Business Model Strategy

WISDOM to work by:

1. *Time to embrace a totally technology focused strategy.*
2. *An effective IT strategy matches the business strategy, if available, or has general applicability based on the overt business activities.*
3. *It all starts with the business model.*
4. *Layer in the technology models:*
   a. *The software view*
   b. *The hardware view*
   c. *The network view*
5. *Mapping the technology models to the business model produces strategic areas of focus.*
6. *The IS strategy will use the strategic areas of focus to leverage the right technologies and remove technology impediments.*
7. *Know your strategic drivers. What makes your situation different?*

I. INTRODUCTION

Please reference appendices 6.1 (Business Model Strategy) and 6.2 (Business Model Tactics) which summarize the recommended approach. This is the approach to follow to again remove IS and technology from being a business impediment. At this point in the company history the business needs to embrace a totally technology focused strategy. This will be a very difficult strategy for the business to embrace without having some business members who are very strong in technology. To remedy this situation the business should either use outside consulting resources or hire additional strategic IS leadership to take control. It will take a knowledgeable technology leader to make this work. Following those steps, the business can identify the direction the technology should take and identify specific technologies and projects to execute. This strategic approach will get the business through the next major barrier. It is more formal and time-consuming. The strategic keys to success will be the tools and techniques found here to structure this exercise.

II. STRATEGY

A. Definitions

The following set of strategic exercises requires an agreement on both philosophy and terminology. The business leadership needs to assist the IS leadership in analyzing the business from a technology perspective and selecting the technologies that will enable the business to realize unrestrained growth. Some clarity on terminology is required at this point in time as well. I recommend the following definitions:

- **Business strategies** - These define what the business is going to do at a high level to grow and prosper. This includes products, services, markets, financial and manpower goals and objectives, and any other stated directives.
- **IS strategic areas of focus** - These are a response to the stated business strategy or business needs. It is a method of identifying and grouping the required technologies in a cohesive and unified way in order to solve enterprise-wide requirements. Examples of IS strategic areas of focus could include the following:
  - Document management
  - Customer relationship management
  - Common systems
- **Individual IS strategic areas of focus -** These are enacted through execution of a set of IS-related projects. These projects fit together from both a technology and business process flow perspective to support the IS strategy. Examples include a document management strategy comprised of the following:
  - Standardized document project
  - Print engine project
  - Fax server project
  - Unified messaging project

B. The Business Model

As with any successful exercise, and similar to the business layer model, before the business can map where it is going it needs to know where it is today. This strategy uses a more sophisticated approach yet one based on some fairly simplistic modeling. It requires that the business develop business models and technology models to describe the current state. Then, using other strategic tools, the business can chart a new direction.

The business model describes how the business works from a macro level. It should be a one- to two-page document that basically shows how the product or service provided by the business is delivered. I find it best depicted in the form of a flowchart. Please refer to the sample business model provided as appendix 6.3. The business model is not a detailed document but rather shows the primary high-level business processes. The business will then need to develop the sub-processes beneath each of the major business processes. I have included a sample as appendix 6.4. The customer interaction with the business to get products and services follows a set repeatable pattern. While it obviously differs from business to business, it is usually a very simple process flow. This process generally begins with a sale or order and proceeds through the internal business

processes culminating in order fulfillment for the customer and revenue to the business. The ultimate use of this business model is to define and document a description of the core business processes with accompanying business parameters.

The business model is the starting point and the basis for this strategic exercise. It defines and documents the core business processes that are basically required to conduct the business. It provides a process view of the business. It is a high-level view which can be used to view the business in discreet individual or process segments.

C. The Technology Model

The technology model is a little more complex and has several uses. It is a multi-page document (views) showing how IS has constructed the various technology systems in support of the business system. A technology model lists the hardware, software (including database), and network components assembled in support of the business. The technology model defines the service delivery configuration in generic process terms and in specific hardware, software, and network terms.

D. Technology Model Views

An example of a set of technology views follows.

1. View 1 – Software and Database View

The software view shows the software and applications that are currently used to support the business model processes. Like the business model it is easiest to depict in a flowchart form. Please reference appendix 6.5 for an example. The attachment lists the various software solutions that have been deployed to support the business model. If the business has not used the business layer approach or some other rigid methodology, this view will most likely be a real mess. The IS department will have bought or built functionality by piecing the entire thing together. The business may be using as little as 10 percent of a purchased package's functionality or as much as 90 percent. The business will have several solutions from several vendors with internally developed or vendor-supplied interfaces. These solutions were working well at the time they were selected and implemented. They provided functionality leaps that were not present before. Now, however, they may have become impediments to growth. Most applications will be using flat files, MS Excel files, MS Access databases and, if the business is fortunate, a few SQL databases.

The ultimate purpose of this exercise is to examine the software and database portfolio and identify strengths, weaknesses, and opportunities. In addition to the flowchart view, the business will need to develop a spreadsheet listing the individual components of the software suite. On the sheet there should be columns for the database or data structures being used and the additional software characteristics listed below. At a minimum track the following:

- Software limitations
- Reporting tools
- Scalability of the application

- Functionality strengths and weaknesses
- Positive and negative features
- Reliability of the system
- The age and maturity of the system
- Whether the software was purchased or developed
- Acceptance by user community and general reputation of the system
- Timings and responsiveness
- Numerical or quantitative limitations
- Whether or not the application is web enabled
- Modularity of construction
- Whether the application is ultimately going to be kept or replaced

If the IS department is using any database other than industry leaders like Oracle or MS SQL server, they should plan for a change. While there are other and possibly better databases, these are the industry leaders and market share dictates the players. Using another database will cause the IS department to have trouble with everything from finding qualified database administrators to getting new functionality and new releases.

2. View 2 – Hardware/Platform View

The hardware or platform view will simply list the existing hardware configuration. It is a given that this will not be an optimal configuration and that there will be an odd mix of hardware and vendors. It is best depicted in a network diagram form that should relate closely to the software and business model views. Please reference appendix 6.6 for a sample hardware/platform view. By the way, deploying four to eight different platforms is not uncommon. This picture is usually more complex than the business first imagines despite previous efforts to standardize.

In addition to the hardware/platform diagram, develop some accompanying narrative. Specifically, develop statements about each component on the diagram. These statements should speak to the same issues identified in the software/database view. Please refer to those bullet points above. If the business has used the business layer approach in earlier growth stages, it is well-positioned to evaluate the technology areas and plan for growth. Here are some sample statements for guidance.

- **Sample statement 1** - **NT servers** - The NT servers are modular and can be grown and configured in various ways. There are no known limiting factors.
- **Sample statement 2** - **Legacy host processors** - The legacy host processors are also a modular solution that can be grown or clustered together in various ways. We are limited by the age of the solution and the limited tool sets available.
- **Sample statement 3** - **Telephony** - The telephony solution is not only limited strictly by size but also by features and functions provided. We lack the following features (provide list).

3. View 3 – Network View

This third technology model will show the LAN, WAN, and Internet connectivity components. It should also be depicted in a network diagram view and be easy to relate to previously developed views. These last two views are much more specific in terms of defining the specific technology components and model numbers. This view is commonly done in all IS organizations and should be constantly kept current and made available for this kind of exercise. Since a network diagram is fairly universal, I have not included a sample.

Using the network diagram view develop statements about each component on the diagram. These statements should speak to the same issues identified in the software/database view. Please refer to those bullet points above. Evaluate the limitations and growth opportunities in each of the areas. If the business has used the business layer approach in earlier growth stages, it is well-positioned to evaluate the technology areas and plan for growth. Here are some sample statements for guidance.

- **Sample statement 1** - **Switches and routers** - These are modular components and can be grown and configured in various ways. There are no limiting factors.
- **Sample statement 2** - **LAN** - We have been using dumb routers instead of intelligent switches and we need to replace these or we cannot proactively monitor our network.
- **Sample statement 3** - **Connectivity** - We have issues with our current software that links the home office to the warehouse. The connection is unreliable and hard to troubleshoot. We need to replace it.

E. The Technology Model Summary

The business now has a concise picture of where the business and the supporting technology reside today. Now let's see where it should go.

F. The Business Strategy

1. Confirm the Business Model

As with the business layer approach, the business model approach requires the business to conduct a strategic exercise to either confirm the business model or make modifications to it. If the business model is confirmed as correct and will not change, the challenge is to focus on the enabling technologies that will remove the barriers to growth. If there are changes to the business model, based on new products or services or other process changes, then the business model needs to be redrawn before proceeding. The business model is the essence of the business model strategy.

2. Document Technology Impediments to Growth

Next compile in a single document all of the technology impediments to growth. This is accomplished by assembling all of the flows and narratives from the three

technology models and collating them into a single comprehensive document. From this narrative we can draw general conclusions and develop a comprehensive document. The IS strategy will be geared toward enabling growth and progress by removing these technology impediments.

3. Develop the New Technology Vision

Based on the current state of the business and the existing IS solutions, tempered and modified by any new business strategy, the next step is to develop an IS technology vision that addresses the problems with and shortcomings of technology. This should be in the form of a narrative and accompanying model views. Take each of the technology model views and reconstruct them using generic components labeled to reflect the grouping of functionalities that you need. I have attached a sample software technology vision as appendix 6.7. Please refer to it. These generic components will become specific strategic components as a result of the next series of exercises. If these can be properly addressed the impediments to business growth can be removed. By focusing on the business and technology models and the deltas or opportunities between the two, we can identify the technologies that are important to the business. We can identify the strategic areas of technology focus that will allow the business to grow. This exercise will result in a period of time where the technology can actually drive the business. This is a very powerful exercise!

G. IS Strategy Summary

We are now ready to develop the strategy. The strategy will be expressed as a set of broad strategic areas of focus. The IS strategy is based on an alignment of the needs of the business with the application and deployment of the IS resources to satisfy those needs. The IS strategy is developed as a convenient way to address all of the pressing needs of the business in broader focused initiatives and assure that common business problems across product groupings are resolved with consistency and forethought.

When we discuss IS strategies remember that we are talking about the following: an IS strategy is a convenient way to organize and address a large number of initiative-related projects that build into a composite strategy.

The scope of the IS strategy enables proper sequencing and execution of projects, as well as building on previous projects. It also enables the business to address other areas, like documentation and training, along with the requisite technology acquisition.

The primary benefit of an IS strategy is the single vision with a defined path describing how to get there. The best way to accomplish results using business strategies is through creation and support of business strategy teams. I will define these teams later.

H. Strategic Areas of Focus

The IS strategy can now be defined as a set of broad strategic areas of focus by using the technology vision models we have developed. With the models and a straightforward process approach, the business can define the strategic areas where the IS department

should be focused. I believe there is a universality of business processes and broad strategies that are common among various businesses. I am referring to the need to do things like manage documents and handle customer calls. These technologies can be identified strategically and applied to the various high-level business processes. Based on what the business is trying to accomplish, the business needs to identify those technologies and solutions that will bring the greatest functionality and effectiveness to the business.

As an example, one of the requirements of the mail-order medical supply business was to obtain written permission from both the doctor and the patient before shipping product. This was originally being done through snail mail and paper fax. It was a repetitive, time-consuming, and inefficient operation. Papers were mailed to the patient and had to be signed and returned. It took repetitive mailings to secure the appropriate signature. Papers were faxed to the doctor's office and were supposed to be signed and returned. This was also a repetitive process that took several attempts before it could be successful. The result was paper documents everywhere and floor space consumed in vast quantities. By making the observation that the business was paperbound, and possessing a basic knowledge of imaging and other document handling technologies, it was not much of a leap to see that document management had to be both an inhibitor to the business and necessarily a strategic area of focus. With this observational leap, the strategic area of focus could be defined, scoped out, and turned into a series of projects that would build the vision into a reality.

The following uses the mail-order medical supply business as an example and shows examples of how the strategic area of focus can be built out into a legitimate strategy. We were able to identify several strategies that, if realized, would position the business for incredible growth and profitability. Two of these will serve as an example. They are as follows:

- Document Management
- Call Management

Example 1 – Document Management Strategy

Document Management Business Strategy Summary

- **Definition** - All systems (hardware and software) required to automate document handling requirements that are needed to carry out the business.
- **Vision** - To implement an enterprise-wide, centralized document handling system with access from any desktop connected to the corporate network.
- **Benefits** - Increase agent productivity by eliminating the need to walk to fax machines or do department printing. Increase agent productivity through electronic storage and retrieval of documents. Minimize the handling of paper documents. Minimize compliance risks that could be created through errors during transcribing and handling of documents.
- **Risks** - Rapid acquisitions and associated integration activity may limit resources available for this development initiative.
- **Constraints** - Time to execute the projects.

- **Assumptions** - Necessary capital will be made available. Necessary staffing with appropriate skill sets will be available. This is a development project and will share its allocated development human resources with other development activities. Solutions will be scaled down to match revenue models and projections. Solutions will scale up with the growth of the organization. Tools will be purchased to centrally manage the solution(s). A high-speed, high-bandwidth, self-healing, and redundant wide area network is in place. Solutions include faxing, scanning, and electronic storage and retrieval.
- **Inclusions**
    - **Activities** - Document printing, document faxing, document imaging, document storage, document retrieval, document bar coding, and document handling.
    - **Documents** - Claims, invoices, and any other printed, faxed, or electronic documents.
- **Governing parameters** - Provide the appropriate document at the appropriate time and at the least overall cost to the organization.
- **Description of Technologies**
    - **Document Imaging, Storage, and Retrieval** - Document imaging involves scanning the paper documents and storing the image electronically. These documents are indexed in such a way that agents can retrieve and display these images across the network on desktop devices.
    - **Document Bar Coding** - Document bar coding involves printing specific data fields translated into bar codes. Documents are then exchanged with customers, physicians, and insurers. When returned, these documents are scanned and the bar code is electronically read. This eliminates manual keying of these data fields.

IS recommends the following document management strategy and recommends that the business develop the required capability and realize the vision through a series of projects that standardize and centralize all document handling functions. The business should execute the following projects:

- **Standardize Documents** - Develop a standard way to store and retrieve documents regardless of the delivery vehicle.
- **Document Printing** - Centralize and standardize document printing. Reduce corporate printing costs by at least 10 percent.
- **Document Imaging, Storage, and Retrieval** - Centralize and image appropriate documents. Provide electronic storage and retrieval of document images. Eliminate the document filing room. Eliminate manual document searching and retrieval.
- **Document Bar Coding** - Deploy bar code printing and scanning of appropriate data fields with the goal of reducing or eliminating excessive document handling and keying of data. Reduce cost of document handling and keying of data fields by at least 10 percent.
- **Document Faxing** - Centralize electronic, individual and mass faxing, or eliminate paper faxing where possible. Reduce paper faxing by 100 percent.

- **Document Emailing -** Centralize and standardize emailed documents.
- **Electronic Interfaces -** Centralize and standardize handling of electronic files and interfaces.

Example 2 – Call Management Strategy

Call Management Business Strategy Summary

- **Definition** - All systems (hardware and software) required to process inbound and outbound telephone calls. The systems manage all aspects (from marketing to distribution) of our business.
- **Vision** - To build a world-class call center environment utilizing industry standard best practices and technology.
- **Benefit** - Increase inbound and outbound call handling efficiency thereby reducing the number of agents required. Enable seamless integration of the small work group concept while achieving cost savings associated with large call centers. Increase customer intimacy through a near one-to-one relationship.
- **Risks** - Limited experience within the business with call center operations management. Rapid acquisitions and associated integration activity may limit resources available for this development initiative.
- **Constraints** - All calls must be answered and processed through human voice interaction.
- **Assumptions** - Necessary capital will be made available. Necessary staffing with appropriate skill sets will be available. This is a development project and will share its allocated development human resources with other development activities. Solutions will be scaled down to match revenue models and projections. Solutions will scale up with the growth of the organization. Tools will be purchased to centrally manage the solutions. Advanced call handling technology will be added.
- **Detailed Vision**
    - **Inputs** - Inputs will be daily transactional work queues developed from existing customer databases. The queues will be built when action is required.
    - **Processing** - Processing focuses on the telephone interaction between customers and agents. Inbound and outbound calls flow through the main telephone system and one or more of the functional technologies.
    - **Outputs** - Outputs will include daily tangible results consisting of new customers, completed documentation, and reorders.
- **Governing Parameters -** The governing parameter is to always have a successful interaction between the customer and the agent. This success is measured by:
    - **Customer Contacting Company -** Customer contact rate should approach 100 percent during published business hours. Provide 100 percent rollover to voice mail during non-business hours. All previously gathered customer information will be available to the agent. All information will be made available with minimal searching and screen sifting. Provide shortened agent training time due to ease of use.

- **Company Contacting Customer**
  Company contact rate should be 100 percent for a live agent and a live customer or answering machine. All previously gathered customer information will be made available to the agent. All information will be made available with minimal searching and screen sifting. Calls will be made at the appropriate time in the customer cycle. Calls should not be made too early or too late. Eliminate repetitive attempts to make customer contact. Provide shortened agent training time due to ease of use.

- **Description of Technologies**
  - **ACD Functionality** - Automatic Call Distribution (ACD) serves as a traffic cop for telephone calls. It enables calls to be handled more efficiently and effectively by sending calls to the appropriate agent based on programmable factors. ACD allows for call receiving, routing, stacking, messaging, and connecting. It often gathers the data used in computer telephony interface (CTI) applications. It greatly increases the chances that the customer will speak to the appropriate agent and have a successful call experience.
  - **Predictive Dialer Functionality** - Predictive Dialers serve as screening agents. They screen out all calls that will not result in an agent speaking directly to a customer. They screen out all busy signals, disconnected telephones, unanswered phones, and answering machines. Predictive Dialers also serve as call regulators. They regulate the speed of outbound dialing in an attempt to keep all agents talking and not have a customer available without an agent to talk to them. This is done by sophisticated pacing algorithms that calculate a calling pace based on the number of available agents, the average number of telephone numbers being dialed to get a customer on the phone, the average talk time of the agents, and the number of outbound lines available to dial through.
  - **CTI Functionality** - Computer Telephony Integration (CTI) brings together voice and data technologies to improve agent productivity. It usually involves interrogating data from an inbound call to make queries against databases over a local area network. The inbound call data may come from capturing the originating telephone number, by asking the caller to press keypad numbers, or by voice recognition. The databases are used to make decisions about the caller and to present appropriate information about the caller to the agent.

IS management recommends the following call management strategy: develop the required capability and realize the vision through a series of projects that add the appropriate technology. Conduct the following projects:

- Call center training and PBX software upgrade
- ACD training and rollout
- Report training and rollout
- Dialer training and rollout
- Voice mail training and rollout
- Voice-over-IP training and rollout
- Advanced ACD and CTI training and rollout

III. STRATEGIC DRIVERS

The business should now be able to identify four to six strategic areas of focus. Any more or less and the business will most likely not be focusing on the right things. Given success in defining the strategic areas of focus (defines the what), the business should now focus on the strategic drivers (defines the how). These are guiding principles or drivers that must be used during the tactical execution of the projects generated out of the strategy. These drivers are important because they allow IS management to make better technology choices and focus on the factors and considerations that are important and particular to the business.

The IS strategy is the culmination of a series of exercises that encompassed looking across the business organization and identifying those key business processes and technology focus areas that are most critical to making the business and IS a success. Strategic drivers enable the IS leadership to make the right technology choices based on what has been observed to be right for the business. These technology choices are there and facing the business…no matter what the strategic drivers. There are a multitude of ways to select and deploy technologies. The business must have guidelines and ground rules in order to choose wisely.

1. Examples of Strategic Drivers

Using my example of a mail-order medical supply company, we were able to identify our strategic areas of focus as the following:

- Call Center Management
- Document Management

The next strategic exercise consists of examining the strategic areas of focus, factoring in the corporate situation and perspective, and selecting the resulting strategic drivers for the IS organization. It is largely an observational exercise. It consists of conducting a meeting or a series of meetings between the IS management and a business advisory team. It consists of a series of brainstorming sessions that focus on the following areas:

What is the strategy of the company? Have the business executives identified the strategic drivers for the business? Is the business currently customer focused or internally focused? Is the business focused on producing a product or providing a service? How do the business executives approach the customers and the business?

What is the frequency and focus of the “customer touches”? How often does the customer come in contact with the organization? What is the content and message of these contacts? What information or goods and services are exchanged? What is important to the company about these exchanges?

How is the company focused on the industry? Is the company an industry leader or an industry follower? Is the company a trendsetter or a trend follower? Who is the competition and what is known about them? How does the competition differentiate themselves? What are the trends in the industry? What is the focus?

The answers to these questions and the dialogue surrounding these discussions lead to some solid conclusions about the current environment. These answers simply need to

be translated into strategic guidelines or strategic factors which must weigh heavily in all technology decisions and all strategic systems development. These become statements of fact that support the business direction and enable the business to structure decisions with fixed criteria. Using our example of a mail-order medical supply business, the strategic drivers might well look like this:

a. Customer Specific

Due to our company focus on customer service, our technology and systems will be flexible enough to enable customization based on the specific needs of our customers. We cannot afford to take a mass production approach because our customers require different solutions based on their particular circumstances. It is expensive to acquire and maintain customers so we must guard them carefully. Our competitors are customizing. In order to be competitive, we must also customize.

b. Product Focused

Since a wide array of products are required to successfully compete in the marketplace, our technology and systems will be full-featured enough to support specific demands of the various product groups. There are distinct groups of customers in our customer community with needs that are different enough to require different product groupings. We must build or buy systems that have a broad range of features and that are not single feature specific. We must build or buy flexible solutions that have a wider range of features than we currently provide or support. We need to focus not only on the current products provided but possible related products as well.

c. Industry Standards

As an IS organization, our technology and selected systems will adhere to industry standards with regard to underlying component technologies and open interfaces. We know we are growing at a rapid rate and that we will face larger integration issues down the road. We must be careful not to select point or one-off solutions that solve narrow specific problems but do not fit into a long-range strategy. We will be cognizant of the need to tie all of our technology and systems together at a later date and that all technology and systems will be required to interact and share information and data. Only through following industry standards can we assure that our decisions today keep our options open for tomorrow.

d. Tightly Integrated

We cannot afford the problems created by disparate systems so our technology and systems will be made to seamlessly integrate among the various selected components. We have a small computer operations capability and we do not have full production monitoring on all shifts. We cannot afford system outages due to integration problems. We do not have the staff to constantly chase and resolve system-related integration problems so we must tightly integrate all systems from the start.

e. Common Systems

We cannot afford to support a wide range of solutions so our technology and systems will be limited to the smallest number of possible solutions with limited duplication of solution sets. The small budget and limited manpower dictate that we narrow the number of deployed solutions. We must look to add functionality and depth of scope to the solutions already deployed and not add like solutions to the mix. This may entail some lost functionality but the support required rises exponentially with the number of solutions deployed.

These strategic drivers and their definitions and explanations should serve as good examples. They should trigger thinking and allow thoughts to coalesce around drivers that will solve current problems and eliminate some of the mistakes made in the past. There is no limit to the number or type of strategic drivers that may be selected but five to six should suffice. The business goal is to assure that these drivers do not conflict and do not leave gaps in the decision-making process. The strategic drivers will not be unique to any single company or any single industry.

IV. BUSINESS MODEL STRATEGY SUMMARY

This strategy works. An effective IT strategy matches the business strategy if it is readily available. If not, the business model strategy has general applicability based on the approach the business is taking and the focus on growth. Mapping the technology models to the business model is the key strategic exercise. Once the SMB identifies the strategic areas of focus and the strategic drivers, it will be poised for action.