.
4. Making the prioritisation matrix readily available to individuals/departments.
5. Allocating a date for the review.

Just on its own, the prioritisation matrix will be a reserved tool for decision makers, and won't be fully beneficial to the institution. Making the matrix available to staff can:

- Improve the quality of decisions.
- Demonstrate the institution's commitment to continuous improvement and achieving a culture of change.
- Assist with communicating why change is important.
- Gain greater trust through greater transparency

Deciding what weighting/rating scales would be appropriate can be difficult. A simple scale has greater transparency – a more complex scale leads to detailed debate about interpretation but can provide greater flexibility.

You could decide that you would like to use a Lickert scale (one to five), or any other scale; or if you are faced with, say, 4 change proposals, you could rank each from one to ten on each of the priority factors.

Use the following link to view the [prioritisation matrix template](#).

Below are some examples of what a prioritisation matrix could look like with the opportunity to customise it and make it fit for use at your own institution.

Example: Scoring each from 1 – 10

Priority Factors	Weighting Factor	No Change	Change Proposal 1	Change Proposal 2	Change Proposal 3	Change Proposal 4
Selected from list above and with ability to add in others						

Total Score

## SMART Targets

Setting targets is a common approach but one that often fails for a number of reasons. Often the targets are not appropriate or where they are, once written, they are never utilised. Setting SMART targets can help with the former (but not with the latter)

SMART stands for

**S** Specific  
**M** Measurable

**A** Achievable  
**R** Realistic  
**T** Time–constrained

So essentially SMART targets set out what's going to happen, who's going to do it, when it's going to be done by, and how achievement will be measured. Easy to say – much harder to do in practice and provide meaningful targets.

SMART target setting is an important process. Some points to consider:

- There are some areas where it is much harder to set SMART targets and the rigid adherence to targets can detract from a change process where the focus (along with the targets) may be changing and developing over time.
- Who sets the targets? Ownership is important; setting them from the top down is not likely to lead to acceptance on the ground. On the other hand, if they're set from the ground up then they may not be sufficiently challenging.
- Is there a reward strategy for achieving the targets? If so it is all the more important to make sure that the targets are SMART particularly specific and measurable. Try and put yourself in the place of making a judgement at the end of the set time on whether the targets have been met. Do the targets give you sufficient information to make that judgement? Could they be open to different interpretations?
- Targets require constant monitoring, and revising if necessary, to remain valid and meaningful.

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