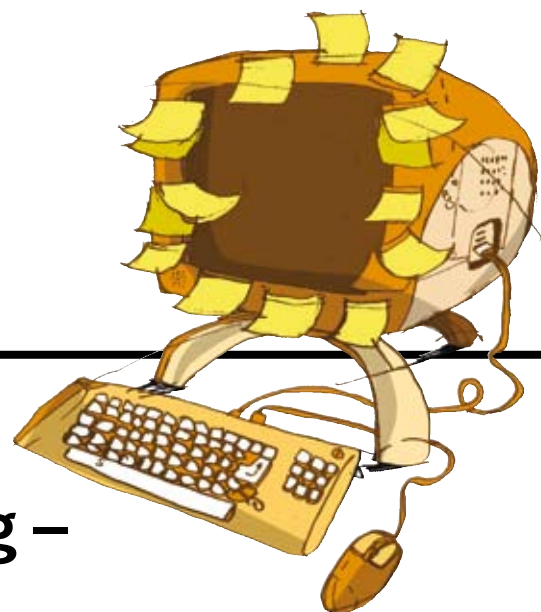


This issue
Paper P6
MABS

Paper P7
FATP

STUDY NOTES



GLOBAL CONTACT DETAILS

■ **CIMA Contact**
E: cima.contact@cimaglobal.com
T: +44 (0)20 8849 2251
F: +44 (0)20 8849 2450

■ **Australia office**
Level 3, The Plaza Building,
Australia Square, 95 Pitt
Street, Sydney, NSW 2000
E: sydney@cimaglobal.com
T: 1800 679 996
(toll-free within Australia)
or: +61 (0)2 9776 7982
F: +61 (0)2 9262 5979

■ **CIMA Botswana**
Physical: Plot 50676,
Second Floor, Block B,
BIFM Building, Fairgrounds
Office Park, Gaborone
Postal: PO Box
403475, Gaborone
E: gaborone@cimaglobal.com
T: +267 395 2362
F: +267 397 2982

■ **CIMA China office**
Unit 1905, Westgate Tower,
1038 Nanjing Road (W),
Shanghai 200041
E: CIMA-China@vip.sina.com
T: +86 (0)21 5228 5119
F: +86 (0)21 5228 5120

■ **Hong Kong Division**
Suites 1414-1415,
14th Floor, Jardine House,
Central Hong Kong
E: juliee.tan@cimaglobal.com
T: +852 2511 2003
F: +852 2507 4701

■ **India liaison office**
DBS Corporate Centre
Second Floor, Raheja
Chambers, 213 Nariman
Point Mumbai 400 021
E: india@cimaglobal.com
T: +91 (0) 22 5630 9200

Continued on page 37.

PAPER P6

Management Accounting – Business Strategy

Scenario planning is more of an art than a science, writes **one of the examiners for paper P6**, but it will prepare your firm better if the unthinkable should occur.

All organisations, to a greater or lesser extent, face an uncertain future. The further they try to forecast into the future, the less certain they can be. The degree of predictability varies from industry to industry, but in those where fast-changing factors such as fashion and technology are crucial to success the period of uncertainty will be longer. A few examples of forecasts that have been made in the computer industry illustrate the point:

- 1943: "I think there's a world market for maybe five computers."
- 1949: "Computers of the future will weigh no more than one and a half tons."
- 1977: "There is no reason why anyone would want to have a computer in their home."
- 1981: "A memory of 640kb ought to be enough for anyone."

When these forecasts were made they were realistic projections of the state of the industry at the time, based on expert opinion. Bill Gates made the last one – and it could be argued that he would have known the market as well as anyone. But things change, often unexpectedly. Because of that kind of uncertainty, organisations often use a technique called scenario planning to get a better understanding of what *might* happen in the future rather than make a point forecast of what *will* happen.

Originally developed by the US military during World War II, scenario planning was soon adopted by American businesses once hostilities ceased. Herman Khan, working at the Rand Corporation, did much to promote the technique, providing policy papers to help the US government deal with global uncertainties during the postwar years. Shell used the technique during the sixties and seventies and was able to survive and prosper during a period characterised by dramatic and largely unpredicted movements in the price of crude oil.

As panel 1 on the next page illustrates, the oil demand forecasts were consistently wrong. Because companies such as Shell would be using these figures to inform their investment

decisions, this was problematic. With most oil fields and refineries lasting 25 to 40 years, any investment decision made using the forecasts would be highly uncertain. By recognising in the eighties that oil prices could go down as well as up, Shell made investments to ensure that it could make money at every part of the supply chain and was still able to profit from declining demand and prices. The company recognised the potential for overcapacity in both refining and transport if the demand for oil were to fall, and it acted accordingly.

Scenario planning has been described as a way of minimising surprises by rehearsing the future. The aim is not to arrive at a forecast but to consider a range of plausible outcomes and decide whether the company is able to deal with them should they occur. While traditional strategic planning assumes that there is usually one best answer to a strategic question, scenario planning recognises that several alternative futures are feasible. Traditional forecasting takes a large quantity of current data and, using various quantitative techniques, boils it down to a single prediction. This narrows the view of the future and does not allow for the unexpected events that will affect trends and move them from their expected course. Scenario planning allows for a much larger number of uncertainties than contingency planning, which tends to focus on one key variable. It is also different from simulation techniques, which tend to be formulaic, in that subjectivity plays a large part in scenario development.

As a group process, scenario planning encourages the exchange of knowledge and a deeper shared understanding of issues that are important to the organisation's future. The outcome is a number of divergent, plausible stories, which are produced by extrapolating uncertain and critical driving forces and combining them in internally consistent, convincing stories. The resulting stories, together with the work done in developing them, widen the organisation's understanding of its environment.



Global contact details continued from page 35.

■ **Malaysia Division**
 Lots 1.03b and 1.05,
 Level 1, KPMG Tower,
 First Avenue,
 Bandar Utama,
 47800 Petaling Jaya,
 Selangor Darul Ehsan
 E: kuala Lumpur@
 cimaglobal.com
 T: +60 (0)3 7723 0230
 F: +60 (0)3 7723 0231

■ **Republic of Ireland Division**
 45-47 Pembroke Road,
 Ballsbridge, Dublin 4
 E: dublin@
 cimaglobal.com
 T: +353 (0)1 6430400
 F: +353 (0)1 6430401

■ **Singapore office**
 16 Raffles Quay,
 Unit 33-03 B,
 Hong Leong Building,
 Singapore 048581
 E: singapore@
 cimaglobal.com
 T: +65 6535 6822
 F: +65 6534 3992

■ **CIMA South Africa**
 Physical: Second Floor,
 South Block, Thrupps
 Centre, 204 Oxford Road,
 Illovo, Johannesburg
 Postal: PO Box 745
 Northlands 2116
 E: johannesburg@
 cimaglobal.com
 T: +27 (0)11 268 2555
 or: 0861 CIMASA/
 0861 246272
 F: +27 (0)11 268 2556

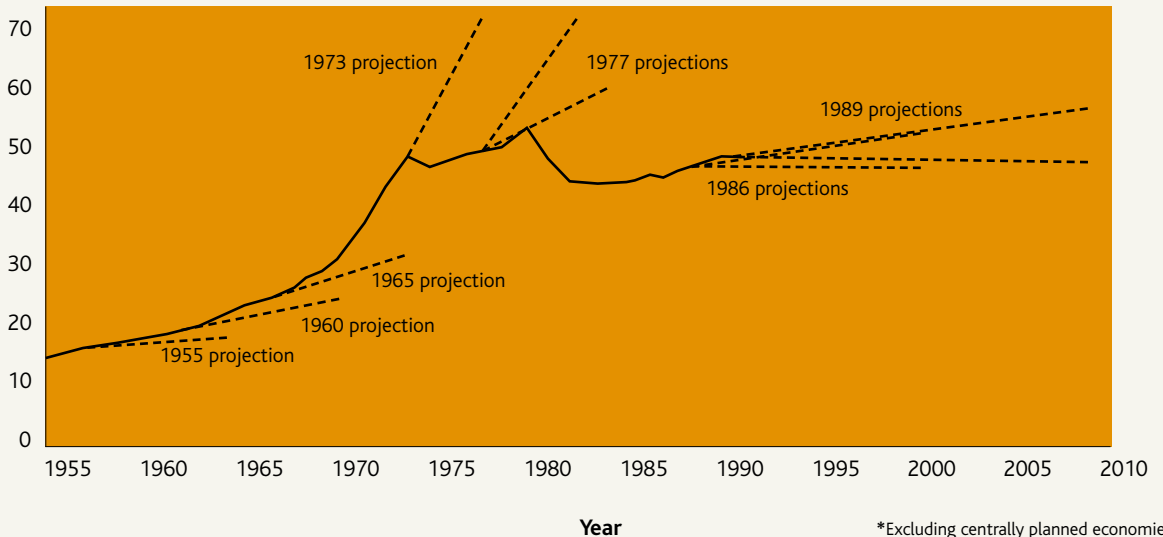
■ **Sri Lanka Division**
 356 Elvitigala Mawatha,
 Colombo 05
 E: colombo@
 cimaglobal.com
 T: + 94 (0)11 250 3880
 F: + 94 (0)11 250 3881

■ **CIMA Zambia**
 Physical: Plot No 6053,
 Sibweni Road,
 Northmead, Lusaka
 Postal: Box 30640, Lusaka
 E: lusaka@cimaglobal.com
 T: +260 (0)1 290 219
 F: +260 (0)1 290 548

■ **CIMA Zimbabwe**
 Physical: Sixth Floor,
 Michael House,
 62 Nelson Mandela
 Avenue, Harare
 Postal: PO Box 3831, Harare
 E: harare@cimaglobal.com
 T: +263 (0)4 708600/
 250475 CIMA ZIM
 F: +263 (0)4 708600/
 250475

1 WORLD OIL DEMAND FORECASTS AND ACTUAL RESULTS*

Million barrels daily



*Excluding centrally planned economies

Storytelling is a traditional way to organise and transfer knowledge that, when used as a strategic tool, forces senior managers to suspend their preconceptions and think outside the box. Scenarios are intended to present multiple alternative futures. Well-crafted stories will bring these possible events to life. Good scenarios are, therefore, plausible and often surprising – they have the power to break stereotyping and group-think. They can help an organisation to recognise warning signs and act to avoid unwelcome surprises. Decisions that have been tested against a range of plausible futures are more likely to produce a set of resilient strategies and provide a distinct competitive advantage. They will improve the organisation's foresight.

There is no one right way to produce scenarios. Various approaches have been proposed over the years, but the key features of an effective process are broadly the same. Let's look at a typical process by considering a sample of elements from a real exercise conducted by a defence contractor:

- **Define the scope of the scenarios.** Agree the period and the markets to be considered to determine what knowledge will be most useful to the firm. In the case of the defence industry this is likely to be a period of five to 20 years. The markets are almost certainly in Europe and the US, since they have the largest defence budgets and their companies are among the largest arms manufacturers in the world.
- **Identify the main stakeholders – ie, those that are likely to drive change.** Usually these will be the budget-holders and the main players in the industry. Defence stakeholders include national governments, BAE Systems, Boeing, General Dynamics, Lockheed Martin and Thales.

- **Identify the main trends.** For the defence industry, these include the decline of Europe's defence industrial base, consolidation after the Cold War, an increase in terrorism and regional conflicts and a decline in defence spending relative to GDP in most western countries.
- **Identify key uncertainties – ie, factors about which we cannot make reliable forecasts.** The key ones are those that will significantly affect the stakeholders. These include technological advances such as the development of unmanned vehicles and the likelihood of further terrorist attacks.
- **Construct initial scenario themes.** The trends are crafted together in plausible and internally consistent plots leading into the future. Each plot involves different directions for the uncertainties identified in the previous stage. The scenarios should include all of the major uncertainties. It's often useful to consider a pivotal event that causes the uncertainty to head in a particular direction. Most experts suggest that two to four scenarios should be produced. Scenario teams should not deliberately set out to produce best and worse cases.
- **Check for internal consistency and plausibility.** The consistency criterion is satisfied if the directions chosen in a story could logically happen together. The plausibility criterion is satisfied if the events could happen during the period under consideration and with imaginable technology. For the defence industry, a terrorist outrage in the US committed by a group of people with European passports might lead to the US's refusal to transfer new technology to firms based beyond its borders. This would be consistent, whereas increased defence spending in the EU during a



Europe-wide recession would not be. In terms of plausibility, the development of matter-transfer technology within 20 years is implausible: the energy requirements are beyond our current or imagined capabilities. But an increase in cyber-terrorism is plausible even in the short term.

- **Develop learning scenarios.** The stories should catch the imagination. As with a good novel, readers should be able to suspend their disbelief, immerse themselves in the plot and identify with the characters. For the defence industry, a situation could be described in which a buyer for a European defence agency arrives in the US to find that their choices have been restricted by new legislation reducing the range of arms that can be sold abroad because of an embargo on the export of strategic technology.
- **Identify research needs.** If a scenario were to start coming true, there would be clues on which the organisation's environmental screening should focus. For the defence industry, cyber-crime would be one area to monitor more closely for signs of terrorism.
- **Develop quantitative scenarios.** Although not all companies do this, it can be beneficial to try to quantify the outcomes of each scenario. This brings them closer to forecasts and, as long as the company does not consider one scenario to be more likely than the others, the exercise can be useful.
- **Develop decision scenarios.** Scenarios should be produced in such a way that they can be used to test the strategic decisions that the company must make. Any chosen strategy should be effective under each scenario – after all, the company does not know which one will come true. The chances are that no scenario will come completely true, but elements of each may well occur.

A number of scenarios will be built and developed over time and, as events unfold, they will be modified. Eventually they will be overtaken by real events or become implausible – or even true – and the exercise will need to be conducted again. Some organisations do this every three years, regardless of the usefulness of their existing scenarios, to incorporate the views of some of their recent recruits. This serves both to bring in fresh perspectives and to give these newcomers a deeper understanding of the industry.

Scenario planning is unlikely to provide an accurate picture of the future. In fact, if a scenario does come true, it is purely by chance. But the technique does offer the following advantages:

- The process will provide a deeper understanding of the environment in which the organisation operates.

- The organisation will have a better idea of the indicators it must monitor as part of its environmental screening process. This will help to minimise the impact of any surprises.
- The management team will be more aware of the key factors behind those uncertainties and will, therefore, have a better idea of where it might be able to influence future outcomes.
- The process will encourage managers to look at what's going on outside their organisation.
- Participation in the scenario planning process will encourage managers to think more creatively, broaden their understanding of the industry and improve their foresight.
- Scenarios can be used to "rehearse the future" that's likely to arise if a company takes a particular strategic decision. They should also go some way to minimising the impact of the law of unintended consequences.

Scenario planning entails examining a range of possible futures that the company might have to deal with and facilitating planning in such a way that it is able to maintain or build a competitive advantage should elements of these possible futures start to transpire. It does not mean identifying alternative outcomes, picking the one that the company prefers and then setting out to achieve it. The focus of a scenario exercise should be the industry in which the company operates, not the company itself. Scenarios are an art, not a science, and they are only one tool in the strategic planning kit. If used correctly, the process should help companies to organise themselves in a way that helps them to respond more flexibly to a rapidly changing environment. It's about changing attitudes by looking into the future from a different perspective. **FM**

P6 Recommended reading

- N Botten and A Sims, *Management Accounting – Business Strategy Learning System* (2007 edition), CIMA Publishing, 2006.
- R Kaplan and K Atkinson, *Advanced Management Accounting* (third edition), Prentice Hall, 1998.
- C Emmanuel and D Otley, *Accounting for Management Control* (second edition), Chapman & Hall, 1999.
- G Johnson and K Scholes, *Exploring Corporate Strategy* (sixth edition), FT/Prentice Hall, 2002.
- R Lynch, *Corporate Strategy* (third edition), Pearson Education, 2003.