

Developing an IS/IT Strategy: Establishing Effective Processes



ایجاد استراتژی IS/IT
نیازمند فرایندی اثربخش است

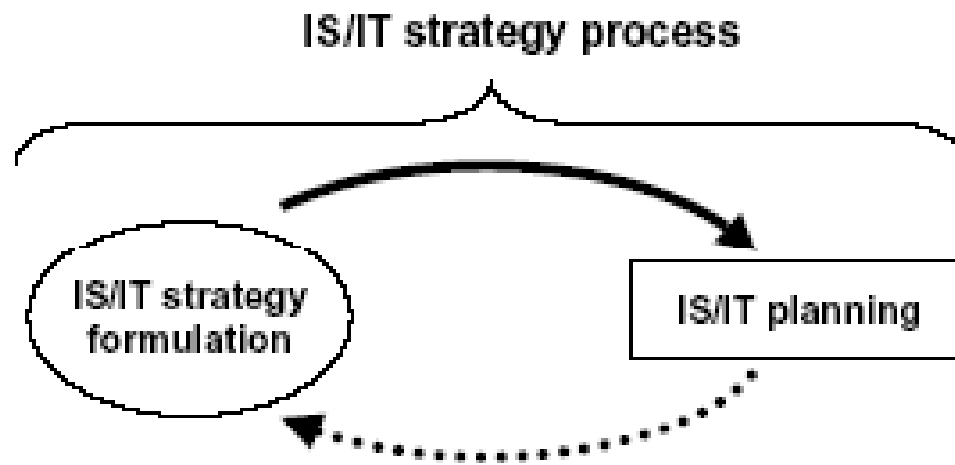


Figure 3.1 IS/IT strategy process

مراحل توسعه برنامه ریزی استراتژیک در IS



Table 3.1 Increasing organizational maturity with respect to IS planning (source: M.J. Earl, 'Experiences in strategic information systems planning', MIS Quarterly, Vol. 17, No. 1, 1993, 1-24)

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
<i>Main task</i>	IS/IT application mapping	Defining business needs	Detailed IS planning	Strategic/Competitive advantage	Linkage to business strategy
<i>Key objective</i>	Management understanding	Agreeing priorities	Balancing the portfolio	Pursuing opportunities	Integrating IS and business strategies
<i>Direction from</i>	IT led	Senior management initiative	User and IT together	Executives/Senior management and users	Coalition of users/management and IT
<i>Main approach</i>	Bottom-up development	Top-down analysis	Balanced top-down and bottom-up	Entrepreneurial (user innovation)	Multiple method at same time
<i>Summary</i>	'Technology led'	'Method driven'	'Administrative'	'Business led'	'Organization led'

A number of surveys have attempted to identify criteria for successful IS/IT strategy development. Lederer and Mendelow¹¹ surveyed 20 US companies to determine the senior management problems preventing effective development of IS/IT strategic plans. An earlier survey had shown that obtaining top-management commitment was a prerequisite for success, but that it was often difficult to obtain. Their research identified the following reasons for this, in order of frequency of occurrence:

موانع ادامه



1. Top management lacked awareness of the impact IS/IT is having generally and did not understand how IS/IT offered strategic advantages. They tended to see 'computers' in purely an operational context—still essentially a DP era view.
2. They perceived a credibility gap between the 'hype' of the IT industry as to what IT can actually do and how easy it is to do it, given the difficulties their organization had had in delivering the claimed benefits.
3. Top managers did not view information as a business resource to be managed for long-term benefit. They only appreciated its criticality when they could not get what they needed.
4. Despite the difficulty in expressing all IS benefits in economic terms, top management still demand to see a financial justification for investments.
5. Finally, and an increasingly apparent problem today, is that top managers have become action orientated with a short-term focus that militates against putting much effort into long-term planning, especially of IS/IT, given the other issues above.

Table 3.2 Problems encountered in the IS strategy process (source: adapted from T.S.H. Teo and J.S.K. Ang, 'An examination of major IS planning problems', International Journal of Information Management, Vol. 21, 2001, 461)

<i>Problems in launching the IS strategy process</i>	<i>Problems with the IS strategy process</i>
1. Failing to get top management support	1. Failing to involve top management sufficiently
2. Not having free communication and commitment to change throughout the organization	2. Ignoring business objectives
3. Being unable to obtain sufficiently qualified personnel to do a proper job	3. Failing to translate business objectives and strategies into action plans
4. Delegating responsibility to an individual without sufficient experience, influence or time to do a thorough job	4. Failing to involve users sufficiently
5. Not investing sufficient 'front-end' time to ensure that all strategy and planning tasks and individual responsibilities are well understood	5. Relying exclusively on user 'wish lists' for application ideas
6. Not having a steering committee that is highly committed	6. Neglecting to assess realistically internal weaknesses of the IS function in determining capabilities to implement the recommended strategy
7. Not having a clear-cut business strategy to guide the IS strategy effort	7. Not performing a top-down analysis to identify critical functional areas that the IS strategy has to support
8. Failing to anticipate new developments in IT that might affect the strategy	8. Failure to consider and explicitly evaluate alternative IS strategies in order to give top management a meaningful choice.
9. Ignoring the people and politics side of strategy formulation and planning	9. Failing to review the IS strategy with all managers so as to obtain support and cooperation for its implementation.

موانع





Table 3.4 *Pitfalls to planning, in relation to people (source: adapted from A.L. Lederer and V. Sethi, 'The implementation of strategic information systems planning methodologies', MIS Quarterly, Vol. 12, No. 3, 1988, 445–461)*

Problems, listed in order of severity

1. Difficulty in obtaining top management commitment for implementing the plan
 2. Success of the approach is greatly dependent on the planning team leader
 3. Difficulty in finding a team leader who meets the criteria specified for the role
 4. Difficulty in convincing top management to fund the planning exercise
 5. Difficulty in finding team members who meet the specified criteria
 6. The exorbitant number of hours demanded from top management
 7. Failure to establish a permanent planning group as a result of the planning exercise
 8. Time and expense involved in finding planning support staff
-

مراحل تکوین استراتژی

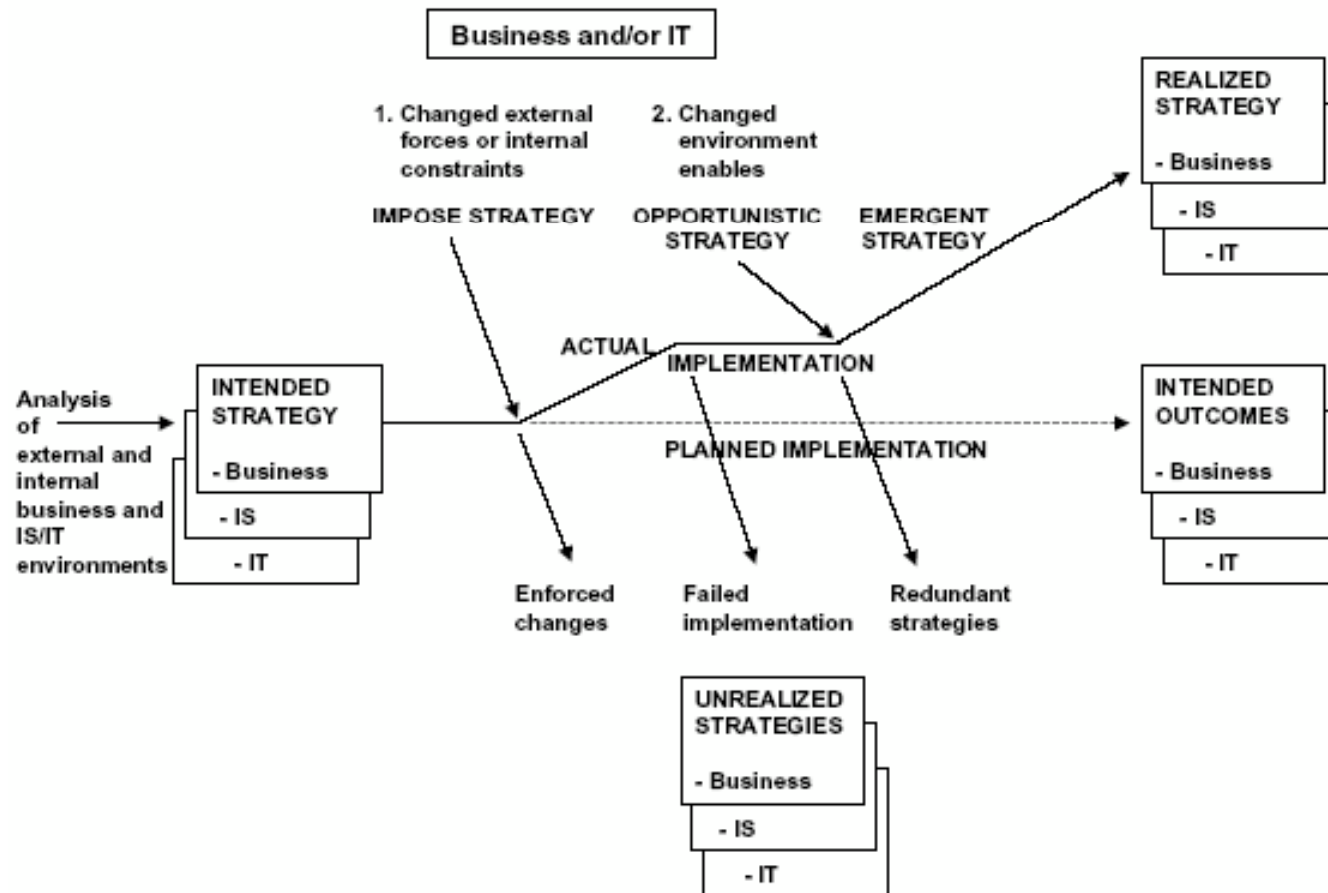


Figure 3.2 A revised model for IS strategy (source: after Johnson and Scholes, 2002)



چارچوب تدوین

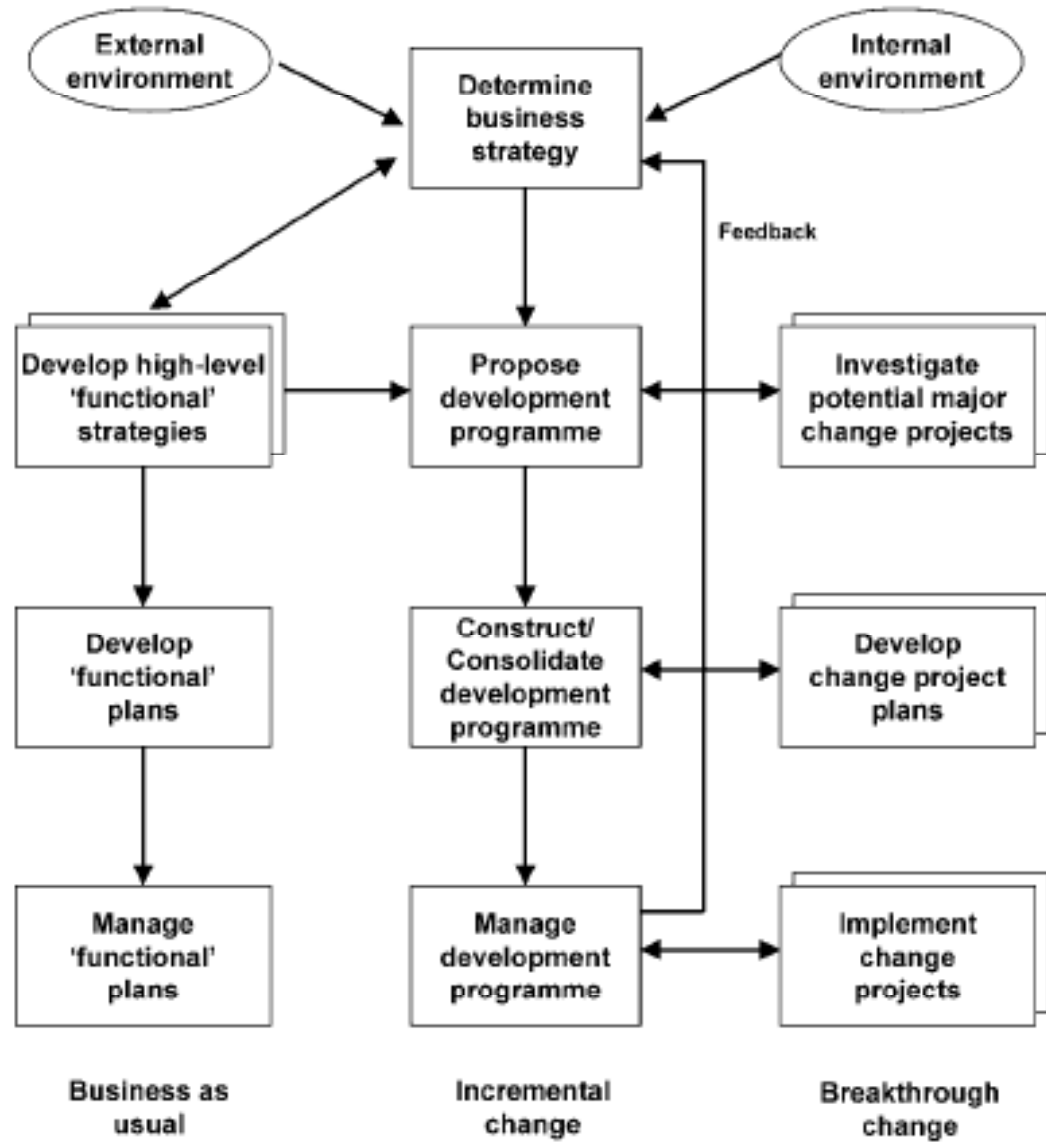


Figure 3.3 Integrated business strategy framework

فرآیند مستمر توسعه استراتژی



A Continuous Process

Once a strategic perspective on IS/IT is established and a strategy process is instituted, it should become a continuously evolving process, where the strategies and plans are refreshed regularly and even frequently, according to external forces, business needs and opportunities, the planning timetable, culture of the organization, and the benefits delivered by implementation of the strategy. Depending on the scope of the strategy process, the main deliverables, hard or soft, may be virtually unchanged

فرآیند یادگیری استراتژی




A Learning Process

As well as being a continuous process, strategic IS planning is also a learning process. Both IS specialists and business people are becoming more aware of business and technology issues, and learning to identify and exploit opportunities within a cooperative environment. At best, the culture of partnership between the IS function and the rest of the organization reorientates itself to treat information, systems and technology as core resources in the day-to-day life of the business and its continuing development. This also takes place alongside a continuing evolution in the maturity of the IS function.

Box 3.1 Questions that need to be answered before embarking on IS/IT strategy formulation and planning

- What are the purpose and the main stimuli prompting the need for planning, and what are the key business drivers to be addressed?
- What aspects of the current business and technical environment, and what issues, constraints, underlying problems and risks are likely to affect the conduct and outcome of the process?
- What should be the scope of planning, and where should planning be focused—on the corporate organization as a whole, at strategic business unit level or on specific core business processes?
- How can the IS/IT strategy process be effectively integrated with business strategy?
- What are the expectations and objectives to be met, and what deliverables are required?
- How should the IS strategy be ‘marketed’ and consolidated with the other elements of the business strategy to ensure that optimal support and cooperation are obtained from the organization?
- Should the approach employed be totally prescriptive, tailored or a mixture of both, and how can the organization build on its previous experience of IS/IT strategy formulation and planning?
- What are the most effective approaches, and which techniques achieve the best results (e.g. determining the critical success factors associated with top-level business functions or employing business analysis down to a very detailed level)?
- What resources, from which areas of the business, fulfilling which roles and responsibilities, and with which skills, should ideally be involved in the process and are they available? What training will be required?
- What other resources are required (automated tools, administrative support, physical facilities)?
- How long will the strategy process take and what will it cost?
- How should the process be steered and managed?

سوالات مقدماتی شروع فرآیند



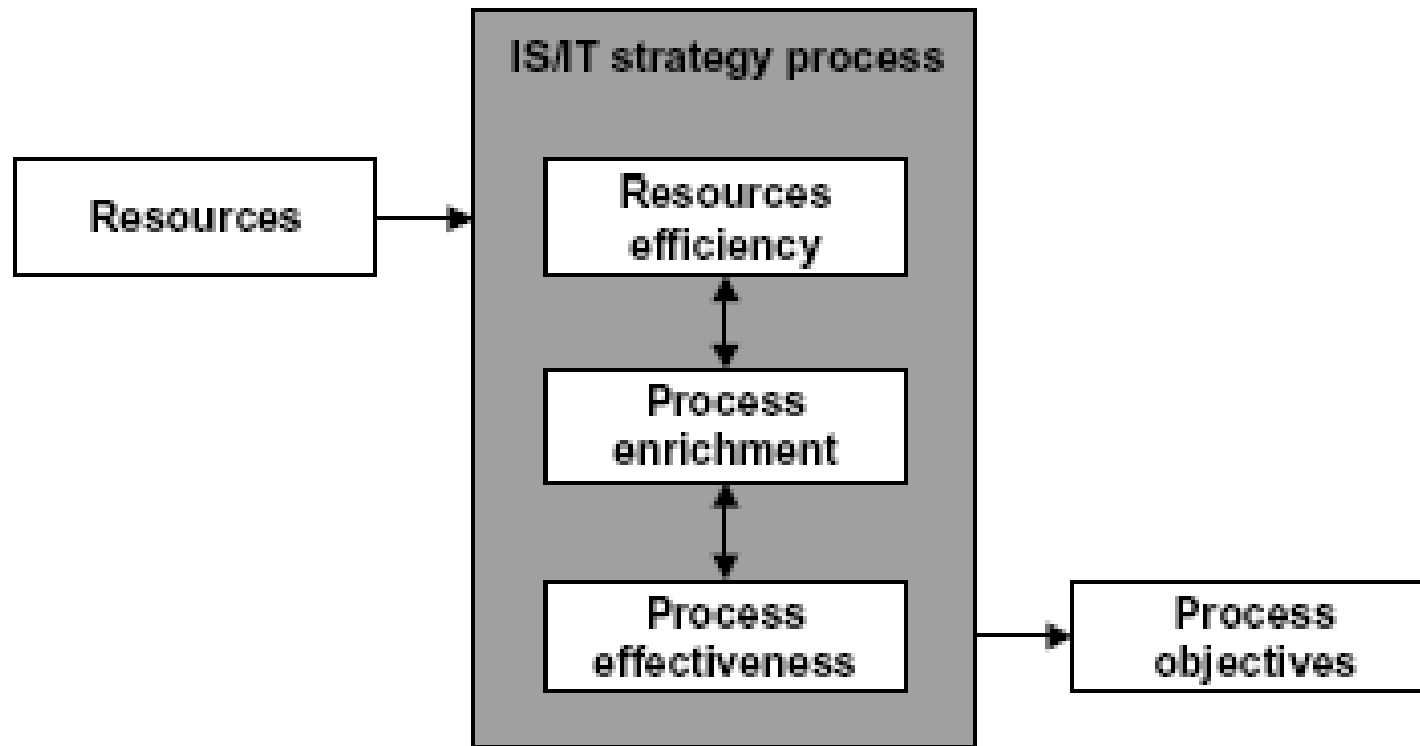


Figure 3.4 Success criteria



PURPOSE AND STIMULI DRIVING IS/IT STRATEGY DEVELOPMENT

The purpose in developing an IS/IT strategy is to ensure that the best possible value can be delivered from IS/IT investments. This can be achieved by tightly aligning the IS demand to the business strategy—strategic alignment—and by exploring opportunities for IS/IT to shape the business strategy where it is possible to improve the overall competitiveness, productivity and fitness of the organization to meet the forces acting upon it—competitive impact.

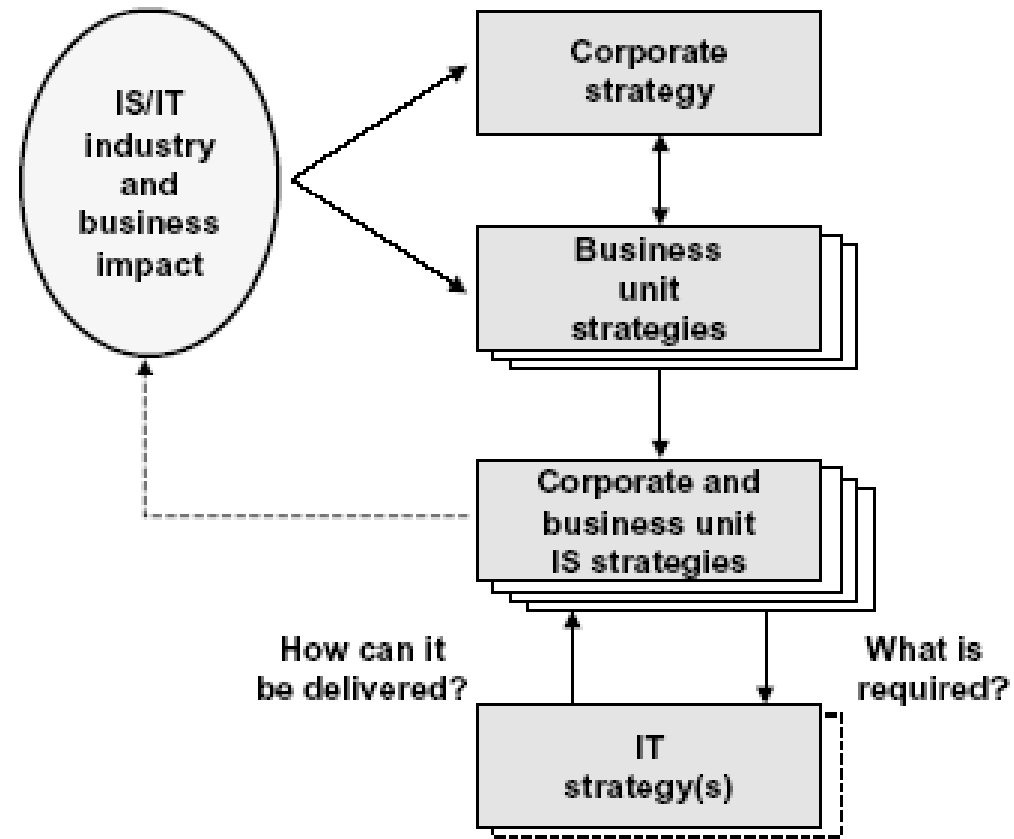


Figure 3.6 IS/IT strategy in context

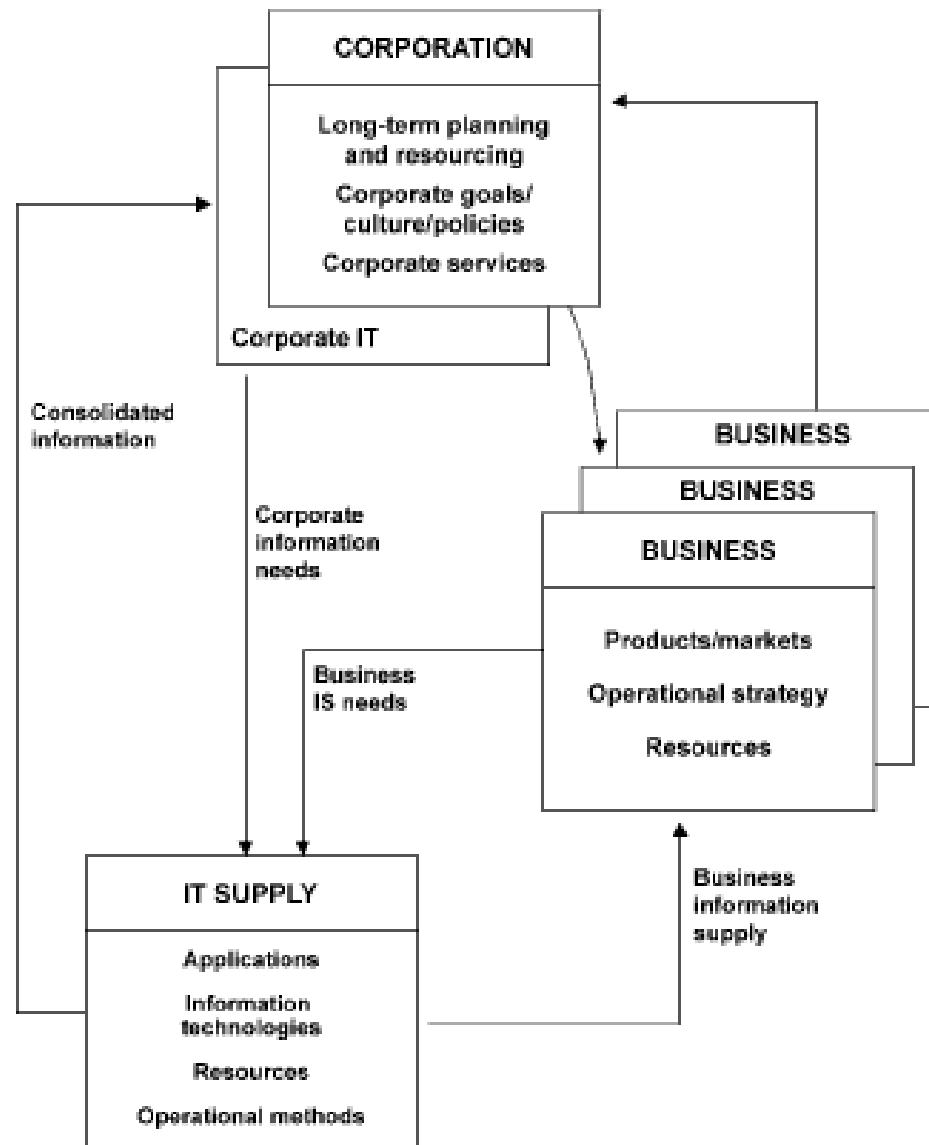


Figure 3.7 Relationships and information demand/supply

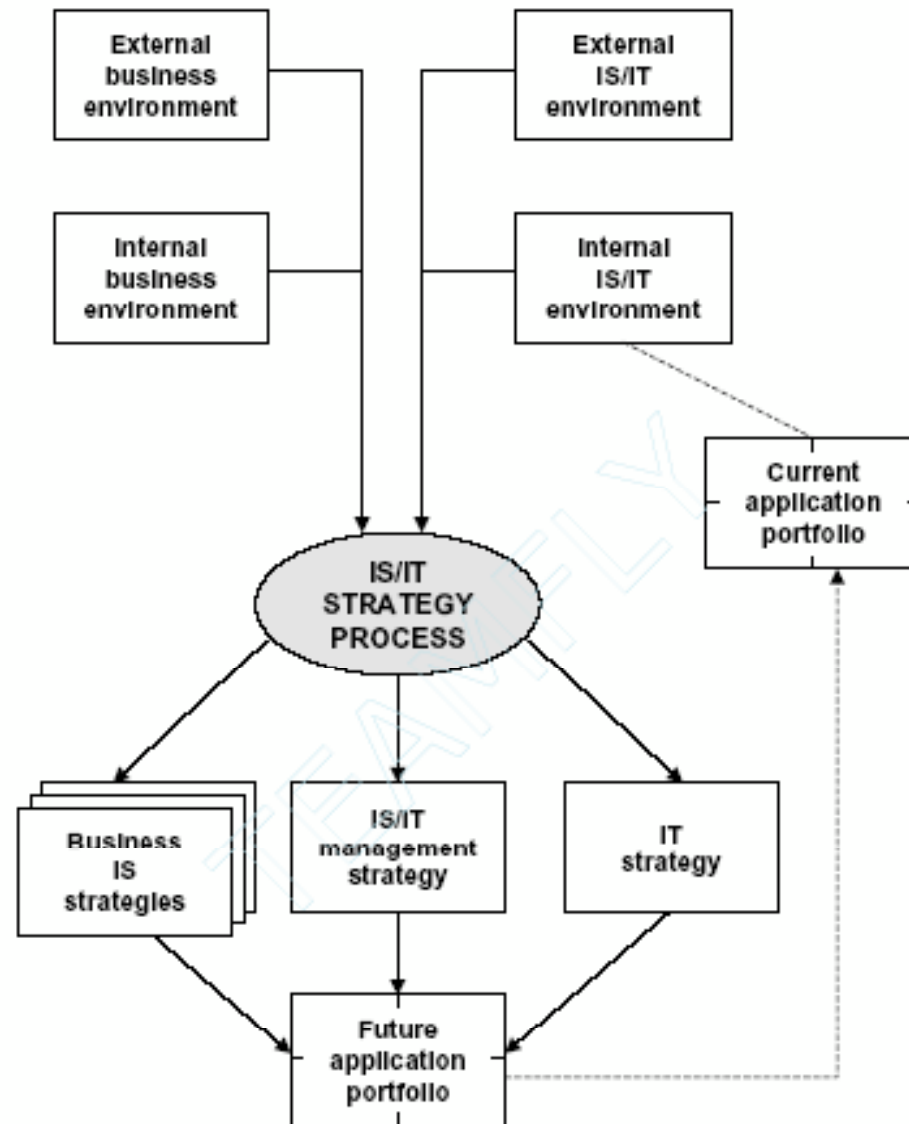


Figure 3.8 The IS/IT strategic model

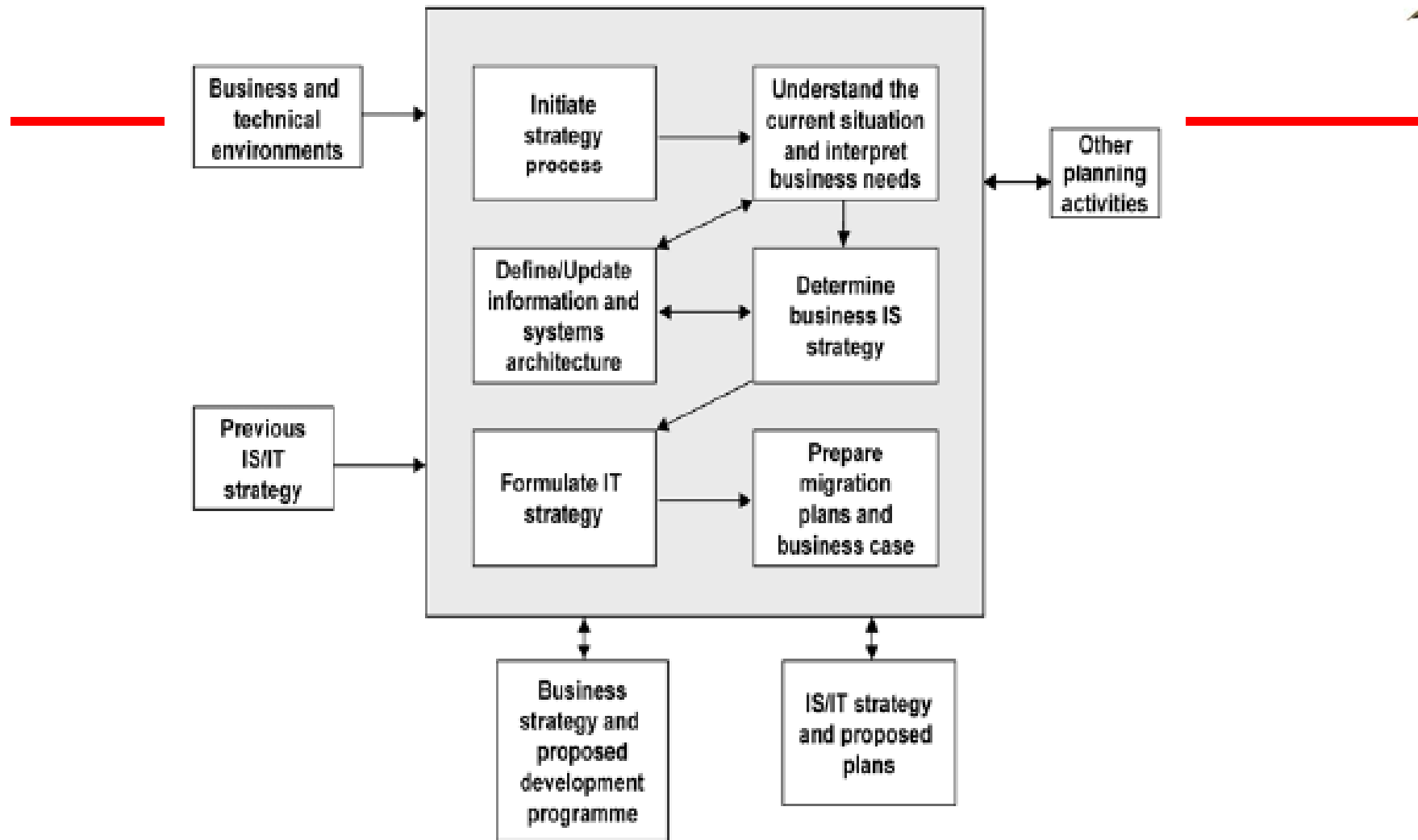


Figure 3.9 Framework for IS/IT strategy formulation and planning process

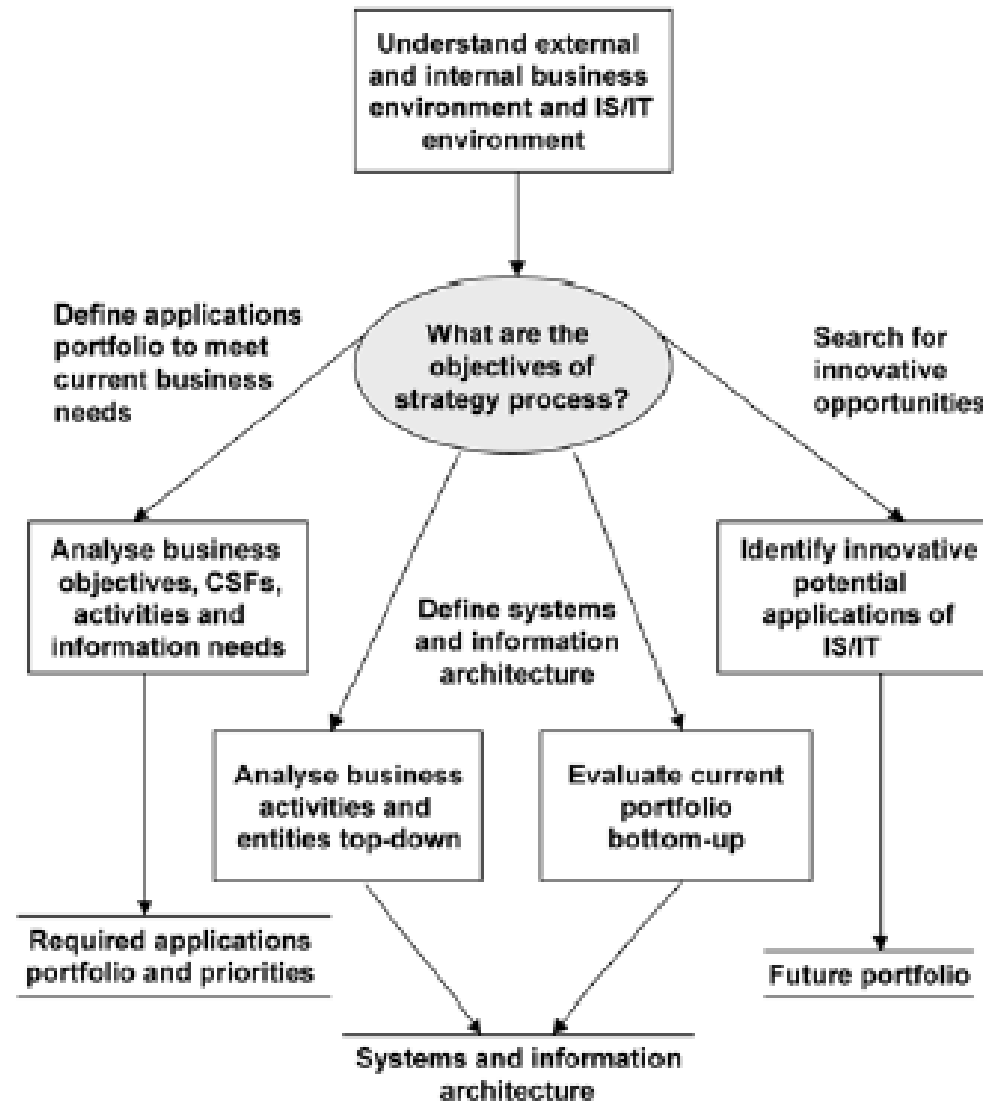


Figure 3.10 Analytical and creative approaches to interpret business strategy

چارچوب نهایی برنامه استراتژیک IS/IT



1. *Purpose of IS strategy*—reasons for new/updated strategy—key changes in business and IT context since last strategy: it is feasible for the IS strategy to be an annual update of the previous one.
2. *Overview/summary of business strategy*—to provide context for IS strategy: objectives and Critical Success Factors (CSFs), if known, plus analysis of competitive forces and/or similar analyses (e.g. strengths, weaknesses, opportunities, and threats [SWOT], competencies) and resulting issues affecting the IS strategy. *These tools will be described later in Chapters 4 and 5.*
3. *Argument for:*
 - new IS opportunities (to gain advantage);
 - critical improvement areas (to avoid disadvantage).

These should be based on Item 2 above but with further detailed analysis of competency issues, value chains (external and internal) and CSFs/balanced score card to determine the opportunity/problem areas and reasons for investment in them. Details of methods (e.g. value chains) should be included in Appendices.

چارچوب نهایی برنامه استراتژیک IS/IT



4. *Summary of opportunities/problem issues*—‘1 page’ for each—explaining the application/opportunity/issue: outline description, the rationale, potential benefits from investment, any critical dependencies and initial action to be taken in the context of an overall estimated time frame for the investment (more detailed plans can be included if known). These opportunities/issues should be separated into:

- strategic, high potential, key operational (and possibly support); and
- prioritized high/medium/low based on business timescales (e.g. H = within 6 months, M = 12 months, L = 2 years).

For each application, the business managers responsible should be identified.

5. *Review of current application*—portfolio and status of current projects (i.e. other investments currently in hand) and the overall resource implications of:

- completing outstanding work and ongoing commitments (major components should be described in Appendices);
- resources available to address new work from Item 4 above;

- any critical issues requiring resolution within the existing strategy.

چارچوب نهایی برنامه استراتژیک IS/IT



6. *Future application portfolio*—incorporating the output from Item 4 above to show the intended/potential investments, with priorities, and the implications for the rest of the portfolio (e.g. replaced systems, etc.).

Initial resource estimates (and costs) of the investments should be appended to the portfolio, with an initial plan (including a simple Gant chart).

(It is often useful to show how the balance, in using resources, is changing as the portfolio evolves.)

7. *Issues arising from the IS strategy*—these are things that require senior management attention (e.g. the establishment of a steering group) to enable decisions affecting the strategy (priorities, resources, organization, other initiatives, etc.) to be made in the required time frame. These may also include issues to be addressed by the IT strategy in order to provide the infrastructure to support the future applications portfolio.

مشابہت استراتژی کسب و کار و IS/IT



1. *Scope and rationale*—it will need to lay out the business background, scope and rationale for the directives it is stating, and preferably describe a vision of the corporate IS/IT environment and its expected impact on the business community. If major changes are in the offing, it will need to describe them and give a timetable for their introduction.
2. *IS function*—organization, resourcing and the allocation of responsibility and authority for IS/IT decisions. This includes both formal and informal structures and any steering group or management committee overlay structures to provide coherence. The allocation of authority and responsibility indicates how much control is retained in the corporate body and how much is devolved into the business and functional units.

مشابہت استراتژی کسب و کار و IS/IT



3. *Investment and prioritization policies*—implementation of the strategies will require many separate decisions on investments to be made. Management cannot consider each one in detail and certainly not continuously allocate and reallocate priorities. Rules must be defined—pertinent to each of the elements of the portfolio (strategic, key operational, etc.)—stating how investments should be appraised.
4. *Vendor policies*—these may state specific vendors, or the parameters that must guide choice of vendors, such as interconnectability, financial soundness, service provision, etc. They should also cover differences in policies where central approval is needed or where local decisions can be taken.
5. *Human impact policies, including education*—it is only too easy to jeopardize IS/IT strategies due to mismanagement of the people issues—new job content, reorganization, even redundancy. Some organizations have ‘technology agreements’ with unions or staff

مشابہت استراتژی کسب و کار و IS/IT



6. *IS accounting policies*—in many organizations, strategies can fail due to insensitive or inappropriate accounting policies for the charging of IS/IT resources. The objectives of such policies should be clearly stated and understood. While they initially appear to be management accounting systems for cost allocation, once implemented they become ‘transfer pricing’ systems on which users will make decisions. The policies will depend on, among other things:

روش اجرایی توسعه استراتژی

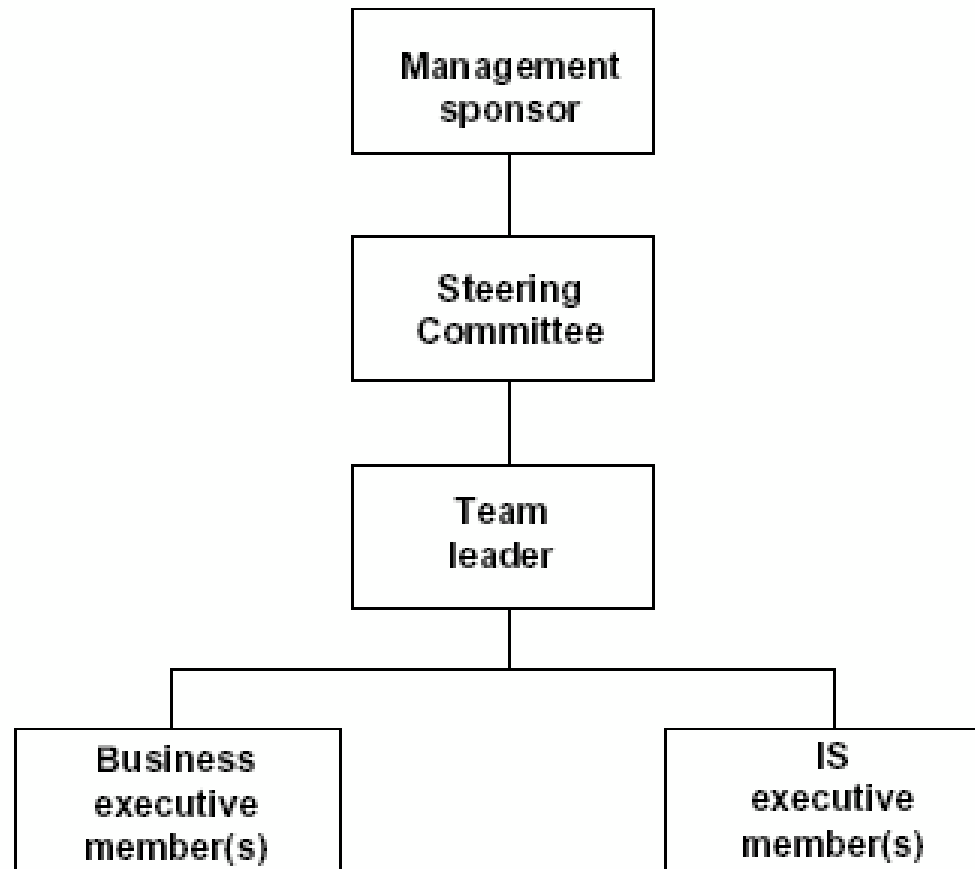
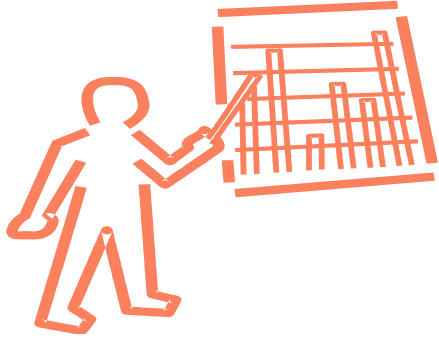


Figure 3.11 Strategy process management structure

هوَالْحَقُّ



پرسش
