Solution Building

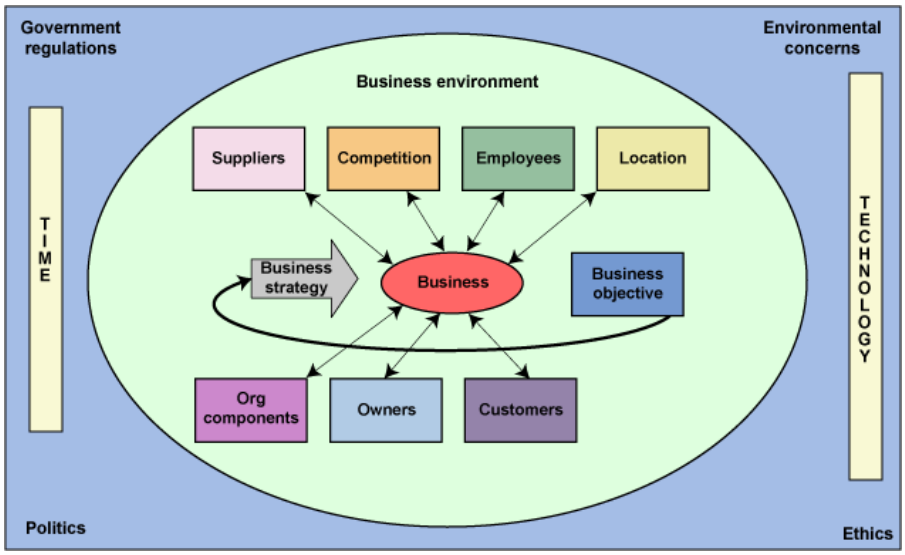
II. The Information Technology Plan

Businesses have a strategy for achieving their objectives, and that strategy changes over time based on any number of variables that can affect their ability to achieve their objectives. The business objective is a "what" and does not deal with the **strategy,** or the "how-to" steps that will result in achieving the objective. The "how-to" road map is a **strategic business plan** (SBP), which is an approach that management believes will

- allow them to achieve their objectives
- defines the assets needed
- specifies how the assets will be used

So that we can better understand what this plan involves, we should use the following general business model. The model, shown in figure 2.1, depicts all of the areas that an SBP must address.

Figure 2.1
General Business Model



The center of the diagram shows that the business strategy is driving the business toward the business objective and is designed to consider and incorporate the variables, both direct and indirect, as needed. To implement the strategy, a plan is developed that addresses many areas of the business, how various available assets will be used, and the assumptions concerning these variables over a time period, which could be up to five years. Because of the speed with which changes are occurring in the worlds of both business and technology, the planning horizon is constantly shrinking.

Figure 2.2, below, suggests that the strategic business plan connects or enables a business to use its strategy to achieve its objective.

Figure 2.2
A Strategic Business Plan Connects Strategy to Objective

As variables change and the business objective is optimized, the business strategy must be modified to meet this changing situation. Business strategy is never constant, but always changes in response to changes in the variables that affect the business's ability to achieve its objective. Figure 2.3 suggests this response.

Figure 2.3
Feedback Leads to Strategy Changes

This means that as feedback is received, changes are made in the business strategy as necessary, and then the SBP must change. The SBP must be a living document that is constantly reviewed and modified to reflect changes in variables so that the business objective can be achieved; it cannot be locked away in a drawer until someone decides to review it.

Figure 2.4
Evolution of the Strategic Business Plan

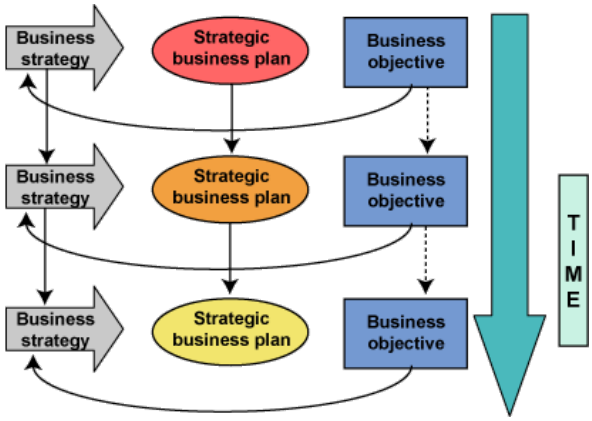


Figure 2.4, above, shows what actually happens. Changes in variables affect a business's ability to achieve its objective with the current business strategy and, therefore, with the current SBP. The plan is modified based on changes made in the strategy, which should favorably affect the business's ability to achieve its objective. This is not meant to imply that the changes happen with any regularity. A good example is when a significant event occurs, affecting business strategy.

Most businesses review their SBPs annually in conjunction with their budget development. The two are naturally connected, because spending (budget allocation) must be available to support the plan. The strategic business plan review should consider all of the variables we have discussed, and it should define specific actions and budget commitments to those areas.

Figure 2.5
Strategic Business Planning Model

Figure 2.5, above, shows the SBP model and the possible changes to the variables that would be considered when making or modifying the SBP. You can see that some of the changes in variables may develop over time. When this happens, the SBP does not require immediate adjustment, but the potential impact must be noted for future action. Changes in other variables, however, require immediate attention and changes to the plan. For example, the poor customer service that has been identified as resulting in the loss of market share would require immediate action. If the reason is identified as poor employee performance when dealing with customers, an extensive training program or a drastic change in hiring practices may be planned. Poor product quality may require improving raw materials and workmanship.

Think about the changes that you could make to the SBP based on the issues shown above. As you do that, think about whether there would be a cost associated with your action. Remember that there is only so much money for investment and other resources available. The plan will direct allocation and scheduling based on some guideline. This should help explain why this review and adjustment process is tied to budgeting.

As we have said, the SBP is the "how to" of the business strategy. We have also said that IT is an enabler used to help achieve the business objective. As the SBP is developed or modified, then, it should be clear that the IT plan must be closely aligned with the SBP done at the same time. Some authors have indicated that the IT plan should actually be part of the SBP because of its close connection to the IT infrastructure. (IT infrastructure is made up of five major components—hardware, software, telecommunications, IT services, and facilities—all of which will be discussed in detail a little later in this module.)

> Moreover, information systems (IS) and the organization's IT infrastructure have evolved into an 'IT fabric,' or 'nervous system,' inextricably entangled and intertwined with the business processes and information processing activities they support (Strnadl, 2001; Calvano and John, 2004; Field and Stoddard, 2004). Consequently, today's IT function is driven by the very same dynamics as the enterprise itself (Krafzig et al., 2004). (Strnadl, 2006, p. 67)

Management's concern must be how this is done and what makes it a success. Booth and Philip (2005) state:

> Earl's (1993) research uncovered five factors that have an impact upon the 'success' of the [IT] planning effort. They are:
>
> - top management involvement;
> - top management support;
> - existence/availability of a business strategy;
> - study business before technology;
> - good IS [IT] management.

> The emphasis here is obviously on facilitating an environment where business drives technological innovations, and management is fully committed to using IT to support business goals. (p. 394)

It is well-understood that if business efforts are to be successful, the first three items in the above list are essential. The fourth item, studying the business before technology, reinforces what we have been saying about the necessity of a close tie between the SBP and the IT plan, with the SBP driving both efforts. The last item, good IS or IT management, must be committed to a long-term systems architectural approach in which, as Strnadl (2006) said, IT infrastructure has evolved into an "IT fabric," or "nervous system," that provides the framework into which new systems and hardware can be fitted as they are needed.

Further, IT management must be sensitive to the business and its needs, rather than being in awe of or driven by technology. Kroenke (2007) indicates:

> Technology is seductive, particularly to IS professionals. The CTO (Chief Technical Officer) may enthusiastically claim, "With XML Web Services we can do this and this and this." Although true, the question that the CIO must continually ask is whether those new possibilities are consistent with the organization's strategy and direction (p. 310).

The technology must also be consistent with the IT infrastructure. Management has a responsibility to ensure that they are not buying a Rolls-Royce when a Toyota Prius will meet all of their objectives. The Rolls-Royce will meet the objectives, but it could create extra costs without any gain in benefits other than status for the owner.

Conversely, business managers must be aware that systems can and should be used in the business to solve problems and improve the various functions, and that the advice of IT management is essential to their success. This also implies that business managers should be conversant with IT terminology and its possible uses if they are going to achieve the maximum benefits of IT systems. It is in the best interests of the organization that both business managers and IT managers recognize each other's importance and strengths in maximizing systems' effectiveness in solving problems. This will ultimately lead to better business solutions enabled by IT that will lead to achievement of business goals and strategic objectives.

Figure 2.6 illustrates an IT plan and its integrated relationship with the organization's strategic business plan.

Figure 2.6
IT Plan's Relationship to Strategic Business Plan

Figure 2.6 illustrates the close connection between the SBP and the IT plan, and how business solutions can be produced or enhanced through the introduction of technology to the business. It should also be noted that these new systems can have ramifications for the infrastructure that may, in addition to the items noted, require increases in infrastructure capacity or structure. Clearly, not all eventualities can be predicted in the SBP or IT plan, but both must be flexible and responsive enough to respond to changes in the variables.

During the planning cycle, potential projects are identified to address business problems or opportunities. This is done at a high level at which not every detail is available or known well enough to support the decision to select one project over another or to commit resources. These potential projects, whether they involve IT or are related to other business functions, are assigned to cross-functional teams for detailed study. An outcome of that study could include business process reengineering (BPR) and, ultimately, documentation in a **business case**, a tool used to document the benefits and costs of a business decision.

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