Bringing Marketing to Wall Street - the role of CLV



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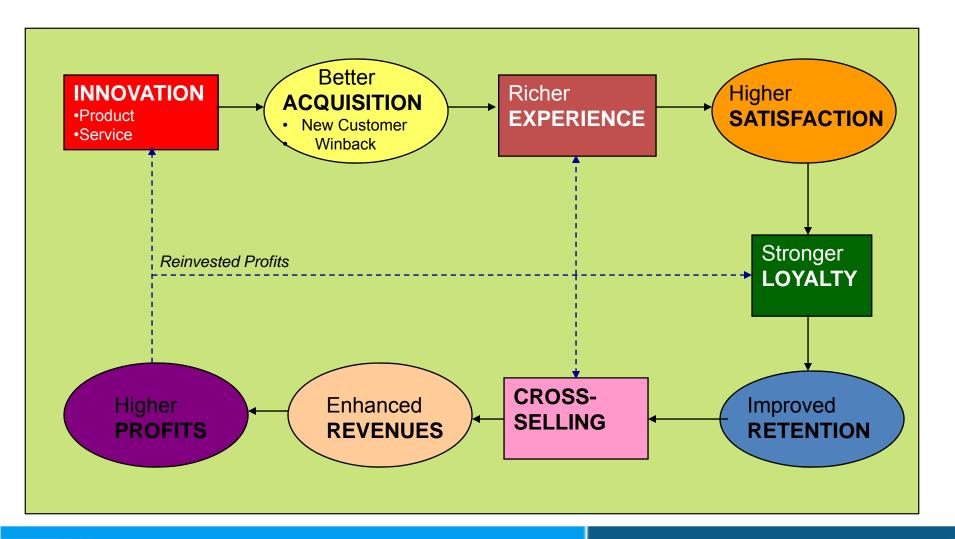
Richard and Susan Lenny Distinguished Chair Professor of Marketing,
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Agenda

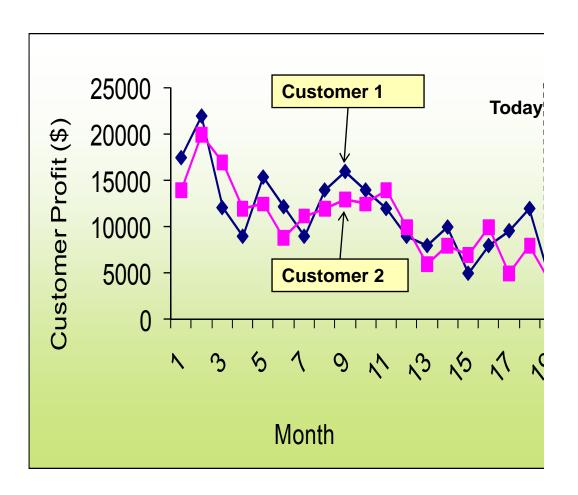
- Managing Loyalty and Profitability
- Marketing Paradigm Shift
- Computing Customer Lifetime Value (CLV)
- Case Study Implementing CLV in the B2C scenario
- Case Study- Implementing CLV in the B2B scenario
- Linking CLV to Shareholder Value (SHV)
- Reversing the Wisdom- The Path to Profitability

Conventional Wisdom: Path to Increased Profitability

- A Differentiated & Sustainable Strategy



Which customer is most loyal and profitable?



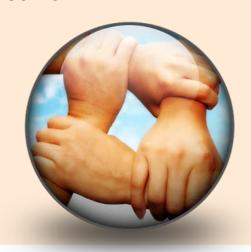
What drives Profitable Customer Loyalty?

Exchange Characteristics

- Customer's spending level Share of Wallet
- Cross-buying behavior
- Focused buying behavior
- Average Interpurchase Time
- Merchandise returned
- Ownership of loyalty instrument
- Mailing efforts of the company
- Majority Product category

Customer Heterogeneity

- -Age
- -Spatial Location
- -Income



Marketing Paradigm Shift

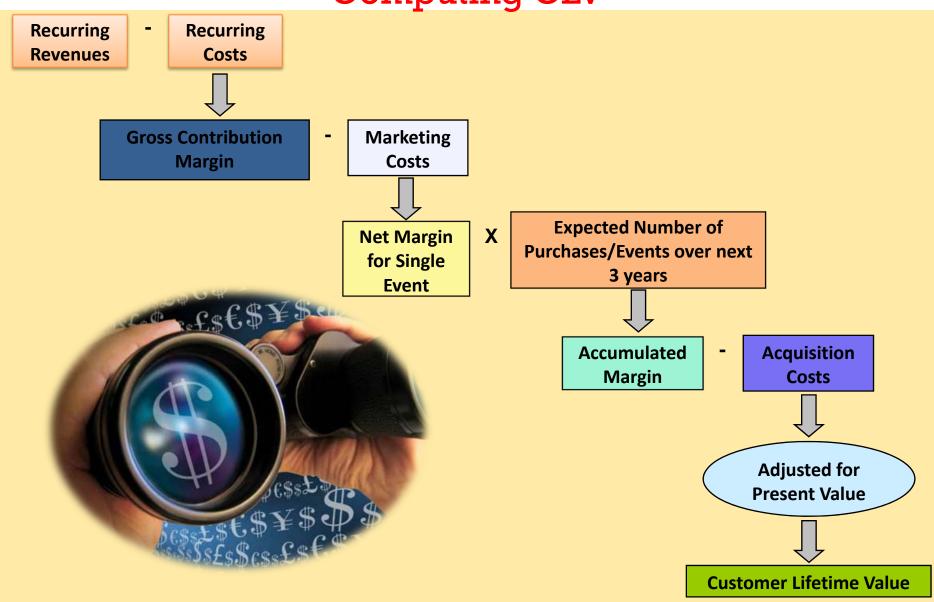
	Traditional Approach	CLV Based Approach
Management Dimension	Manage products	Manage customers
Focus	Focus business on products that are most profitable	Focus business on customers that are most profitable
Selling Approach	How many customers can we sell this product to?	How many products can we sell this customer to?
Decision Orientation	Marketing decisions based on historic measures or past value of profitability	Marketing decisions based on forward-looking measures or the customer lifetime value metric



"Look, let me get back to you while I find out how important you are."

Computing the CLV metric

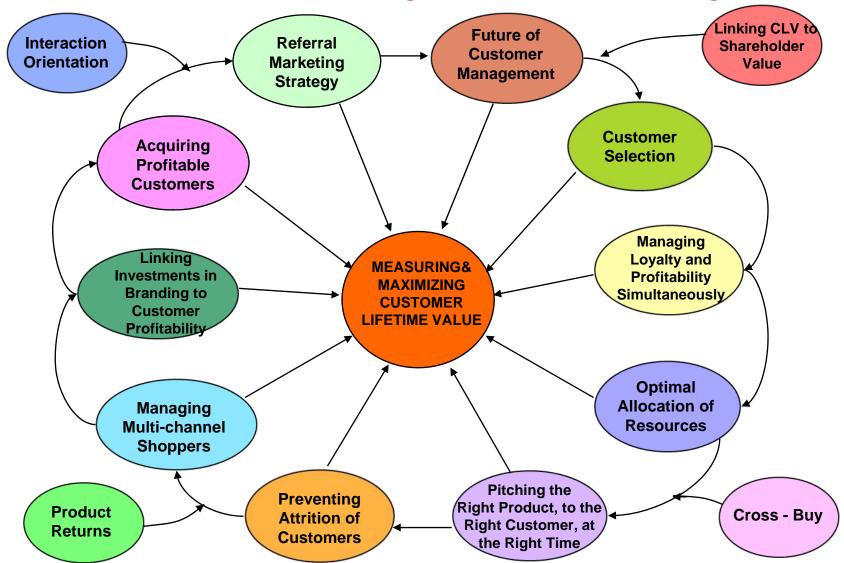
Computing CLV



Why CLV?

- Forward looking metric unlike other traditional measures (that include past contributions to profit)
- Helps marketers adopt the right marketing activities 'today' to increase profitability 'tomorrow'
- Can be used to understand current clients as well as prospects
- The only metric that incorporates all elements of revenue, expense and customer behavior
- Focuses on the customer (rather than products) as a driver to profitability

The Wheel of Fortune Strategies Used for Maximizing CLV



Source: Kumar, V., "Managing Customers for Profit", The Wharton School Publishing, January 2008; February 2009

Case Study: Implementing the CLV Framework in the B2C scenario

Background

 Fashion retailer having retail stores across USA

Challenges:

Develop a suitable metric to measure and manage customer level profitability

Identify the right metric to manage customer loyalty

Step 1: Identify the Drivers of Loyalty

The retailer used several measures to identify loyal customers:

- Regularity of Purchase
- Frequency of Purchase
- Tenure

Question: Do these 'measures of loyalty' drive profitability?

Result:

	Regularity	Frequency	RFM	Tenure
CLV	r= - 0.09	r= 0.17	r= 0.19	r= 0.44
N	172,688	470,932	470,932	470,932

Except for tenure, the traditional metrics of loyalty showed poor correlation with loyalty.

Step 2: Measuring CLV

The lifetime value is computed for each customer using this formula:

$$CLV_{it} = \sum_{t=1}^{T_i} \frac{GC_{i,t}}{(1+r)^{t/frequency_i}} - \sum_{l=1}^{n} \frac{\sum_{m} c_{i,m,l} * x_{i,m,l}}{(1+r)^{l-1}}.$$

Where:

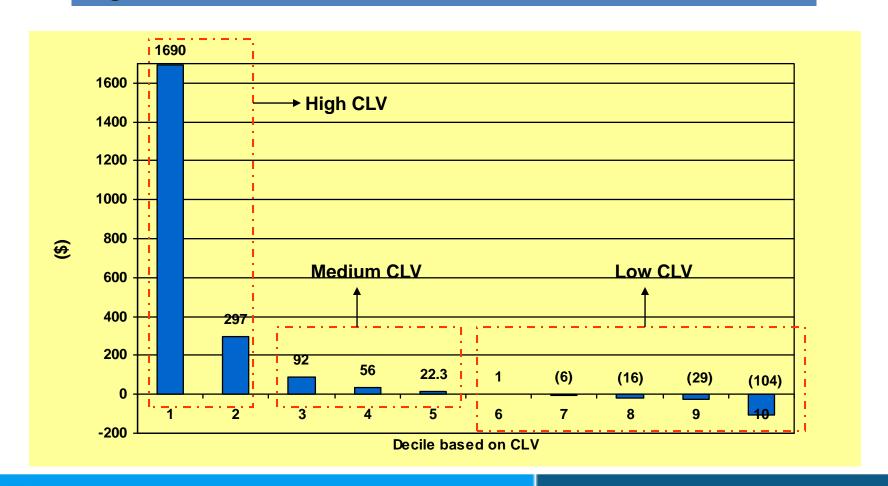
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 $\overline{GC_{i,t}}$ = Gross contribution from customer i in purchase occasion t $c_{i,m,l}$ = unit marketing cost, for customer i in channel m in time period l $x_{i,m,l}$ = number of contacts to customer i in channel m in time period l frequency l = 12/expint, expint = expected inter purchase time for customer l l = the discount rate for money l = is the number of years to forecast l = total number of purchases made by customer l

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Step 3: Scoring & Segmenting the Customers

Customers are rank-ordered into deciles and segmented based on the distribution of CLV across the deciles

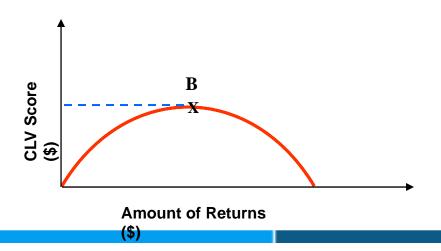


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Step 4: Identifying the drivers of CLV

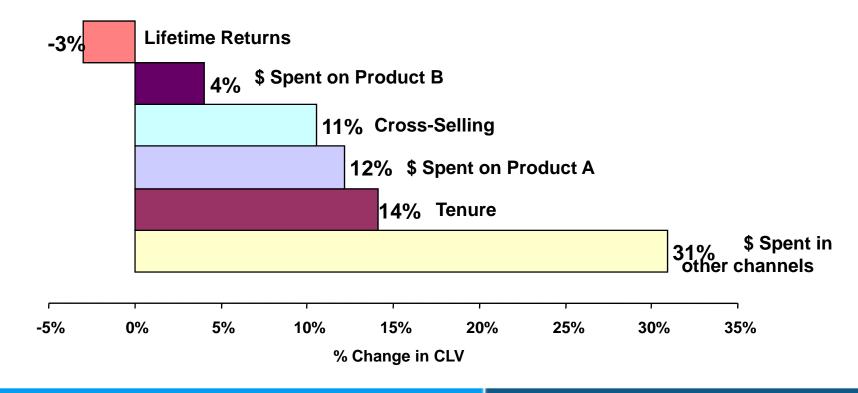
Top Drivers of CLV

- \$ Spent in other channels (Multi-channel shopping) (+)
- Tenure (+)
- \$ Spent in Product A (+)
- Cross-Buying (+)
- \$ Spent in Product B (+)
- Lifetime Returns (∩)



Step 5: Interpreting the impact of the drivers

A 15% increase in cross-channel spending by customers in the top 2 CLV deciles results in 31% increase in their CLV for PRC stores. Similar interpretation holds for the remaining variables illustrated below.



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Step 6: Profile Analyses

Develop profile analyses for the High and Low CLV Customers

Typical High CLV Customer

Gender: Female

Age: 35-54 years

Marital Status: Married

Presence of Children

Estimated Household

Income: \$125,000+

Stays closer to retailer

Loyalty Card Member

Mail Order Shopper

Shops frequently in upscale stores





Typical Low CLV Customer

Gender: Male

Age: 25-34 years

Marital Status: Single

Presence of no children

Estimated Household

Income: < \$50,000

Stays further away from

retailer

Not necessarily a Loyalty

Card Member

Single Channel Shopper

Case Study: Implementing the CLV Framework in the B2B scenario

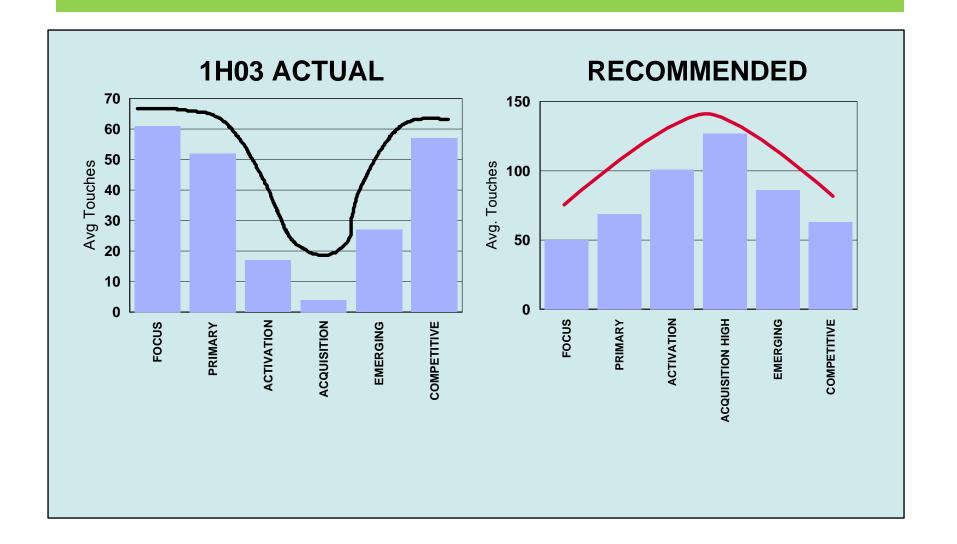
How did we get there?

Process	Purpose
Measure Customer Lifetime Value (CLV)	To measure the potential value of IBM customers
Identify the Drivers of CLV	To influence the CLV
Determine optimal level of touches for each customer that maximizes their CLV	To determine the level of investment required for each customer
Develop propensity models to predict what product(s) a customer is likely to purchase	To develop a product message when touching a customer
Reallocate marketing touches from low CLV customers to high CLV customers	To maximize marketing productivity

A key hypothesis that we want to test is.....

Can an increase in touch create high value from low value customers when all other drivers are similar?

Average Number of Touches/Establishment (B2B firm)



Optimal Resource Allocation Matrix

Low Share of Wallet High

Optimal Spending Limit \$2,197	
Face to Face Meetings:	

Currently meets once every 6.6 months Optimal meeting interval is 4.6 months

<u>Direct Mail/Telesales:</u>

Current Interval is 4.82 days

Currently Spending \$1,008

Optimal Interval is 1.9 days Profits:

Cost Reduction(\$):

Current Profit is \$109,364
Optimal profit is \$178,092

Optimal profit is \$178,092
Cost Reduction(\$):

Currently Spending \$819
Optimal Spending Limit \$433

Face to Face Meetings:

Currently meets once every 4.5 months
Optimal meeting interval is 12.5 months

Direct Mail/Telesales:

Current Interval is 9.7 days
Optimal Interval is 12.6 days

Profits:

Cost Reduction(\$):

Currently Spending \$1,385

Optimal Spending Limit \$2,419

Face to Face Meetings:

Currently meets once every 2.5 months
Optimal meeting interval is 1.2 months

Direct Mail/Telesales:

Current Interval is 6.3 days

Optimal Interval is 5.3 days

Profits:

Current Profit is \$534,888 Optimal profit is \$905,224

Cost Reduction(\$):

Currently Spending \$1,291

Optimal Spending Limit \$612

Face to Face Meetings:

Currently meets once every 2.4 months

Optimal meeting interval is 10 months

Direct Mail/Telesales:

Current Interval is 8.4 days

Optimal Interval is 8.3 days

Profits:

Current Profit is \$10,913

Optimal profit is \$28,354

Current Profit is \$7,435
Optimal profit is \$12,030

Low

High

Customer

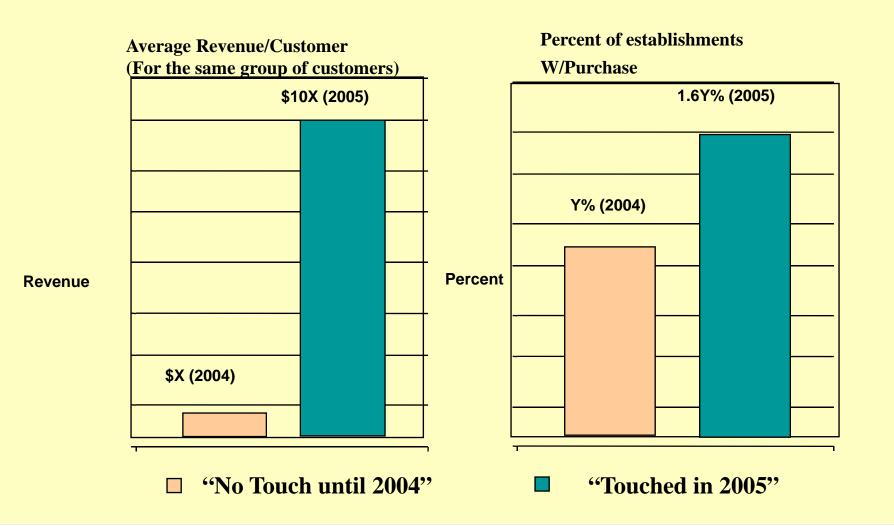
Lifetime

Value

Resource Reallocation based on CLV

Decile	Not Reached Until 2004	Reached by 2004	Customer Segment
1	\$350,471	\$2,124,483	Super High CLV
2	\$993	\$125,460	High CLV
3	\$669	\$43,681	
4	\$638	\$23,624	
5	\$623	\$17,499	Medium CLV
6	\$611	\$13,675	
7	\$534	\$10,513	
8	\$444	\$8,051	
9	\$369	\\$5,023	Low CLV
10	\$80	\(\\$35)	

Impact of the Touch Strategy



On a small pilot of <1% of the establishments in a single country

Impact on the Bottom Line

Touched Until 2004

Yes No

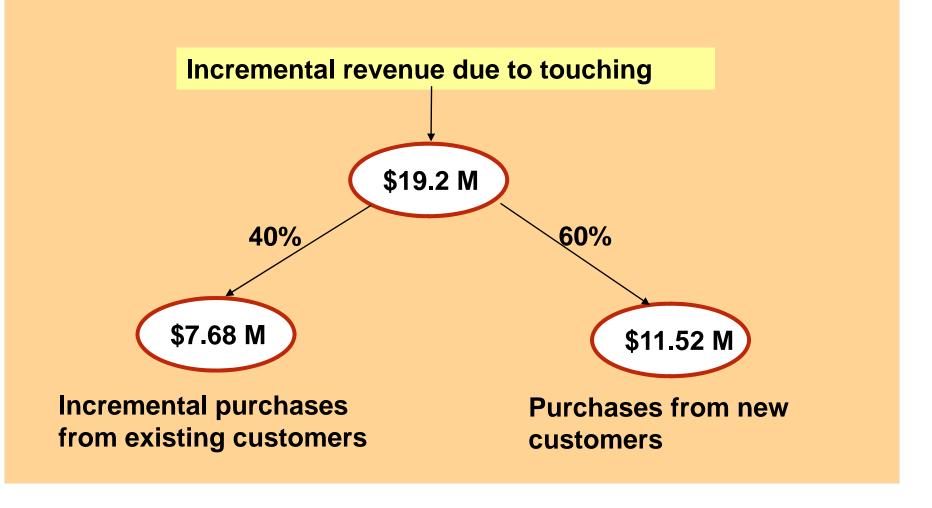
Touched in 2005

Optimal # of touches	28 ^a	8.1 ^a
Observed # of touches	37ª	8.9a
Revenue in 2004	\$751 M	\$2.0 M
Revenue in 2005	\$793 M	\$22.2 M
Incremental Revenue	\$42 M	\$19.2 M

^a Average per customer

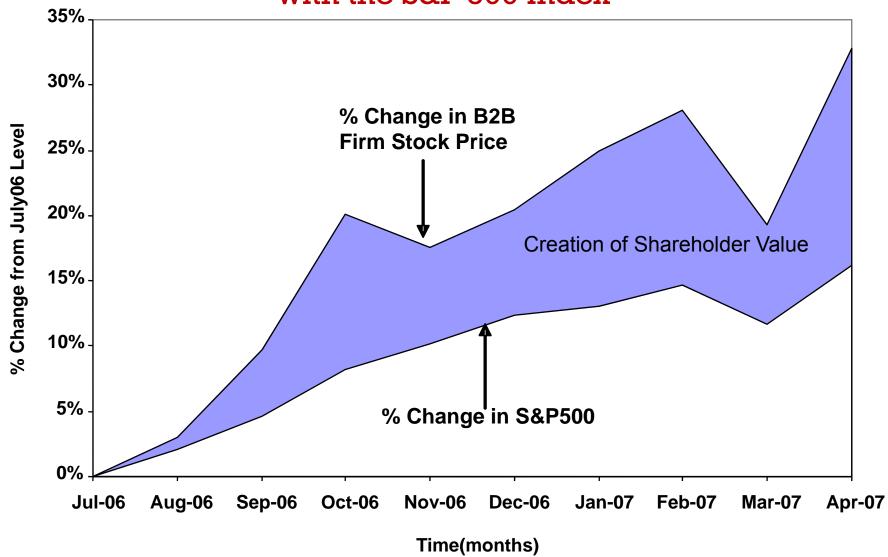
- The CLV model did not miss out on identifying the existing valuable customers as evident from the incremental revenue of \$42 million.
- Incremental Revenue attributed to net new accounts touched using CLV Model recommendations = \$ 19.2 million.

How to induce incremental sales?

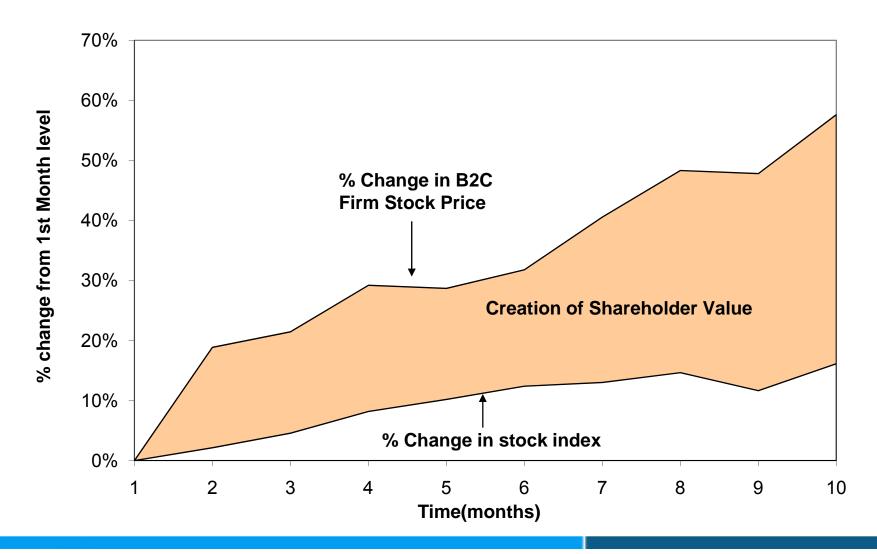


Linking CLV to Firm Metrics

Comparison of B2B firm's Stock Price Movement with the S&P 500 Index

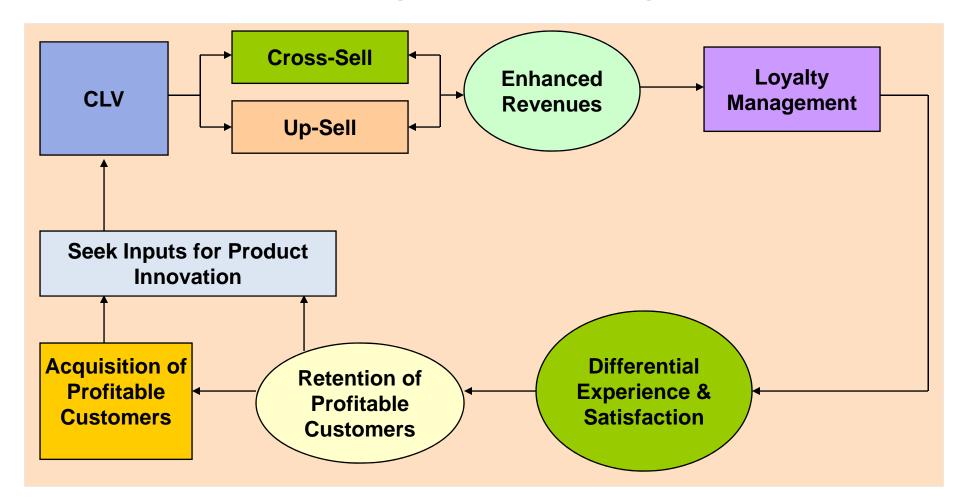


Linking CLV to Share Holder Value (SHV)

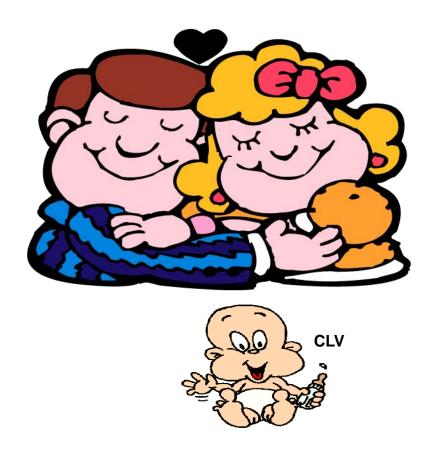


Path to Profitability

Reversing the Conventional Logic

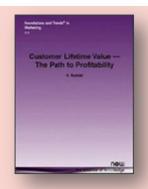


Firms & Customers

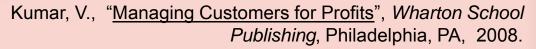


.....need to end up together in an eternal blissful marriage so that the managers can live happily ever after.

Relevant Books



Kumar, V., "Customer Lifetime Value- The Path to Profitability", now Publishers, Delft, The Netherlands, 2008

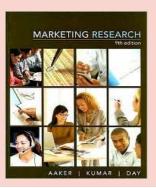






Kumar, V., and Werner J. Reinartz, "Customer Relationship Management-A Databased Approach", John Wiley & Sons, Hoboken, NJ, 2006

Aaker, David A., Kumar, V., George Day, "Marketing Research"-9th Edition, John Wiley & Sons, Hoboken, NJ, 2007



Thank You!

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Which customer is most loyal and profitable?

