*"How do we lead a company in a world like this..trying to figure out where we are going and what we should do?" David Pottruck, the CEO of Charles Schwab, recently asked this question. In March 2002, the ISRC welcomed Dr. Lynda Applegate from the Harvard Business School, to explore how IT should be reacting in these turbulent times and how IT investments can be valued so that executives at the top level will easily see the return from the investment.*

## Introduction and Overview

The 1990's were full of exuberance—the supply of money from VC's was enormous and the U. S. saw an expansion of the economy unlike any other time in our history. Advocates labeled this the "new economy," arguing that the rules of business had changed forever. In March, the ISRC welcomed Dr. Lynda Applegate from the Harvard Business School, who argued that the old rules are still in existence. While the questions have changed, the underlying economic model still exists: successful companies make money. But how does an organization link strategy to value in the post dot-com era? Dr. Applegate explored this question during our session.

## The "New Economy" Question

Dr. Applegate claimed that the one lesson that we have learned from the evolution of the economy was that the question that we should be asking has changed. The old question was…*What business am I in?* The new question is…*What is my business model?* The implication is that the way that we think about our business defines how we view opportunities and threats. If we think about the business that we are in, we will miss opportunities that exist for new business and threats that will affect our business in the future. This shift in thinking then requires an examination of our underlying business model.

## So what is a business model?

A business model is comprised of three elements:

1. **Concept**: describes the opportunity that you are seeking to capitalize upon. This defines the market opportunity, the products and services offered, the competitive dynamics, the strategy for capturing a dominant position, and the strategic options for evolving the business. The concept should drive the revenue model, for the definition of the concept will allow firms to answer the size of the opportunity and the impact upon revenue.
2. **Capabilities**: defines the resources needed to turn the concept into a reality. The capabilities are built and delivered through people and partners, leadership, organization and culture, the operating model, the business development/innovation model, and the infrastructure model. By defining the capabilities, firms can then assess how the capabilities of the firm will capitalize upon the concept to change costs and assets.
3. **Value**: measures the return to investors and other shareholders. Value is measured through the benefits returned to all stakeholders and the firm, through market share, brand, reputation, and financial performance.

Since the business model drives the financial model (as expressed in the elements above), it is the articulation of the elements in the business that allows firms to assess the future revenue, asset, and cost issues associated with emerging business opportunities. This view of a business model is expressed below in Figure 1.

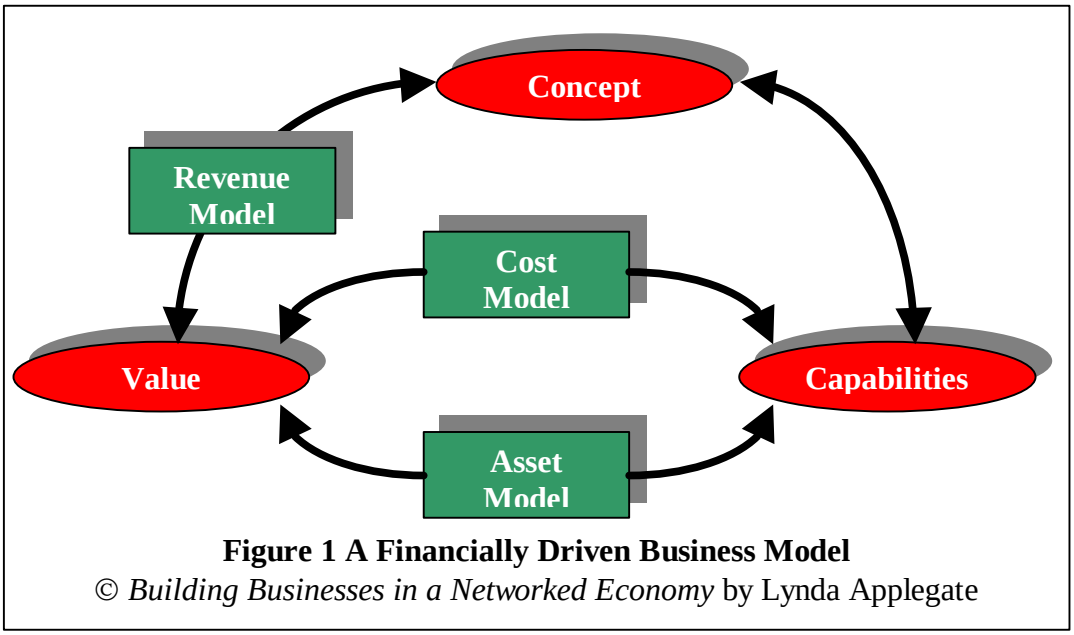


**Figure 1 A Financially Driven Business Model**
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Using this approach, a company can link the new opportunity with their capabilities to drive a business idea within a financially viable way.

**But how will this drive a Future Business Idea?**

The application of this approach is that firms must follow the following algorithm:

1. Carefully define the concept and the capabilities.
2. Determine the impact of the concept upon revenues.
3. Calculate how much it would cost to implement the idea, using the available resources. By subtracting the costs from the revenue, the earnings (or EBITDA—earnings before interest, taxes, depreciation, and amortization) can be determined.
4. Define the assets that can be used to move the concept into reality. This will allow for a calculation to determine the money produced given a specific plan of capital investment.
5. Examine how this investment will affect the market value of the organization

By following these steps, firms can determine the impact of a concept upon the overall value of their firm. Yet, according to Albert Einstein, "Not everything that can be counted counts…not everything that counts can be counted." Thus, organizations must also examine how intangible factors affect firm value.

One of the most critical ways to ensure future growth is to build the loyalty of customers, employees, partners, and shareholders. Thus, one intangible factor that must be considered is loyalty. When this intangible, plus all of the other tangible factors already presented in the algorithm are considered together, the result is Figure 2 below.

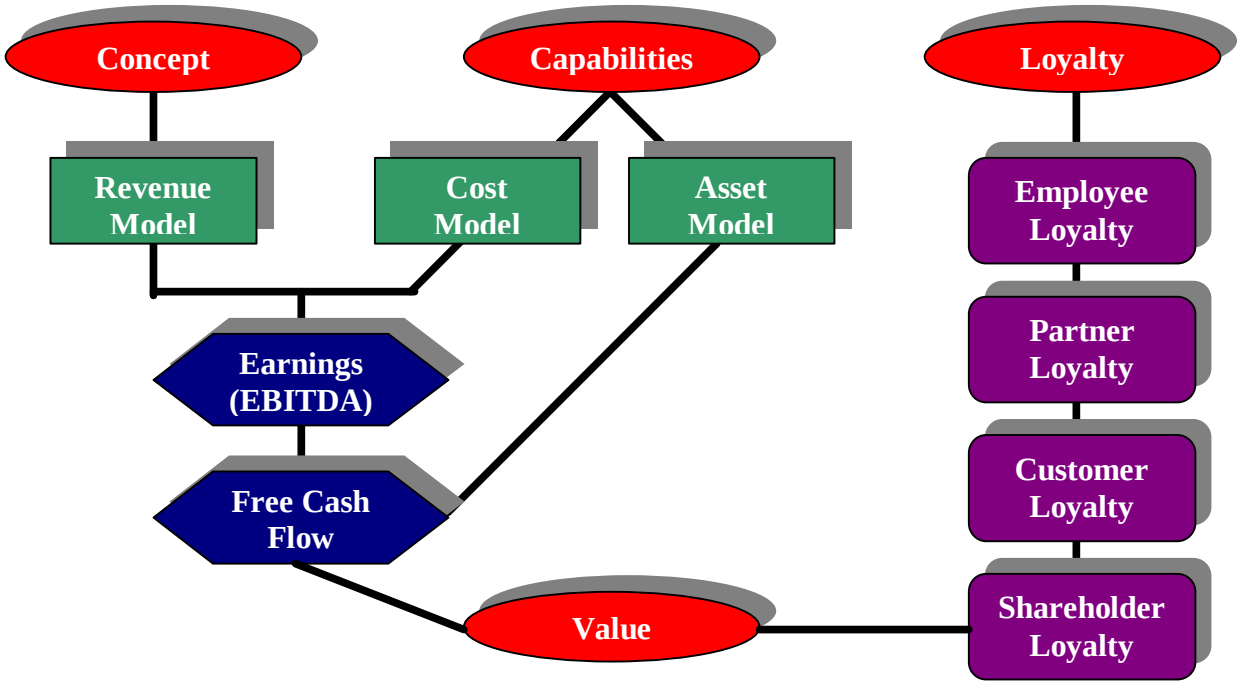


**Figure 2 Intangible and Tangible Drivers of Value**
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## Applying the Model to IT

IT must realize that top-level executives are seeking to create value in everything that is done. Thus, when IT is considering an investment, they must begin to seek justifications that would increase the overall value to the corporation. This realization then helps IT make the case for investments.

IT investments can be broadly characterized into four strategic goals. Each goal has objectives that the goal is attempting to achieve. The table below considers the strategic goal, associated objectives, and internal and external tactical goals.

| | *Objective* | *Internal Tactical Goal* | *External Tactical Goal* |
|---|---|---|---|
| ***Infrastructure*** | To enhance infrastructure performance and leverage strategic options | Decrease the cost to operate and maintain existing infrastructure | Create an efficient infrastructure with external customers, suppliers, and partners |
| ***Operating*** | To improve operating performance and channels to market | Streamline and integrate internal operations | Streamline and integrate multi-channel operations to market and create new ones |
| ***Content*** | To exploit the value of information and build knowledge assets | Increase employee access to information so that the data can be leveraged for future opportunities | Increase external access to data in a personalized way so that the information can be leveraged in a unified manner |
| ***Community*** | To strengthen and leverage community loyalty and build brand | Increase coordination and collaboration within the firm to build a community culture | To improve coordination and collaboration with customers, suppliers, and partners |

To value an IT investment, the project must first be defined. With the stated concept, IT can clearly define the objective and corresponding tactical goal. With the goals defined, the model displayed in Figure 2 can be used. When IT is speaking in a way that the rest of the business can understand, IT investments can begin to be viewed as ways that will increase business value and executives will be more likely to see the IT as an investment rather than as a cost center.

## Defining Value

When defining value, one of the problems is that value is not always realized in the short term. Often times, value is achieved in the future due to investments. For example, most firms seek projects that behave as Figure 3 below illustrates. If the dotted line is assumed to be $0, the firm puts money into a project initially, losing money. Yet, over time, the amount of money spent stops and the project ends up making money. Not all projects have this benefit and firms can often times end up continuing to spend money on projects without the bottom of the curve occurring. Despite using the methodology described thus far, unforeseen events can prevent the value from being achieved. To prevent this from occurring, Dr. Applegate suggests that projects be modularized, so that a big project is broken down into parts that can produce value on their own. Further, infrastructure investments today can also help to change the project investment curve in the future. Consider Figure 4 to the right. With an investment now, the curve on future projects can be changed. Instead of the curve on the right, where the bottom is lower (meaning it will cost more money) and the time is longer, the project will cost less money and the amount of time required will be shorter. Understanding this principle and applying the methodology presented by Dr. Applegate will allow IT to justify IT investments so that key decision-makers in the firm can easily understand the business value that can be derived from this project.

**Figure 3 Project Investment**

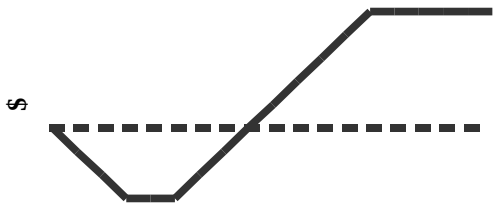
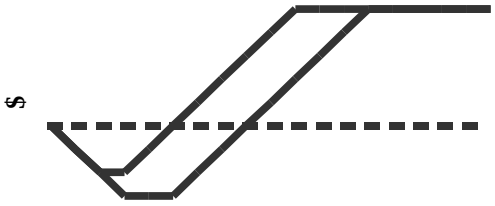



**Figure 4 Investment with Infrastructure**




## Concluding Thoughts

The "New Economy" and valuing IT projects has been the subject of debate at numerous ISRC events within the past few years. For example:

- Nicholas Noecker argued that the "New Economy" is more complex, relationship-based, and information driven (November, 2001)
- John Sifonis claimed that the business models of firms must be customer-centric, not market-driven (February and March, 2001)
- ISRC roundtables have agreed with Dr. Applegate that modularizing projects and delivering immediate value is crucial for IT projects (January 2001 and January 1999)

All of these examples are used to demonstrate that during the past few years, as scholars argued about the "New Economy," Dr. Applegate and our other presenters concur that the underlying rule remains the same: **IT projects must produce business value**.