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## DEFINITION AND SCOPE

Life cycle strategy is developed by a firm to ensure that the demand for its discrete businesses is extended as long as feasibly possible. Life cycle strategy is based on product life cycle thinking from the field of marketing. It goes further than the scope of the product and is applied to lines of business or strategic business units (SBUs) that have common rivals, customer base, substitutes, capital investment, and pricing levels.

# CONCEPTUAL FRAMEWORK

*Life cycle tools.* The process to develop a life cycle strategy first identifies the life-cycle position of a business as a descriptor of industry characteristics. This is done by depicting four sets of data: the market share, revenue, profitability, and cash flow derived from a bundle of products which make up the business. Second, the competitive position of a business is represented across a matrix of life cycle stages and business strengths. Arthur D. Little Inc. (ADL) developed the life cycle model as an alternative to the growth share matrix and competitive position – market attractiveness matrix.

Life cycle strategy depends on two sets of conceptual tools: the life cycle charts (see Figure 1) and the life cycle matrices (see Figure 2).

The combination of life cycle stage and business strength is illustrated in Figure 2 as a  $6 \times 4$  matrix, on which the position of each business unit suggests a number of logical strategic alternatives, as shown. In using this system, the corporation is segmented into a series of relatively independent business units. The life cycle position of each business is carefully assessed (note that the product life cycle need not necessarily be the same as the business life cycle). The competitive position of each business is then carefully assessed.

Strategy centers. The label "strategy center" was assigned by ADL to each business that

others had defined as a SBU structure. To reach its conclusions on strategy centers, ADL defined them in terms of competitors, prices, customers, quality/style, substitutability, and divestment or liquidation. The first four of these indicate that a strategy center contains a specific set of products for which it faces a specific set of customers and competitors that are also affected by price, quality, and style change. Moreover, all products within a strategy center should be close substitutes for one another. If divested, a strategy center could also probably survive as an independent business.

Factors affecting business position. The position of a business within its industry life cycle is determined by eight factors. They are market growth rate, market growth potential, breadth of product lines, number of competitors, distribution of market share among competitors, customer loyalty, barriers to entry (see barriers to entry and exit), and technology, as illustrated in Table 1. Strategy centers do not usually fall into a single life cycle phase for every descriptor, and some judgment therefore needs to be made as to the overall life cycle position of a business.

Embryonic businesses are usually characterized by high growth, rapid technological change, pursuit of a rapidly widening range of customers, fragmented and changing shares of market, and new competitor entries. By contrast, a mature industry is characterized by stability in known customers, technology, and market shares, with well established and identifiable competitors. Interestingly, it is sometimes possible, usually as a result of technological change, to convert mature or emerging industries back into embryonic industries. For example, in motor insurance, Direct Line Insurance transformed the industry over only 8 years by selling policies direct and achieving a growth rate of around 70% per year against the background of a relatively static growth rate for the industry as a whole.

Most industries, however, work through the life cycle on a steady basis. The competitive position of a business is assessed by ADL via a series of qualitative factors rather than the use of quantitative factors such as relative market share. Five categories of competitive position are identified: dominant, strong, favorable, tenable, and

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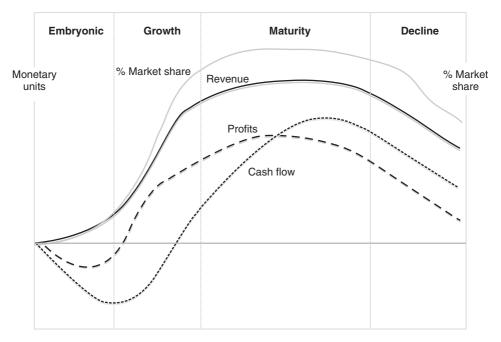


Figure 1 Business life cycle market share, sales revenues, profits, and cashflows.

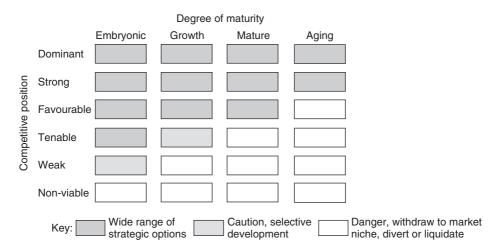


Figure 2 The life cyle porfolio matrix (Arthur D. Little, Inc.).

weak. The sixth position – nonviable – demands immediate or rapid exit. A dominant position is rare, and comes about because a competitor has managed to establish a quasi-monopoly or has achieved technological dominance.

Such positions could be claimed by IBM in computers and Kodak in color film. However,

both positions have come under attack in recent years. IBM has failed to dominate the personal computer market which, because of technological advances, has become an increasing threat to IBM's core mainframe computer business (see core business). Similarly, Kodak has begun to face a major threat from electronic digital

Embryonic	Growth	Mature	Aging
			Aging
_	_		
_	_		
	_		
	_		
	_		
	_		
	_	_	
	_	_	

Table 1 Factors affecting the stage of the industry life cycle for a strategy center.

Source: Arthur D. Little, Inc.

imaging in its core business of amateur color film, a silver halide-based "wet" process activity. A "strong" business, by contrast, enjoys a definite advantage over competitors, usually with a relative market share of greater than 1.5 times. "Favorable" means that a business usually enjoys a unique characteristic; for example, dominance of a specific niche, access to dedicated raw materials, or a special relationship with an important distribution channel. A "tenable" position means that the firm has the facilities to remain within a market but has no distinctive competence. Nevertheless, the position is such that survival is not a serious issue. Finally, a weak position is not tenable in the long term. Such businesses should either be developed to a more acceptable position or exited.

Families of strategic activity. For portfolio balance using the life cycle model, the firm needs a balanced mix of activities, with mature businesses generating a positive cash flow that can be used to support embryonic or growth operations. Success is also determined by having as many businesses as possible in dominant or favorable positions. Once the portfolio of businesses has been determined, ADL has developed three further aids to assist managers of strategy centers in formulating strategy. The first of these concepts was labeled by ADL as families of thrusts. The consultants agreed that there were four families of activities which covered the spectrum of business development. These were natural development, selective development, profit viability, and withdrawal. The fit of each of these families is indicated in Figure 3.

A "natural development" position is likely to represent a position at industry maturity with a strong, competitive position which, as a result, justifies strong support to maintain or enhance the strategic position. A "selective development" strategy implies concentration of resources into attractive industry segments or where the firm has destructive competitive advantage. "Profit viability" status requires management to come up with a strategy that enhances strategic position or exit. "Withdrawal" clearly suggests exit, the speed of which needs to be clarified to avoid undue haste.

*Strategic thrust.* Having identified the family of strategic thrust that is most appropriate for a specific business, management is now challenged to select a specific strategic thrust for the business. For example, the following thrusts have been applied to the natural development family:

- Startup can be applied in an embryonic stage business to achieve a high share position while the market growth is high.
- Growth with industry applies when the firm is content with its industry position and seeks to maintain market share. This

Stages of industry maturity Competitor's position		Growth	Mature	Aging
Dominant				
Strong	N	l latural developme l	nt	
Favourable	Selective	 e development 🥄 	$\searrow$	
Tenable			Prof	it viability
Weak				Out

Figure 3 Natural strategic thrusts (Arthur D. Little, Inc.).

position prevails under dominant or strong conditions and at industry maturity.

- Gain position gradually is a stance that is applicable when a modest share increase is required to consolidate industry position.
- Gain position aggressively is similar to the double or quit position or question mark business. The firm seeks to aggressively build share in an attractive industry while the growth rate remains high.
- Defend position applies when the firm already enjoys a dominant or strong position. As part of a defensive strategy, spending should be at whatever level is necessary to maintain the existing position. The relative cost of defense tends to be much lower for industry leaders than for attackers, owing to economies of scale and economies of scope.
- Harvest is relevant at all stages of the life cycle. The key factor for consideration is the speed of harvest. From a strong position, harvesting may be slow, with the cash flows generated being deployed more effectively in newer businesses. Rapid harvesting occurs from positions of strategic weakness and may imply strategies of sale or closure.

*Generic strategies.* ADL conceived a set of generic strategies (not to be confused with Porter's concept; see generic strategies), which were then grouped into a series of subcategories:

### Marketing strategies.

- Export/same product
- Initial market penetration
- Market penetration
- New products/new markets
- New products/same markets Same product /new markets

### Integration strategies.

- Backward integration
- Forward integration

#### Go overseas strategies.

- Development of overseas business
- Development of overseas production facilities
- Licensing abroad

### Logistic strategies.

- Distribution rationalization
- Excess capacity
- Market rationalization
- Production rationalization
- Product line rationalization

#### Efficiency strategies.

- Methods and functions efficiency
- Technological efficiency
- Traditional cost-cutting efficiency

### Market strategies.

- Hesitation
- Little jewel
- Pure survival
- Maintenance
- Unit abandonment

*Strategic position.* The three concepts of families, strategic thrusts, and generic strategies were then linked into an overall matrix to demonstrate strategic position. In the ADL methodology, the position of a business in the life cycle impacts on its financial performance. A tool used by ADL to assess this is the return on net asset (RONA) graph, which is illustrated in Figure 4.

On the vertical axis, the RONAs is seen to be generated by each business in the corporate portfolio and, on the horizontal axis, the internal deployment of cash flows is displayed. At 100% all cash generated is redeployed within the business, which thus becomes cash neutral. Above 100% the business becomes a cash user, while below 100% a business is a cash generator. In addition, a negative value implies a divestment strategy. On the RONA graph each business unit is represented by a circle, the area of which is proportional to the net investment attached to the business.

In addition to RONA, a number of other indicators are also expected to reflect industry maturity. These include profit after tax, net assets, net working capital/sales, fixed costs/sales, variable costs/sales, profit after tax/sales, and net cash flow/sales. The final step in the ADL methodology consists of assessing the level of risk associated with a business unit strategy. This involved a substantial level of subjectivity, but ADL have identified a number of factors that contribute to such risk, including the following:

- Maturity and competitive position: derived from the position of the business within the life cycle matrix. The greatest risk occurs for embryonic businesses with a weak market position, and the lowest for a business with a dominant position in a mature industry.
- Industry: some are much less predictable than others at the same stage of maturity.
- Strategy: aggressive strategies tend to be inherently more risky.
- Assumptions: future predictions enjoy varying degrees of probability and hence, greater or lesser degrees of risk.
- Past performance: while the past is no necessary predictor of the future, stable historic

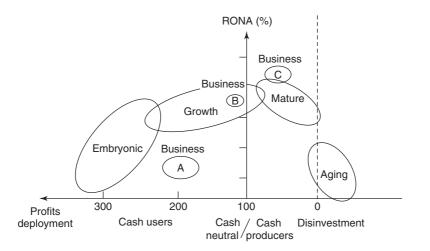


Figure 4 A typical RONA graph (Arthur D. Little, Inc.).

records tend to be less risky than no records or inconsistent ones.

- Management: historic management performance counts, although this can be subject to change by events such as midlife crisis, illness, and so on.
- Performance improvement: the gap between actual and predicted performance is also important.
- Dramatic improvements tend to be much more risky than gradual extensions of existing performance.

Limitations of the model. While the ADL model is a useful addition to the range of portfolio models, like the others it needs to be used with care. Criticisms of the approach include, first, the usefulness of the life cycle approach, whose validity has been challenged by many. Second, where a life cycle can be accepted, the stages of each position vary widely in terms of time. Third, industry activity does not necessarily evolve into a well-behaved S curve.

Markets can be rejuvenated and maturity can become growth through changes in fundamental industry characteristics. Firms can also fundamentally transform life cycle positions by innovation and repositioning. Finally, the nature of competition varies greatly from industry to industry. Thus fragmented industries may concentrate, while others go in the other direction. Nevertheless, when used wisely, the life cycle portfolio model provides a useful addition to the development of the strategic management tool kit.

See also BCG (growth share) matrix; cash cow; dog businesses; question mark businesses; star businesses

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