



Marketing Dashboards & Causal Modeling

### Why we're here



- Discuss how to use data to build the right kind of marketing scorecards
- Based on our work with Fortune 500 clients in retailing, technology, and other sectors
- Practical, hands on approach

TERMS scorecard = dashboard



### What you will learn

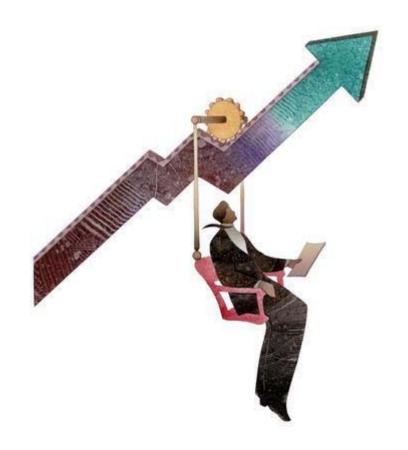


- How accountability hurts and helps
- The 5 different types of dashboards
- How causal models help

### Good News



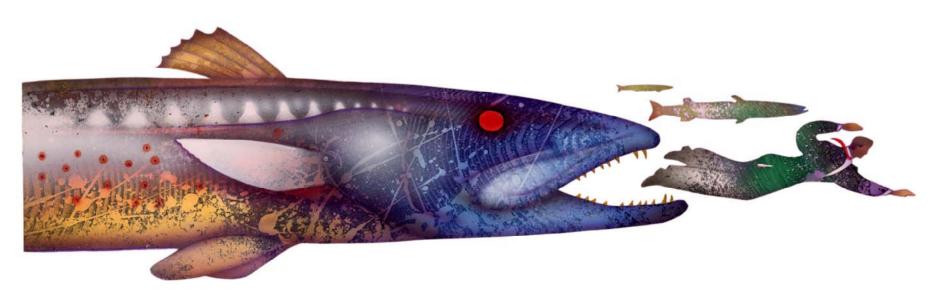
CEOs want to partner with CMOs to grow the business



#### Bad News



- It's a killing field out there
- The average tenure of a CMO is 18-22 months



### Accountability



- The new imperative
  - Marketing often the only discretionary dollars left at your company with the exception of R&D
  - What you spend today better drive revenue tomorrow
  - Same time enormous pressure to "up the activity level" – often in ways that make little sense



# Dashboard types



	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
Туре	Performance	Operations	Collaborative	Marketing	Predictive
Accountability	Limited	Low	Moderate	High	High
Decisions supported	Tactical Short term	Tactical Short term	Track progress Quarterly	Track results Backwards looking	Track results Optimize investment strategies Both backwards and forwards looking
Data requirements	Existing financial reports	Data feeds from CRM/SFA systems	Data feeds from multiple ERP systems	Multiple data feeds from both within and outside the company	Multiple data feeds from both within and outside the company Includes predictive models using most recent data
Technology requirements	Minimal	Low Database Query & Reporting	Moderate Multi-user	Moderate Drill downs Multiple data sources	High Support for OLAP Predictive Analytics





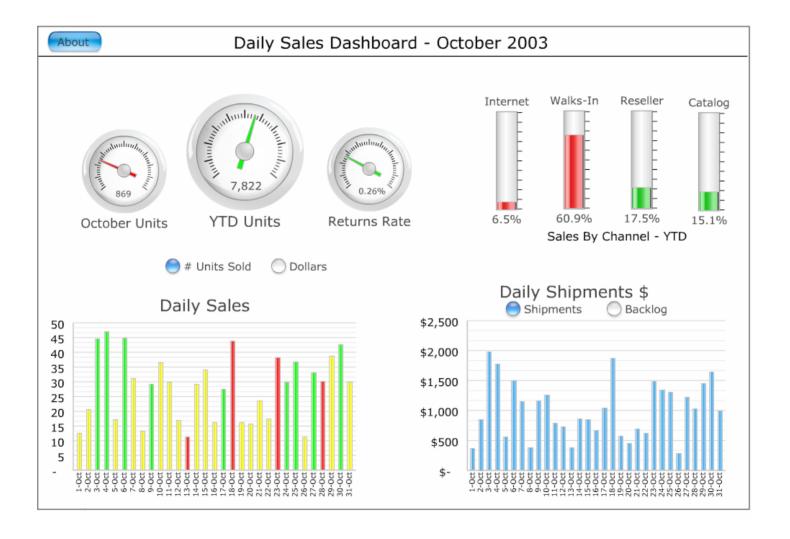
### Performance tracking



#### Model Info **Financial Highlights** FY 2002 **Financial Highlights** FY 2003 \$8,227 Net Income \$7,936 Revenue \$36,024 \$37,346 Diluted Earnings Per Share 3.45 3.6 1.23 1.28 Dividends per Share 2.5% 2.61% Return on Assets Return on Equity 27.6% 28.63% Net Interest Margin 8.4% 8.74% 0.875 Efficiency Ratio 0.84 Assets \$501,375 \$519,775 Loans \$279,465 \$289,721 Core Deposits \$199,589 \$206,913 Stockholder's Equity \$31,740 \$32,905 Non-Performing Loans / Total Loans 1.24% 1.29% 3.11% 3.22% Allowance / Total Loans Allowance / Non-Performing Loans 374% 387% Net Charge Offs / Average Total Loans 1.46% 1.51% Net Income \$9,000.0 \$8,000.0 \$7,000.0 \$6,000.0 \$5,000.0 \$4,000.0 \$3,000.0 \$2,000.0 \$1,000.0 \$0.0 1997 1998 1999 2000 2001 2002

### Operations visibility





#### Collaborative

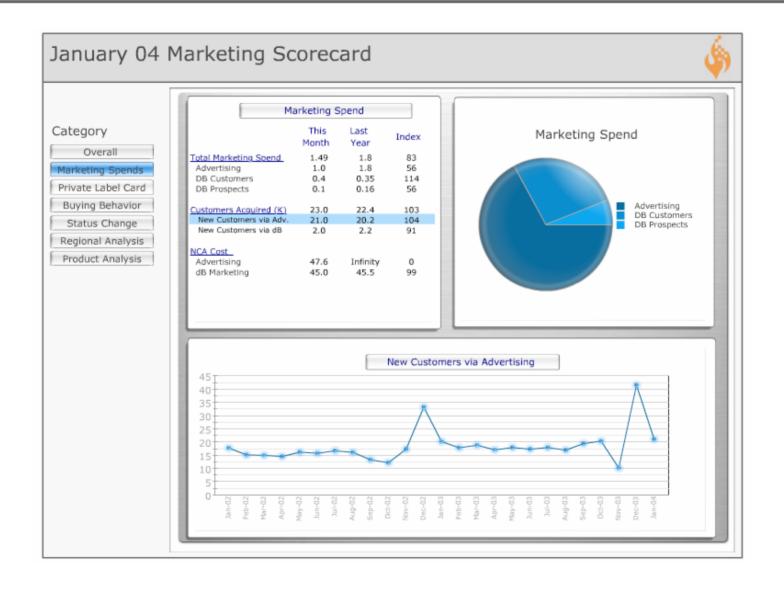




Note: This is a great example of a "balanced scorecard". Appropriate for running a whole business. Not so appropriate for a marketing scorecard.

### Marketing





### Predictive



- Final stage in evolution of dashboards
- Discussed extensively in next section



### Now for a question



- What is the value marketing brings to the corporation?
  - A) create differentiation
  - B) maximize customer value
  - C) create brand value
  - D) other



#### Point of this exercise



- The answer is B maximize customer value
- Clarity of marketing mission is paramount
- Every company has different set of strategies, initiatives, and objectives

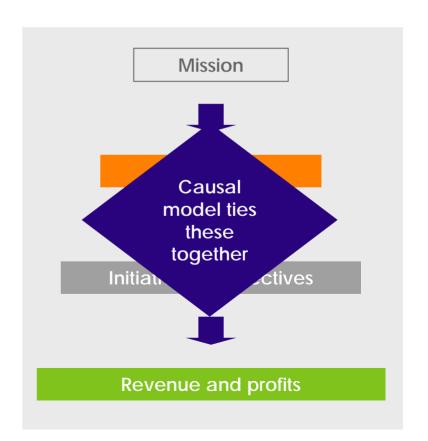


### Causal models



 Key to the kingdom when it comes to linking strategy to initiatives & objectives and ultimately to revenue

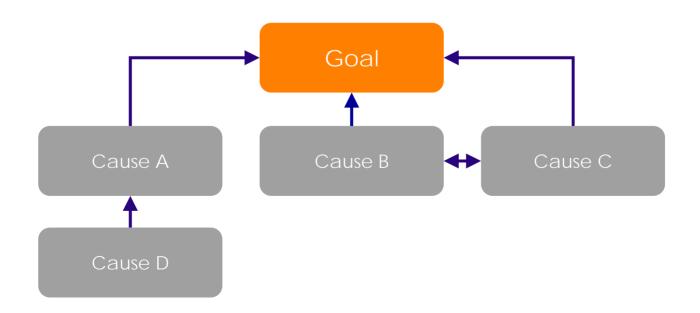




#### Causal model



- Causal model defined...
  - A system that describes the underlying cause and effect relationships underlying your goal
  - Tells how aligned your world is with the real world
  - Required method: hypothesize → test → learn → update



# SimCity Example



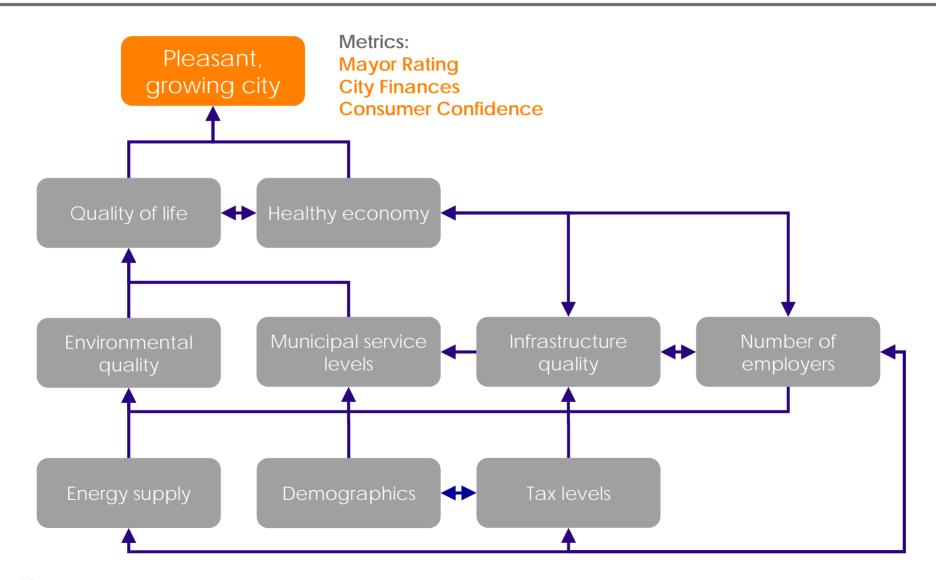


Pleasant, growing city

Metrics:
Mayor Rating
City Finances
Consumer Confidence

### SimCity causal model





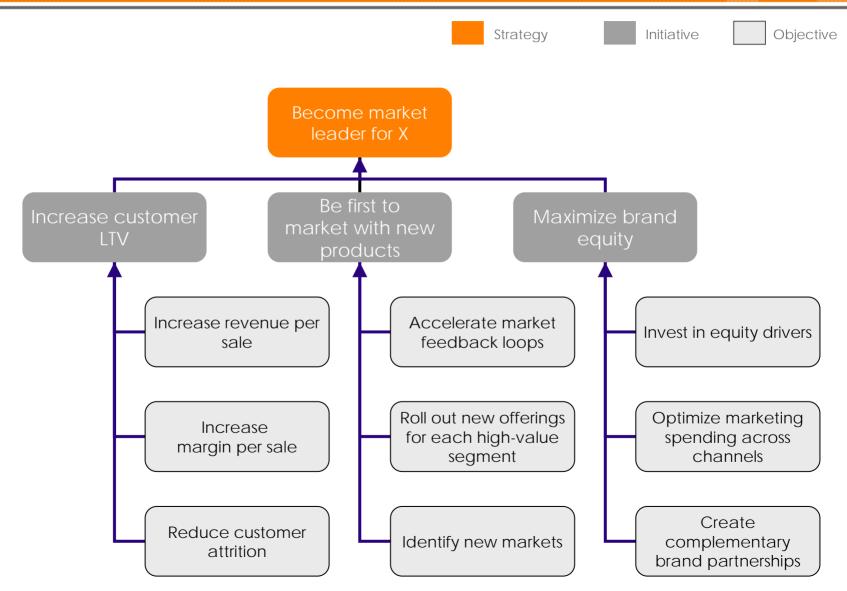
### Marketing example



- Generalized
- Platform for discussion let's hear your questions
- Won't cover each element in excruciating detail

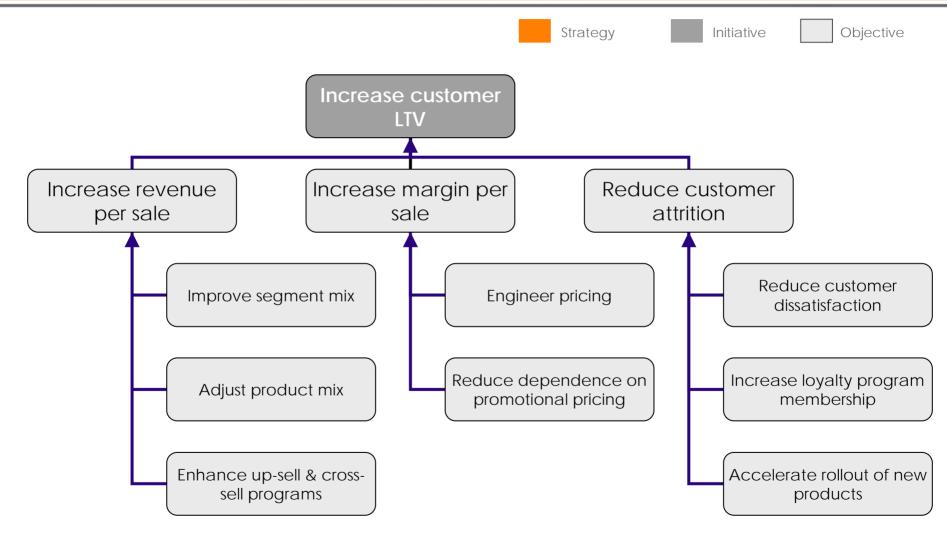
### High-level example





### More granular example

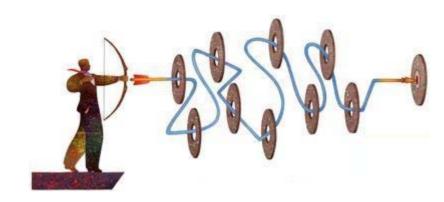




### Don't go overboard



- Prioritize objectives that make sense for the business, not just marketing
- Too much granularity upfront will make your scorecard unwieldy



#### Metrics



- Obvious next step after you've established a causal model that you think will work
- Metrics you pick should be designed to turn the data you have into information that sheds light on results
- Choice of metrics

Depends on what data you have, can have, will never get

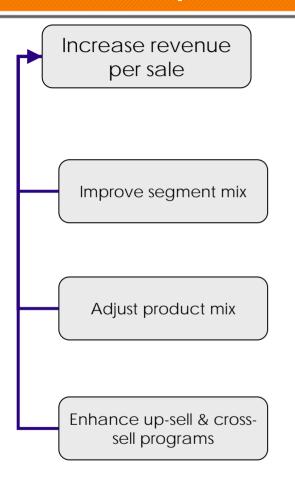
If the data is important, get it – you can only manage what you can measure

Need a mix of historical measures as well as leading indicators



### Examples





#### **Example Metrics**

- Rate of growth of desired segments
- Revenue per sale to desired segments
- Satisfaction rate by segment
- Ratio of sales from new products vs. existing products
- Number of new products schedule for launch in quarter
- New product development spending
- Ratio of up-sell cross-sell revenue vs. core products
- % of upsell/cross-sell merchandize for coming quarter
- Number of sales force & customer requests for crosssell/up-sell merchandise
- Spend on upsell/cross-sell promotion

### Setting levels



- Make sure you use the right level
- Practical guidance
  - Look backwards then set "stretch" goals
  - Model, track numbers over time to set a band around numbers vs. absolute goals
  - Get the variance right targeting a band not an absolute number

### Example



Level setting in action – for the initiative "improve segment mix"

Metric	Level	Range	
Rate of growth of desired segments	1000 net additions per week	+/- 250	
Revenue per sale to desired segments	3.5% increase per quarter	+/- 1.5%	
Satisfaction score	3 point growth per month	+/- 2 points	

#### **KPIs**



- Key Performance Indicators ... performance snapshots
- Drill down to where you need to go
- Should be statistically modeled to maximize utility
  - Multivariate regression, if possible
  - If not, work towards it



### What you get



 Once you've built multivariate statistical models is a true, predictive dashboard

 Tells you not only where you've been but also there is the potential to tell you where you are going

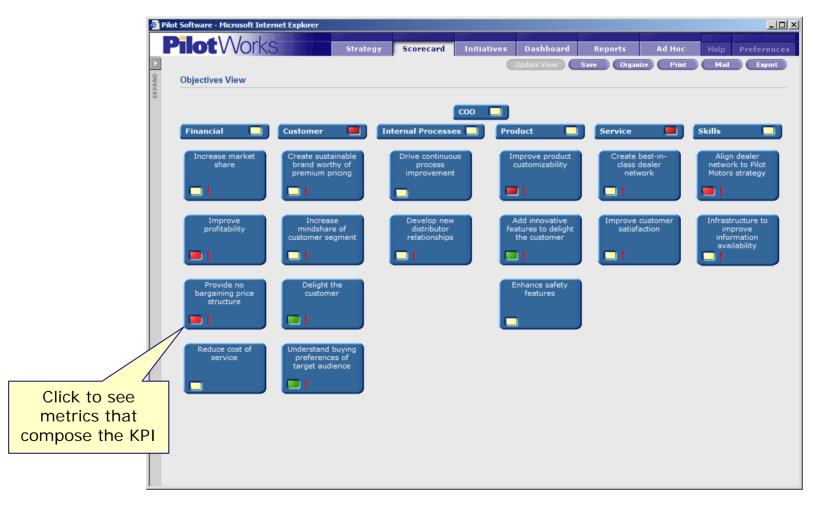
Requires is more sophisticated technology ...

Move from drill downs → predictive analytics



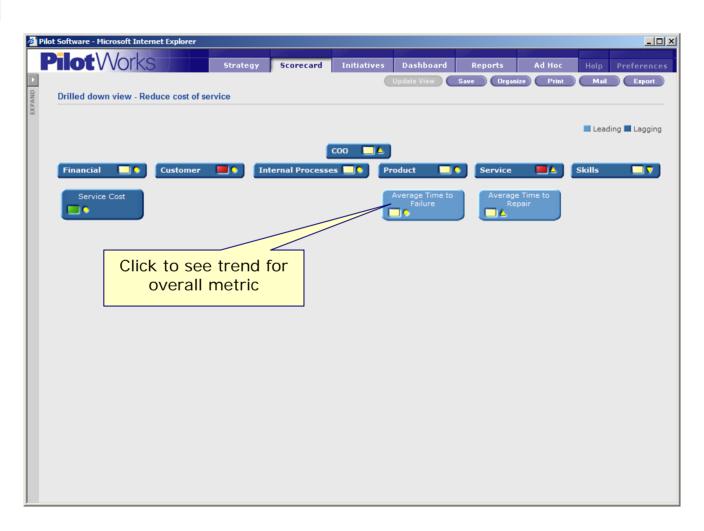


Dashboard





KPI



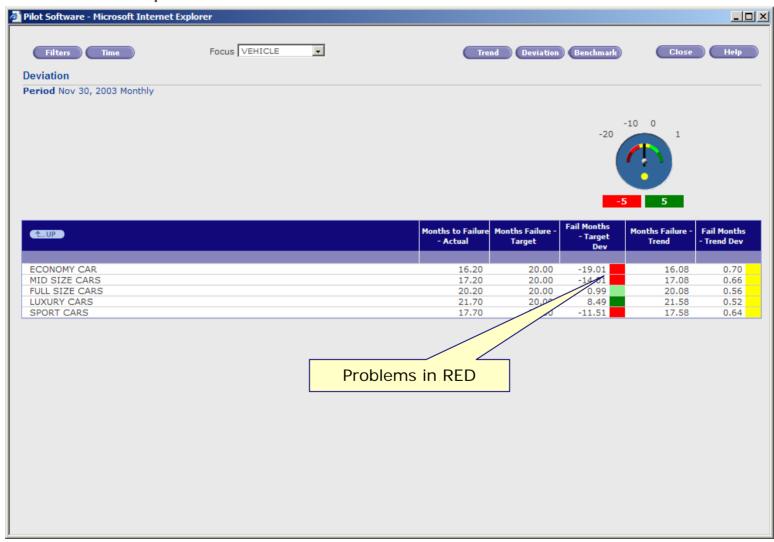


Metric performance





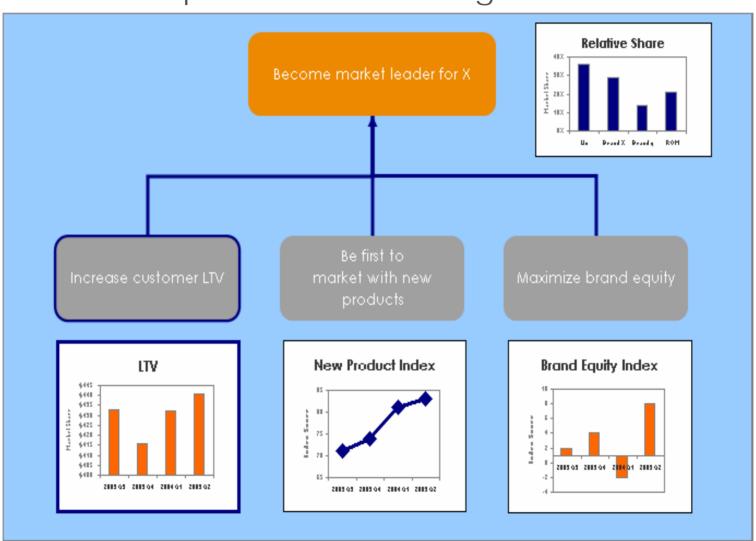
Metric components



### Predictive dashboard



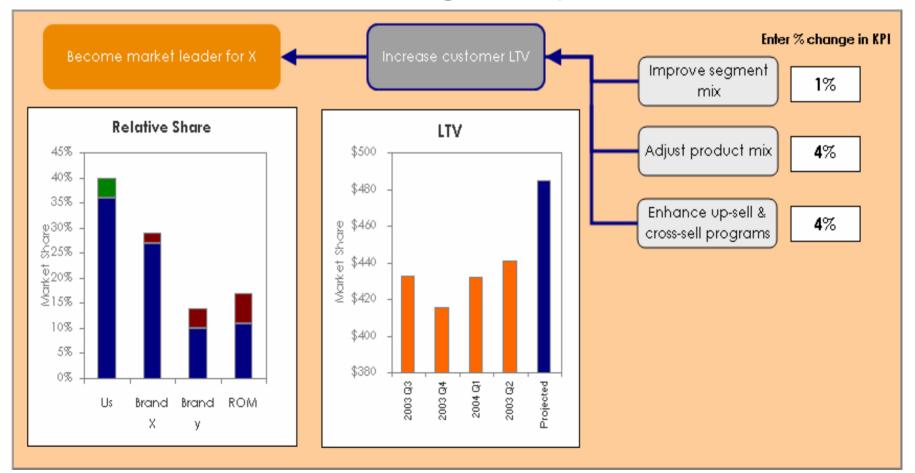
Select LTV for predictive modeling



### Predictive modeling



- Predict impact of changes in KPI on market share
- Assess ROI of alternative growth paths



### Keep in mind



#### **Good Data**

- Segmentation
- LTV analysis
- Marketing spend and program effectiveness tracking
- Channel investment & return
- Brand equity drivers, value, and investment

#### Good Analysis

- Understanding what is gut & what isn't
- Quality models
- Ability to capture learning



Marketing accountability!

### Bringing this back



- Inside your company
  - Take a prototype approach
  - Use Excel and/or Flash in the beginning, don't worry too much about technology
  - Get metrics, level setting, and statistical models right

### Questions?



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### Coordinates



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