

Chapter Two Case Teaching Notes: Lowe and Shawyer Ltd.

Industry context and learning focus

Long term trends in a horticultural sector trending to global operations and the impact of macro environmental changes on enterprise survival sustainability.

Major themes that can be addressed in lectures or class discussions

- The Scanstep[®] framework
- The uncertainty-generating impact of major macro environmental forces on enterprises *over long time periods*, including:
 - Long-run economic and other factors (e.g. progressive increases in personal wealth; climate differences) on country comparative (dis)advantages
 - Evolving transport infrastructure and technology
 - Evolving social norms and preferences
- The uncertainty-generating impact of major macro environmental forces on enterprises *over short time periods*, including:
 - Wars
 - Short-run economic and other factors (e.g. recession; governmental priorities on industrial policy)
 - Competition from beyond the sector (e.g. labour markets)
 - Rapid evolution of the retailing industry (supermarkets) in the 1950s
- Planning for managerial succession.

Suggestions for prior preparation by students

Systematic application of the ScanStep[®] framework to the context of Lowe and Shawyer at various stages of its history with particular focus on the periods after 1945.

Strategic issues particular to the enterprise(s) and context described

The table below summarises some key features of the macro environment as experienced by Lowe and Shawyer during its lifetime. Some key macro issues are:

- Social acceptance of flowers to decorate the home created a commercial market (A)
- Regulations encourage the formation of a limited company (B)
- Extensions to the rail transport network pioneered by the Victorians transforms access to markets across the entire UK in late 1800s and early 1900s (C)
- 1914-18 and 1939-45 wars radically changes all the Scanstep[®] environmental factors, notably it alters Lowe and Shawyer's output at a stroke (D1 and D2)

- Lowe and Shawyer applies new knowledge to the breeding of plants and adapts the physical environment for growing flowers using heated glasshouses, significantly enhancing variety, yield and the volume of total output (E)
- Less formal and more progressive, consumer-oriented UK society after about 1950 (F)
- In response, competitors begin importing plants and flowers grown in warmer climates, often using much lower cost labour (G)
- Application of new mass-production technologies (e.g. in the car industry) attracts workers to major industrial centres, drives up wage rates and makes labour harder to attract in traditional industries (H)
- Government economic policies prioritise the development of key industries, notably reconstruction and healthcare. Other sectors are prioritised only if they generate substantial exports (e.g. car industry) (I).

Brief notes on the questions posed at the end of the case

1. Outline the changes in the business environment (that is, the context in which the business worked) that contributed to its decline.

The preceding bullet-points identify many key issues for this company. Changes can be presented systematically within a number of time periods as per the chart below, in which the more significant themes are highlighted in red type.

Periods in Lowe and Shawyer’s history

| ScanStep [®] issue | 1864-1913 | 1914-1918 | 1919-1938 | 1939-1945 | 1946- |
|----------------------------------|---|--|--|---|---|
| Social | Stratified and largely stable (A) | Turbulent | Stratified but more dynamic | Turbulent | Rise of consumerism as society is still stratified but increasingly progressive (F) |
| Cultural | Rigid patterns in Victorian and Edwardian outlook | Patriotic | Anglo-centric but increasing diversity | Patriotic, but with less convergence in outlooks | Accelerating diversity, from awareness of other countries and rising immigration |
| Authority (legal and regulatory) | Regimented; strict laws (B) | Authoritative | Strict, but more often challenged | Authoritative | Citizens’ rights considered more directly |
| Natural environment | Generally exploited with little thought to the long term consequences for the environment or people working in it | | | | |
| Security | Ineffective attacks on the established class structure | Threat to the British Empire and way of life | Perceived threat from communism and later from fascism | Severe threat to the British Empire and way of life | Cold war military threats from the Soviet bloc; economic threats from transnational competition |

| | | | | | |
|---------------|---|---|--|---|--|
| | | | | | (G) |
| Technological | Increasing mechanisation, but industry still labour intensive (C) | Wars accelerate technological developments in many forms and industry sectors | Application of new technology in many industry sectors (E) | Wars accelerate technological developments in many forms and industry sectors | Application of new mass production technologies allied to skilled, well-paid workers (H) |
| Economic | Slow, but progressively rising wealth | War effort redirects all economic activity (D1) | Financial hardship; perceived threat of global free trade | War effort redirects all economic activity (D2) | Post war rebuilding focuses investment on key priorities e.g. housing and health (I) |
| Political | Stable, Empire oriented | War and its consequences | Defensive of Britain's prewar status in the world | War and its consequences | Reluctant redefinition of Britain's status in the world |

2. On the basis of your answer to question 1, suggest some actions the company might have taken to help it survive.

Actions that Lowe and Shawyer might have taken include:

- Lobbying the Government to impose import duties and/or other restrictions on imported flowers and plants
- Contracting to import flowers from cheaper sources abroad
- Developing consumer brand awareness for its products as premium quality, supported by enhanced packaging
- Diversifying into other horticultural or vegetable products,
- Pioneering the use of covered, environmentally controlled growing environments (as did the Dutch) for a wider range of plants or crops

Factual update on subsequent developments

Described in the case. When George Shawyer died in 1943 it seems that there was no clearly defined line of managerial succession, which may explain why the company subsequently declined and disappeared.

Chapter Two Case Teaching Notes: The macro environment of Airbus Industrie and the A380

Industry context and learning focus

Impact of global, medium and long-term macro environmental trends on a capital-intensive industry (aircraft manufacture).

Major themes that can be addressed in lectures or class discussions

- Why there is need for systematic analysis of current and possible future macro trends; exploring complexity, hostility and dynamism
- Environmental scanning methods and mechanisms
- Coping with uncertainty and ambiguity in trend assessment/evaluation
- Specific environmental trends affecting the prospects for Airbus A380
- Assessing the impact of potential competition and its macro environmental determinants (n.b. this example is discussed further in chapter 3).
- Risk management

Suggestions for prior preparation by students

Investigate the role of governments in supporting the aviation industry. Address questions posed in the case study

Strategic issues particular to the enterprise(s) and context described

- Specific issues and uncertainties arise in each domain of the Scanstep[®] framework
- Distinction between analysis of an issue and its judgemental evaluation
- Lengthy timescales over which macro environmental judgements are required
- Issues that impact multiple domains of the Scanstep[®] framework requiring appropriate reframing of issue definitions

Brief notes on the questions posed at the end of the case

1. Using the above study and additional recent, relevant data sources, use the ScanStep[®] worksheet to analyse the macro environment that Airbus faces, with particular reference to issues that may affect the A380.

The first table below summarises key issues that Airbus needs to be aware of and adopt considered postures towards.

| Scanstep [®] macro environmental issue summary for Airbus | | | |
|--|---|--|--|
| Issue domain | Event or trend | Active stakeholder(s) | Potential significance |
| <u>S</u> ocial | Increasing leisure time encourages air cost-conscious travel to holiday destinations. ¹ | Consumers | Should sustain demand for new, larger aircraft combining comfort with low cost. An opportunity for Airbus. ² |
| <p>¹ Vacation travellers (including older and retired people) are being encouraged to fly further afield to attractive new destinations. Increasing numbers of expatriates and settlers wish to visit their families in far-off countries on a regular basis. The available UK Govt. forecast was that UK air passenger traffic was expected to rise from 189m in 2002 to 500m by 2030 (source: http://www.dft.gov.uk/stellent/groups/dft_aviation/documents/page/dft_aviation_031507.hcsp)</p> <p>² All else equal – i.e. assuming that external constraints on flying and escalating costs do not significantly inhibit market development.</p> | | | |
| <u>C</u> ultural | Increasing scope for cultural exchange visits by EU students and other groups ³ | European Commission Students and special interest groups | Increasing transnational air travel is notably by very cost-conscious people. An opportunity for Airbus particularly if they have the budget airlines as clients |
| <p>³ An explicit priority of the European Commission. Also Europe to the US and to the Far East</p> | | | |
| <u>A</u> uthority | <p>Planning constraints on airport expansion are becoming tighter⁴</p> <p>International regulation of civil aviation</p> | <p>Airport operators e.g. BAA Local residents</p> <p>A complex mix of regulatory, safety and security agencies in host countries⁶</p> | <p>Airport operators may be barred from extending runways and expanding facilities that will be vital for aircraft like the A380 to land. A possible threat to Airbus sales.⁵</p> <p>Extreme complexity of negotiations for change affecting the interests of many governments generally makes constructive change slow and difficult to agree. Uncertainty may cause airlines to delay new purchases or stick to what they are familiar with</p> |
| <p>⁴ Owing to a combination of international governmental commitments as well as pressure groups with ecological and local concerns forcing government regulators to respond.</p> <p>⁵ New runways and longer ones will be needed at many airports (e.g. at London Heathrow) to cater for the A380. Better passenger-handling facilities are also needed. However, larger aircraft means fewer noise and pollution-creating flights, all else equal.</p> <p>⁶ e.g. nationally: US FAA, UK CAA, and transnationally: EASA European Aviation Safety Authority, IATA, WTO</p> | | | |
| <u>N</u> atural environment (ecological) | Air travel generates large volumes of greenhouse gases, noise and possible damage to the ozone layer | Environment pressure groups; Government agencies responsible for industry | Probable tightening of controls on airline routes, take-off and landing slots. Rising demand for cleaner aircraft using less fuel per passenger-mile. This should be an opportunity to increase sales of the Airbus A380 (but see note 5 above). |

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|--|---|---|--|
| | | regulation | |
| <u>S</u>ecurity | Threat of terrorist attacks | Terrorist groups. Regulatory and security agencies | Various challenges arise for the A380: <ul style="list-style-type: none"> ◦ More complex aircraft designs.⁷ ◦ Increased scrutiny of passengers and slower boarding.⁸ ◦ Airline bankruptcies.⁹ |
| <p>⁷ Changes to existing aircraft have already been made e.g. bullet-proof, locked access doors to the pilots' cabin. Future designs will be required to have greater survivability in the event of explosion damage etc.</p> <p>⁸ Slower boarding will discourage the use of larger capacity aircraft such as the A380.</p> <p>⁹ Causing defaults on orders and payments. Two effects might cause bankruptcy (i) targeting of particular airlines for physical attack e.g. Islamic terrorist attack on Israel's El Al (ii) major disruption to the computer booking systems used by all airlines, causing chaos and loss of revenue.</p> | | | |
| <u>T</u>echnology | Major developments in use of composite materials in aircraft production New scanning technologies to speed passenger and baggage screening | Chemical companies Airframe contractors IT and security industries | Bigger, lighter, more fuel-efficient aircraft, but rising development costs, which present potential threats and opportunities for Airbus Makes super-jumbo aircraft more viable by speeding up flight boarding |
| <u>E</u>conomic | Globalization of business operations Economic constraints on airport expansion | Business corporations Airport operators | Growing international air travel by business travellers, some of whom who prioritize service and comfort, others low cost and convenience. Implications for Airbus are ambiguous. ¹⁰ Airport operators may be reluctant to invest in costly, longer runways and better facilities. ¹¹ A significant threat to Airbus. |
| <p>¹⁰ Because the needs of business and non-business travellers generally differ, internal layouts on new aircraft will have to cater for their differing expectations.</p> <p>¹¹ Since these are vital for big aircraft like the A380 to land safely and turnaround efficiently and quickly.</p> | | | |
| <u>P</u>olitical | The USA is politically unpopular in many countries Countries whose governments effectively control their airlines and aircraft makers | Boeing and its contractors; the US Government. China & Russia in particular Their aircraft makers | State-owned airlines generally buy from their own state companies where possible. Failing that, they may prefer Airbus over Boeing if they have anti-American sentiments. Extremely difficult for external suppliers such as Airbus to break into these essentially captive markets. |

2. Assess which of the issues identified represent the most positive and most negative influences on Airbus. Reflect on the impact-probability profiles of these issues.

The table below is an attempt to identify the most significant issues in an impact-probability assessment.

| Impact-probability assessment of key macro environmental issues for Airbus in respect of the A380 | | | | |
|--|------------|---|---|---------------------------------|
| Key issue | | Subjective impact rating[#] | Probability rating | Impact-probability score |
| Expectations of greater use and availability of air travel | Consumer | + 9 (increasingly high volume of users predicted) | 50% (economic austerity and electronic means of keeping in touch may limit the actual long-term rise) | +4.5 |
| | Business | + 3 (absolute numbers are much lower) | 90% (global business travel will continue to be seen as a necessity) | +2.7 |
| Cost pressures on airline industry | Operating | - 6 (ongoing) | 100% (fuel costs and taxes will continually rise, but A380's cost benefits will remain disputed) | -6 |
| | Investment | -3 (risk of orders delayed/postponed) | 80% (new orders are often delayed when confidence is low) | -2.4 |
| Regulatory constraints on air travel | Ecological | +4 (the benefits of A380 are route-specific) | 90% (tighter regulations are almost certain, favouring A380's lower impact per passenger mile) | +3.6 |
| | Other | - 6 (will generally be unfavourable to the airline industry) | 60% (and more likely than not to happen) | -3.6 |
| Technology developments | Aircraft | +8 (favour big aircraft that spread costs over more passengers) | 75% (many are already under development) | +6 |
| | Airport | +8 | 60% (under development but less certain to succeed) | +4.8 |
| Political influences on aviation industry | | -5 (constraints on free market operations imposed on aviation) | 100% (governments have always sought to regulate and influence the aviation industry) | -5 |
| | | [#] + is favourable to Airbus 380, - is unfavourable | | |

Comments: the tables are intended to illustrate the methodology, not provide a definitive assessment. Specific assessments can be the subject of class discussion.

The issues highlighted are those with the greatest impact-probability scores. They suggest that technology is a key positive feature of the A380's potential, but Airbus is not in a position directly to

affect all technological developments relevant to A380's acceptance. The major negative factors suggest the need to (i) persuade airlines how A380 can contribute to cost control and (ii) lobby governments of all persuasions to look favourably on what Airbus is doing.

A common next step in the analysis is to sum the positives and negatives separately:

Positives: + 21.6

Negatives: -17

which suggests that the benefits of A380 are countered by significant drawbacks. If Airbus conducted an analysis whose outcome was broadly similar, it shows the size of the gamble it took. Having made that decision, it needs to continue to act so as to eliminate or mitigate the negative aspects.

Factual update on subsequent developments

According to Wikipedia (http://en.wikipedia.org/wiki/Airbus_A380), as of June 2011 Airbus had 236 firm orders for the A380, of which 51 had been delivered. Six airlines were denoted as primary users, the most committed being Emirates, which had 90 aircraft on order. However, Airbus would become profitable only after 400+ have been delivered. The reference http://en.wikipedia.org/wiki/Competition_between_Airbus_and_Boeing may shed light on the probability of this occurring.

Chapter Two Exercises and Questions for Further Study and Discussion

1. Do research to establish the kinds of environmental scanning and assessment companies actually perform.

What link, if any, can you find between extent of environmental scanning and business performance? [Note: Many academic journals, magazines and newspaper articles and company websites etc. can help you to accumulate evidence. For example: Baron (2006); Elenkov (1997); Garg, Walters and Priem (2003); Grant (2003); Kefalas and Schoderbeck (1973); Kourteli (2005); Lenz and Engledow (1985); Xu, Kaye and Duan (2003)].

To this list might be added:

Dess, G.G., Lumpkin, G.T. and Taylor, M.L. (2005) *Strategic Management* (Ed. 2., chapter 2)

Kiesler, S. and Sproull, L.S. (1982). ‘Managerial response to changing environments: perspectives on problem sensing from social cognition’, *Administrative Science Quarterly*, (vol. 27, pp. 548-570)

Lutz, W. (1997), ‘Long-Term Macro Models of Population, Development, and Environment’, *Research in Human Capital and Development* (Vol. 11/A, pp 249-278)

O’Connell, J.J. & Zimmermann, J.W. (1979) ‘Scanning the international environment’, *California Management Review*, (vol. 22/2, pp. 15-23)

There is something of a paradox that although an understanding of the macro and micro environments has arguably never been more important, in terms of numbers of research articles published, it seemingly receives less academic attention than in the past. Of course, scanning activity is costly and does not guarantee success at isolating critical variables and events in advance.

Demonstrating a definitive empirical link between scanning and performance is difficult because it is virtually impossible to isolate the scanning variable(s) from the many other variables that can bear on performance. Research often uses executive opinion about scanning and takes a broad definition of performance. Davis (2008) for example presents a recent doctoral study: ‘Does environmental scanning by systems integration firms improve their business development performance?’ (See: <http://gradworks.umi.com/33/24/3324667.html>).

Most enterprises limit external scanning to their industry sector(s) including key competitors, government and other regulatory developments likely to bear on their activities, including membership of sector representative bodies for the purpose of lobbying. Entry to new sectors and overseas markets typically results in commissioning of external research projects to address specific issues of concern.

2. Focus on emerging macro environmental trends in the ScanStep[®] fields that most interest you. Assess their possible implications for the following types of enterprises:
 - a. An international manufacturing corporation
 - b. A retail banking group

- c. A university that relies on overseas students for a high proportion of its income.

Trends noted could include:

- a. Competitive cost pressures from low cost, emerging countries; new technologies; less time to exploit new products before they are superseded
- b. Uncertain economic conditions; threat of default on governmental debt; adverse public opinion;
- c. Greater competition from institutions in other countries; difficulty of recruiting enough high calibre staff; changing societal expectations about the value of higher education.

3. Reflect on the assumptions you made in the previous exercise: how can their validity be tested practically?

In principle, identifying assumptions provides an opportunity to test them in advance and may help future understanding of why the world did not develop as expected. Some assumptions can be tested via appropriate, empirical research (qualitative or quantitative), the use of game theory and other kinds of analysis. The challenge, however, is to brief researchers with the ‘right’ questions. Other assumptions over environmental issues are really no more than untestable ‘hunches’ propounded by senior executives whose authority results in short-circuiting of more objective assessment (chapter 6). Nonetheless, especially in small *adaptive* enterprises, these judgements may actually be preferable to the risk of expending too much time and money on research that ultimately produces unreliable findings.

4. Reflect critically on the following statement: ‘progressive, innovative enterprises do *not* react or respond to trends, they establish them. So environmental scanning is of limited strategic value to such enterprises.’

It is true that innovative enterprises such as Apple Computer and Dyson work hard to create new products that consumers did not know they needed or would find attractive. Thus they create markets and new industry sectors in which competitors are disadvantaged and reactive. Do such enterprises do no scanning? Almost certainly they do, but they generally focus on the variables that are perceived as relevant to their circumstances and open to objective measurement and forecasting e.g. GDP per capita (disposable income); availability of support infrastructures (e.g. electronics firms target clienteles having access to good electricity, internet and telephone networks). The evidence is that large corporations (defence contractors are a recent example) get wrong-footed by events they did not anticipate or (more likely) knew of, but could do little to affect (e.g. government cuts on defence equipment expenditure). Progressive enterprises must, of course, take care to innovate at a pace their clienteles can accept and afford, yet retain adequate sensitivity and flexibility to adapt to the unforeseen.

5. Examine other accounts of the successes of scenario analysis. [Note: In addition to the references cited already, see: Burt et al. (2006); chapter 14 of McGee, Thomas and Wilson (2005); Mercer

(1998); Schoemaker (1995); Walsh (2005).]Are you persuaded or has hindsight been invoked in support of the claims made for this technique?

The key point about scenario analysis is not that a scenario is a forecast with calculable probability of occurring, but a vision (a gestalt) of what cannot be ruled out as a plausible future, however unlikely it may currently seem. Once envisioned its implications can be explored as well as the paths that could lead towards it. This kind of analysis may prove vital for understanding and realising desirable global futures such as the ‘hydrogen economy.’ It seems highly probable that all major vehicle and energy companies as well as academic and governmental agencies are examining this scenario and its particular implications for them. Naturally, it is always easier in the popular literature to discuss successful (realised) scenarios after the event than failed (non-realised) ones. So there is a temptation to ‘talk up’ the positive cases, not least if one is a scenario consultant