## TRANSFORM MARKETING TO TAKE MORE SHARE

A Big Data Case Study



#### Webcast Speakers



**Generosa Litton**Director, Big Data Marketing
EMC



Michael Foley
Director, Marketing Science
EMC

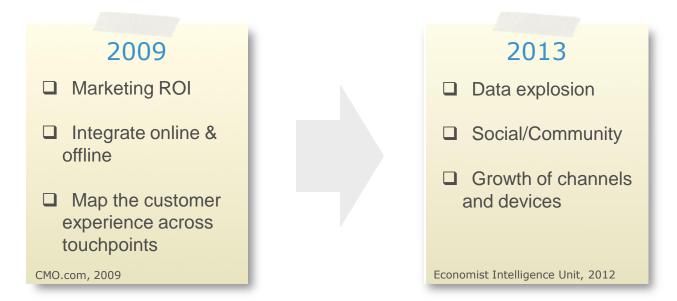
### What Is Your Top Reason For Considering Big Data?

- A. Improve operational efficiency
- B. Innovate on business models, products, and services
- C. Manage security and risk
- D. Segment customers and deliver customized actions



#### The New CMO Agenda

Driven by massive media consumption changes



Tectonic Shift To A Mobile and Social World



# SOCIAL MEETS BIG DATA

#### Our Customers Have Changed



Have Met Suppliers Thru Interactions
In Social Media



## 45 %

#### Of Our Prospects

Rate Peer-To-Peer Influence Is NOW The Most Trusted Source Of Technology Information

# THE SHIFT IS ON 170,000,000 SOCIAL EMC INTERACTIONS

## +52,000 Virtual Product Launch Attendees

With important moderated dialog



#### A Shift In Media Consumption

Results in a dramatic shift in budget to social/communities

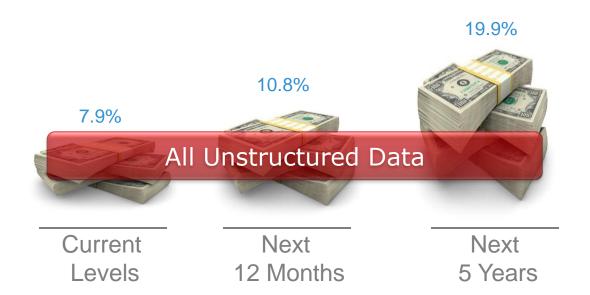


<sup>\*</sup> Sirius Decision, 2012, percent of total marketing budgets allocated toward social and communities



#### Yields Significant Volume Of Data

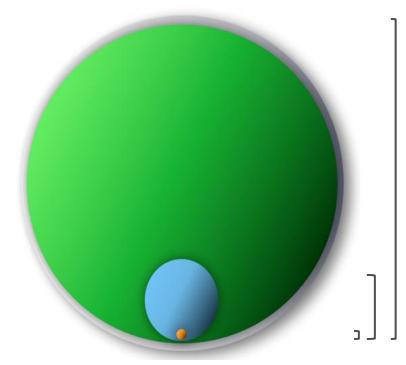
Community Conversation and crowd sourced documents





#### EMC Marketing's Data Explosion

Continual journey to understand behavior and improve targeting



**150**TBSocial / Community Conversations

**35**⊤ Enterprise View Across Touchpoints

**Traditional Marketing Channel Interactions** 



## DATA THE NEW CURRENCY OF MARKETING

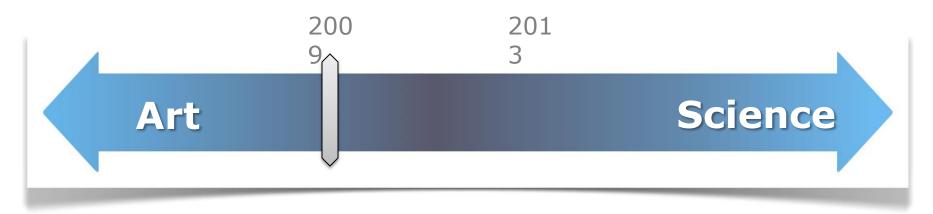
CUSTOMER
INTERACTIONS
ACROSS
ENTERPRISE
IS THE FORCE
MULTIPLIER

COLLABORATIVE
ANALYTICS
THAT ALIGNS
MARKETING ACROSS
ROUTES TO MARKET

ANALYTICS
THAT
SCALE OUT
FOR OUR
EMERGING
MEDIUMS

#### Requires Careful Balancing Act

CMO's Must Get Closer To The CIO



**Big Data Digital Infrastructure** 

For Personalization & Conversion



## MARKETING SCIENCE



#### **TEAM SKILLS**

**STATISTICS** 

MODELERS (SAS / OPEN SOURCE)

PROGRAMMERS (SAS/SQL)

DOMAIN EXPERTISE (MARKETNG ANALYTICS)

**BIG DATA MANIPULATION** 

#### Do You Have Data Scientists In Your Team?

- A. Yes
- B. No
- C. Don't know
- D. Plan to develop and train



#### Marketing Science Capabilities

#### TOP METHODOLOGIES

Cluster Analysis

NLP Association Rules Machine Learning

Decision Tree

#### **BIG DATA ANALYTICS**















Response

Purchase Rules

Segmentation

Journeys

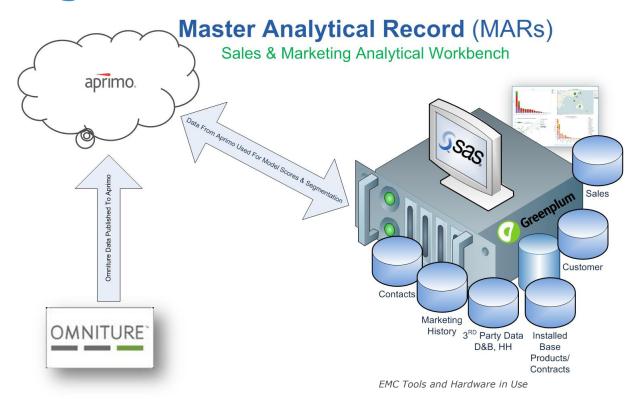
Full ROI

Marketing Mix

Lead Score



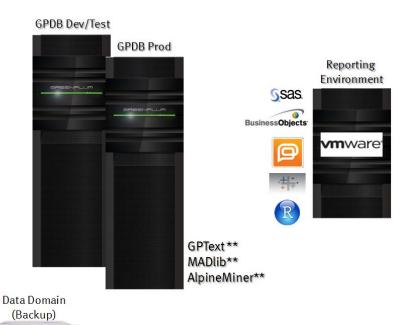
#### Marketing Science Data





#### Marketing Science Infrastructure







### SEGMENTATION

Align Marketing To Value Creation

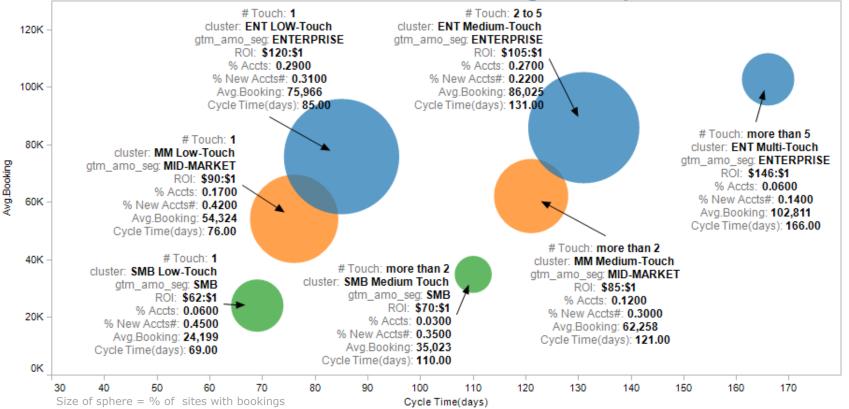


#### Segments Contain The Following

| MKTG ROI   | MIX  | PERSONA  | JOURNEY  | ASSETS  |
|--|--|--|--|---|
| <ul> <li>Total marketing<br/>spend vs<br/>bookings (not<br/>last activity)</li> </ul>  | <ul> <li>By persona</li> <li>Sequence of activities to maximize value</li> </ul> | <ul> <li>Involved in the buying process</li> </ul> | <ul> <li>Interactions by segment leading up to a deal</li> </ul> | <ul> <li>Usage of<br/>campaign<br/>assets on<br/>EMC.com</li> </ul> |
| <ul> <li>Comparative by<br/>segment for<br/>planning future<br/>investments</li> </ul> |  |  |  |   |



#### Clusters: Touches, Bookings, Cycle Time





#### C5 Marketing Activity Sequence

| COUNT | SUPPORT | RULE                             |  |  |
|-------|---------|----------------------------------|--|--|
| 22    | 9.32    | Seminar/Roadshow ==> EMC Forum   |  |  |
| 18    | 7.62    | Tradeshow ==> EMC Forum          |  |  |
| 15    | 6.35    | Tradeshow ==> Seminar/Roadshow   |  |  |
| 12    | 5.08    | Webcast - Live ==> Tradeshow     |  |  |
| 12    | 5.08    | EMC Forum ==> Tradeshow          |  |  |
| 11    | 4.61    | Advertising ==> Tradeshow        |  |  |
| 11    | 4.61    | Seminar/Roadshow ==> Advertising |  |  |
| 11    | 4.61    | Seminar/Roadshow ==> Tradeshow   |  |  |
| 10    | 4.23    | Advertising ==> EMC Forum        |  |  |
| 10    | 4.23    | EMC Forum ==> Seminar/Roadshow   |  |  |
| 10    | 4.23    | Tradeshow ==> Webcast - Live     |  |  |



## NEXT LIKELY PURCHASE

#### Next Likely Purchase: Key Drivers

| Driver                      | Importance  |  |  |
|-----------------------------|---|--|--|
| Past Product<br>Purchases   | Used to predict the future likely purchase.   |  |  |
| Segment                     | Company's size and sales make a difference relative to next likely buy.                       |  |  |
| Vertical                    | Show variation in products and solutions.   |  |  |
| Time Since Last<br>Purchase | Eliminate products that have no 2012 sales due to EOL, etc. Study the product purchase cycle. |  |  |
| Company Bookings            | Shows the magnitude/quantity of product purchasing.   |  |  |



#### Assigned A Likelihood Score

Probability of buying product on a scale of .0 to 1.0, with 1.0 being the highest score.

| Probability<br>Range |     |  |  |  |
|----------------------|-----|--|--|--|
| ∐iah                 | .99 |  |  |  |
| High                 | .7  |  |  |  |
| Neutral              | .69 |  |  |  |
| Neutrai              | .5  |  |  |  |
| Low                  | <.5 |  |  |  |

#### Next Likely Purchase Matrix For SMB Segment

| Products & Combinations | SYMMETRIX       | UNIFIED            | VNX             | CONNECTRIX     | PS-UNIFIED     |
|-------------------------|-----------------|--------------------|-----------------|----------------|----------------|
| CLARiiON                | P=.60; Sites=27 |                    |                 |                |                |
| UNIFIED                 | P=.85; Sites=17 |                    | P=.70; Sites=14 |                |                |
| VNX                     | P=.93; Sites=14 | P=.93;<br>Sites=14 |                 | P=.60; Sites=9 | P=.54; Sites=8 |
| CONNECTRIX<br>BROCADE   | P=.87; Sites=14 | P=.55; Sites=8     | P=.56; Sites=9  |                |                |
| PS-CLARiiON             | P=.98; Sites=11 |                    |                 | P=.55; Sites=6 |                |



#### Operationalizing Marketing Science

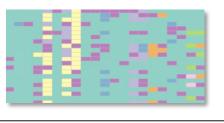
Store in Greenplum For Iterative Analysis



#### Master File in Greenplum

- Input Variables:
- Company
- Vertical
- Product Sub-Family

Create Heatmaps For Prioritization



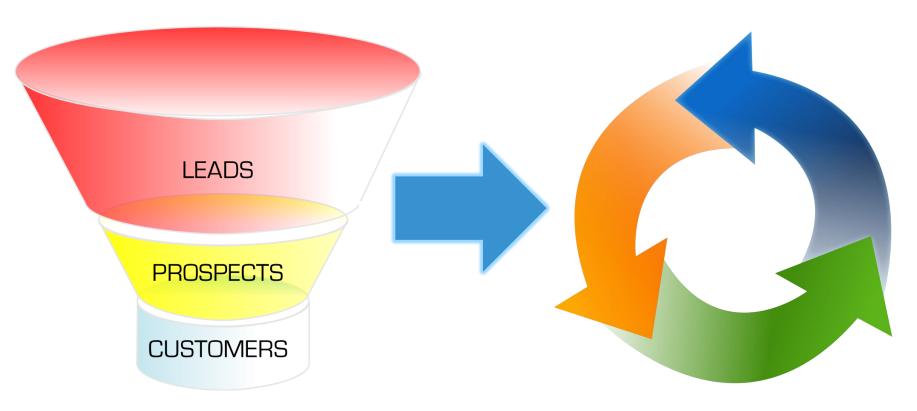
+

Load In Aprimo
For Execution & Further



# MARKETING SCIENCE School Senerating \$M In Revenues

#### Is The Funnel Dead?





#### Marketing Science Success Factors

- Executive sponsorship
- Strong collaboration with IT
- Technology availability



#### **Questions and Answers**



To type a question via WebEx, click on the Q&A tab Please select "Ask: All Panelists" to ensure your questions reach us. Thank you!



#### Next Steps: Check Out These Resources

- EMC's solution for Big Data
  - www.emc.com/bigdata
- EMC's Big Data Blog
  - www.bigdatablog.emc.com
- EMC Education Courses: <a href="http://education.emc.com">http://education.emc.com</a>
  - 90 Minute Module: Introducing Data Science and Big Data Analytics for Business Transformation
  - 1 Day: Data Science and Big Data Analytics for Business Transformation
  - 5 Days: Data Science and Big Data Analytics



#### **THANK YOU**



# EMAIN OF THE PROPERTY OF THE P