

# E-Business Strategy

Performance Measurement

- 
- ## Outline
- Introduction to Performance Measurement
  - Performance Metrics
  - Balanced Scorecard Model



## What is Performance Measurement?

- The process of developing measurable indicators that can be systematically tracked to assess progress made in achieving predetermined goals and using such indicators to assess progress in achieving these goals
- The process that supports the decision making process by generating indicators of how well the organization is achieving the desired or expected outcomes



## Why Performance Measurement?

- Some important reasons:
  - How to evaluate the effectiveness of organizational performance
  - How to evaluate the effectiveness and successfulness of strategy implementation.



## Performance Measurement Methods

- Single Performance Measure Mainly focused on financial performance measurement
- Integrated Performance Measure
  - Design measures (i.e. Metrics Design)
    - Qualitative Measure
    - Quantitative Measure
  - Balanced Scorecard-multiple levels
    - Balanced approach (ie. Multiple measures)
      - Financial/Customer/Business process/Learning



## Measuring Performance - Single Performance Measures

- The use of a single performance measure is attractive because of its simplicity.
- The traditional method of measurement has been financial.
  - Cost: a typical performance measure
  - ROI (return on investment): Measures the profitability of an organization on investment, generally given by the ratio of net profit to total assets.
  - The economic value added (EVA) measure addresses the challenges companies faced in the area of financial performance measurement. By measuring profits after subtracting the expected return to shareholders EVA indicates economic profitability.



## Performance Metrics

- The only way to know whether a company has reached its objectives is to measure results.
- **Performance metrics** = specific measures designed to evaluate the effectiveness and efficiency of an organization's operations.
- Armed with this information, the company can make corrections to be sure it accomplishes the goal.
- Performance metrics should be defined along with the strategy formulation so the entire organization will know what results constitute success.



## Performance Metrics

Performance metrics used to measure strategy effectiveness:

- Translate the vision, strategy, or e-business model into components that have measurable outcomes that various departments can use to create action plans,
- Communicate to employees what the firm values.  
⇒ When employee evaluations are tied to the metrics, people will be motivated to make decisions that lead to the desired outcomes.



## The Balanced Scorecard

BEFORE to measure success, firms used:

- Financial performance,
- Market share,
- The bottom line (profits).

BUT these approaches are narrowly focused and place more weight on short-term results rather than addressing the firm's long-term sustainability.



## The Balanced Scorecard

NOW, they use: The Balanced Scorecard

= enterprise performance management systems that measure many aspects of a firm's achievements.

- 50% of organizations worldwide have adopted the Balanced Scorecard with excellent results.
- The scorecard approach links strategy to measurement by asking firms to consider their vision, critical success factors for accomplishing it, and subsequent performance metrics in four areas: customer, internal, innovation and learning, and financial.



## The Balanced Scorecard

### **Purpose of Balanced Scorecard:**

A method of implementing a business strategy by translating it into a set of performance measures derived from strategic goals that allocate rewards to executives and managers based on their success at meeting or exceeding the performance measures.



## The Balanced Scorecard

(Source: Kaplan & Norton, 1996)

### **Balanced Scorecard Perspectives**

1. Financial: How do we look to our Shareholders?
2. Customer: How do our Customers See Us?
3. Internal Business Process: What should we do that is Excellent?
4. Employee and Organization Innovation and Learning: Can we continue to Improve and Add Value?

| Customer Perspective |          | Internal Business Perspective |          | Innovation and Learning Perspective |          | Financial Perspective |          |
|----------------------|----------|-------------------------------|----------|-------------------------------------|----------|-----------------------|----------|
| Goals                | Measures | Goals                         | Measures | Goals                               | Measures | Goals                 | Measures |
|                      |          |                               |          |                                     |          |                       |          |

The Balanced Scorecard Has Four Perspectives

## Four Perspectives

1. The customer perspective:
  - Uses measures of the value delivered to customers.
  - These metrics tend to fall into four areas: time, quality, performance and service, and cost.

E.g. Time from order to delivery, customer satisfaction levels with product performance, amount of sales from new products, and industry-specific metrics such as equipment up-time percentage or number of service calls.



## Four Perspectives

2. The internal perspective:
  - Evaluates company success at meeting customer expectations through its internal processes.

E.g.: cycle time (how long to make the product), manufacturing quality, and employee skills and productivity. Information systems are a critical component of the internal perspective for e-business firms.



## Four Perspectives

3. The innovation and learning perspective  
= the growth perspective:
  - Companies place value on continuous improvement to existing products and services as well as on innovation in new products.

E.g. Number of new products and the percentage of sales attributable to each; penetration of new markets; and the improvement of processes such as CRM or SCM initiatives.



## Four Perspectives

4. The financial perspective:  
 = Income and expense metrics as well as return on investment, sales, and market share growth.

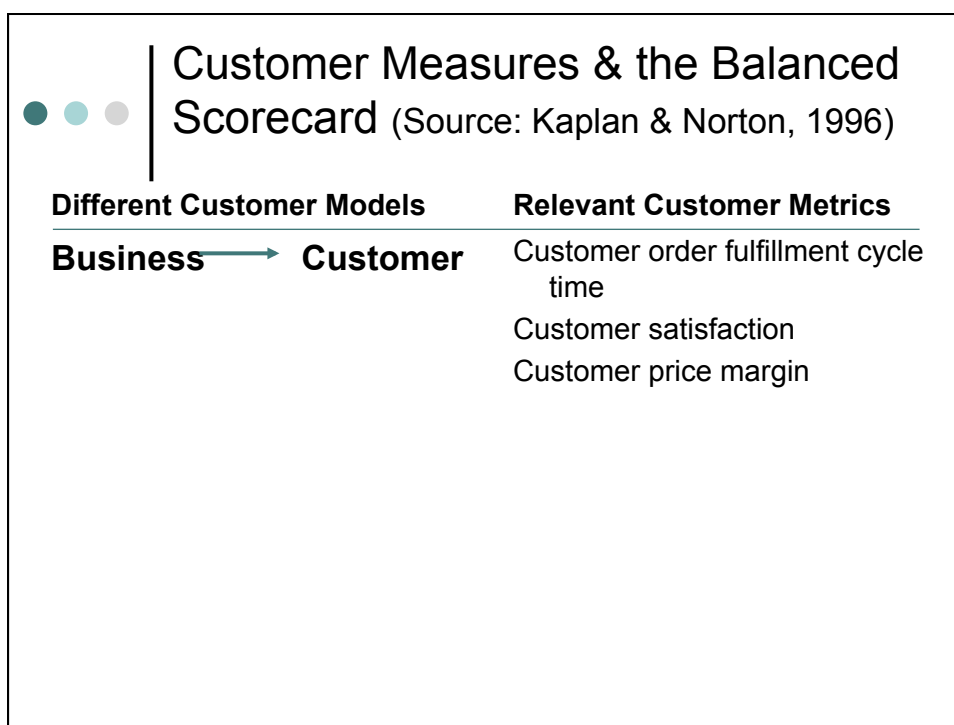
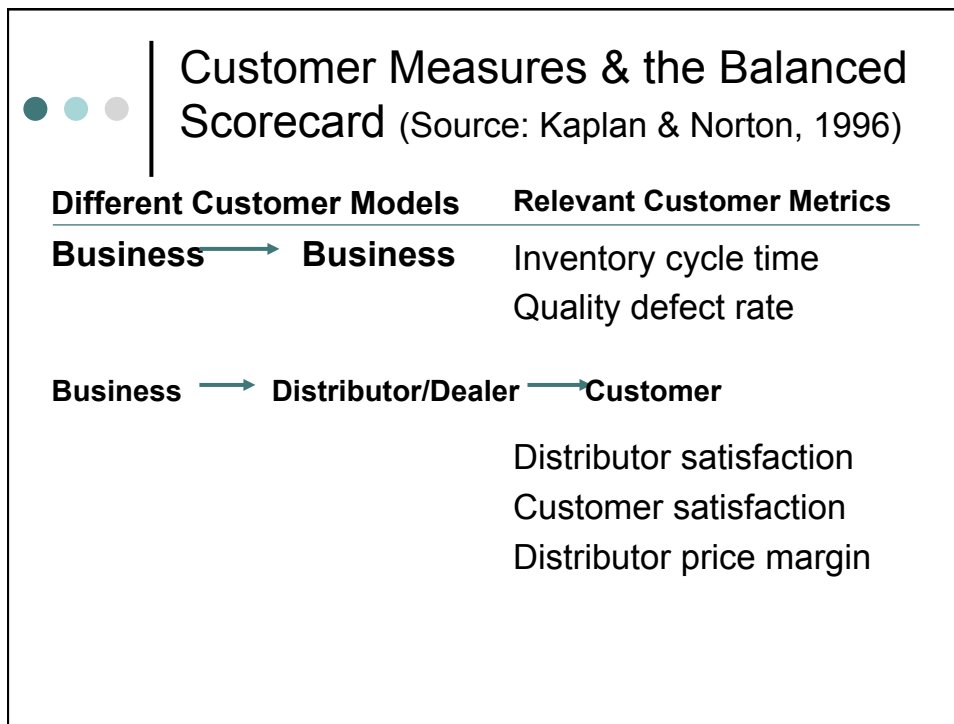
The point is to understand what the company wants to accomplish and to devise performance metrics to monitor the progress and see that the goals are reached.

## | Applying the Balanced Scorecard to E-Business and E-Marketing

### *Metrics for the Customer Perspective*

| Customer Perspective                                       |                                                                                                                                |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Example Goals                                              | Possible Measures                                                                                                              |
| Build awareness of a new Web site service                  | Survey target awareness of service<br>Number of visitors to the site                                                           |
| Position firm as high tech                                 | Survey target attitudes                                                                                                        |
| Increase number of software downloads from the Web site    | Number from Web site log                                                                                                       |
| High customer satisfaction with Web site                   | Survey of target at Web site<br>Number of visits and activity at site                                                          |
| High customer satisfaction with value of online purchasing | Number of complaints (e-mail, phone)<br>Number of abandoned shopping carts<br>Sales of online versus offline for same products |

Customer Perspective Scorecard for E-Business Firm



# Applying the Balanced Scorecard to E-Business

## *Metrics for the Internal Perspective*

| Internal Perspective                    |                                                                                                                                                                 |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Example Goals                           | Possible Measures                                                                                                                                               |
| Improve the quality of online service   | Target market survey<br>Number of customers who use the service<br>Time to run the service software from Web site                                               |
| Quality online technical help           | Amount of time to answer customer e-mail<br>Number of contacts to solve a problem<br>Number of problems covered by Web site<br>FAQ<br>Customer follow-up survey |
| Quick product cycle time                | Number of days to make the product                                                                                                                              |
| High product quality for online service | Product test statistics on specific performance measures                                                                                                        |

Internal Perspective Scorecard for E-Business Firm



## Internal Business Process Measures and the Balanced Scorecard

(Source: Kaplan & Norton, 1996)

### Internal Business Process Measures

- Quality
- Yield
- Throughput
- Cycle time
- Cost efficiency
- Order Fulfillment
- Procurement
- Repair service quality/downtime
- Warranty quality

## | Applying the Balanced Scorecard to E-Business

### *Metrics for the Innovation and Learning Perspectives*

| Innovation and Learning Perspective            |                                                                                                                                                                 |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Example Goals                                  | Possible Measures                                                                                                                                               |
| Online service innovation                      | Number of new service products to market in a year<br>Number of new service features not offered by competitive offerings<br>Percent of sales from new services |
| Continuous improvement in CRM system           | Number of employee suggestions<br>Number/type of improvements over time                                                                                         |
| High Internet lead to sales conversion         | Revenue per sales employee from Internet leads<br>Number of conversions from online leads                                                                       |
| Increased value in knowledge management system | Number of accesses by employees<br>Number of knowledge contributions by employees                                                                               |

Innovation and Learning Scorecard for E-Business Firm

## | Applying the Balanced Scorecard to E-Business and E-Marketing

### *Metrics for the Financial Perspective*

| Financial Perspective                                    |                                                                        |
|----------------------------------------------------------|------------------------------------------------------------------------|
| Example Goals                                            | Possible Measures                                                      |
| Increase market share for online products                | Market share percentage (firm's sales as percentage of industry sales) |
| Double digit sales growth                                | Dollar volume of sales from one time period to the next                |
| Target 10% ROI within one year for each new product      | ROI                                                                    |
| Lower customer acquisition costs (CAC) in online channel | CAC (costs for advertising, etc. divided by number of customers)       |

Financial Perspective Scorecard for E-Business Firm



## Example: Automobile Company Balanced Scorecard

| Category                         | Measure                                            | Weighting |
|----------------------------------|----------------------------------------------------|-----------|
| Financial (50%)                  | EVA                                                | 25%       |
|                                  | Unit Profit                                        | 15%       |
|                                  | Market Growth                                      | 10%       |
| Customer (20%)                   | Customer satisfaction                              | 10%       |
|                                  | Dealer satisfaction                                | 10%       |
| Internal (20%)<br>Process        | Above average rank on industry quality survey..... | 10%       |
|                                  | Decrease in dealer delivery cycle time.....        | 10%       |
|                                  |                                                    |           |
| Innovation (10%)<br>and Learning | Suggestions/employee                               | 5%        |
|                                  | Emp. satisfaction survey                           | 5%        |



## Balanced Scorecard

- Some criticisms:
  - Generalized
  - Unclear location of capabilities / resources
  - Unclear role of partnerships
- Propose new metrics to overcome these limitations: the performance dashboard, or more criteria specific to E-business Strategy



## Metrics for *e-business*

### E-BUSINESS EXEMPLARS' PERFORMANCE DASHBOARD INDICATORS

| Metric Category                               | Activities Measured |                                             |
|-----------------------------------------------|---------------------|---------------------------------------------|
| Valuation and Financial Performance           | <b>FINANCE</b>      | "New Economy" Share Price Driver            |
| Digital Quotient                              | <b>PROCESS</b>      | Core Processes Internet-Mediated            |
| Sales Efficiency and Transactional Excellence | <b>CLIENT</b>       | Reliability of On-Line Service              |
| Customer Loyalty and Value                    | <b>CLIENT</b>       | Conversion of Site Traffic to New Revenues  |
| Customer Information Capture                  | <b>CLIENT</b>       | Accumulation of Information Assets          |
| Supply Chain Excellence                       | <b>PROCESS</b>      | Progress Toward Negative Cash Conversion    |
| Innovation and Flexibility                    | <b>PRODUIT</b>      | Speed to React to New Ideas                 |
| Knowledge Management                          | <b>PRODUIT</b>      | Productivity of Knowledge Workers           |
| Infrastructure Reliability and Scalability    | <b>PROCESS</b>      | Preparedness for Unpredictable Demand Ramps |

Extracted from [Corporate Executive Board, 1999]



## Metrics for *e-business*

### (SALES EFFICIENCY AND TRANSACTIONAL EXCELLENCE)

| Key Metrics                                                                           | Used By                   | Gold-Standard Performance |
|---------------------------------------------------------------------------------------|---------------------------|---------------------------|
| Number of Unique Visitors per Month                                                   | Msn.com                   | 26,868,000                |
| Percentage of Returning Customers Who Are Recognized and Sent Personalized Content    | In2.com                   | 50%                       |
| Percentage of Products (Across Business Units) Searchable from a Single Search Engine | 3M                        | 100%                      |
| Percentage of On-Line Sales Abandoned Before Completion                               | N/A                       | 30%                       |
| Average Time to Respond to Customer Request for Call Back                             | Dell                      | 15 minutes                |
| Percentage of On-Line Orders Shipped Within 24 Hours                                  | Submitorder.com           | 99%                       |
| Percentage of Orders Correctly Fulfilled                                              | Corporate Express         | 99.9%                     |
| Percentage of Orders Delivered to Correct Address                                     | Data Integrity Consultant | 95%+                      |

Extracted from [Corporate Executive Board, 1999]



## Reading

### Main

- Kaplan and Norton (1992), "the Balanced Scorecard – measures that drive performance", Harvard Business review, Jan-Feb, pp71-80 1992.
- Neely (2006), "The evolution of performance measurement research - Developments in the last decade and a research agenda for the next"
- Plant et al. (2003), "Measuring e-business performance: Towards a revised balanced scorecard approach"
- Atkinson (2006), "Strategy implementation: a role for the balanced scorecard?"

### Additional Reading:

- Kaplan and Norton (2004), "The strategy map: guide to aligning intangible assets"
- Kaplan (2005), "How the balanced scorecard complements the McKinsey 7-S model"
- Kettunen et al (2005), "Management information system based on the balanced scorecard"
- Kuwaiti et al (2000), "The role of performance measurement in business process re-engineering"
- More can be found on Emerald Journal System