**ADEXCHANGER'S INDUSTRY PREVIEW 2015**

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# The Evolving Digital Marketing Technology Landscape

**Brian Andersen**
**LUMA Partners**

*LUMA Partners presents "The Evolving Digital Marketing Technology Landscape," as presented at the AdExchanger Industry Preview conference on January 21, 2015. This presentation reviews some of the key topics discussed at the conference: convergence of AdTech and MarTech, as well as trends in mobile, convergent video and cross-channel.*

# Agenda

1. **Intersection of AdTech & MarTech**

2. **Significant Industry Trends**
   i.   Mobile
   ii.  Convergent Video
   iii. Omni-Channel
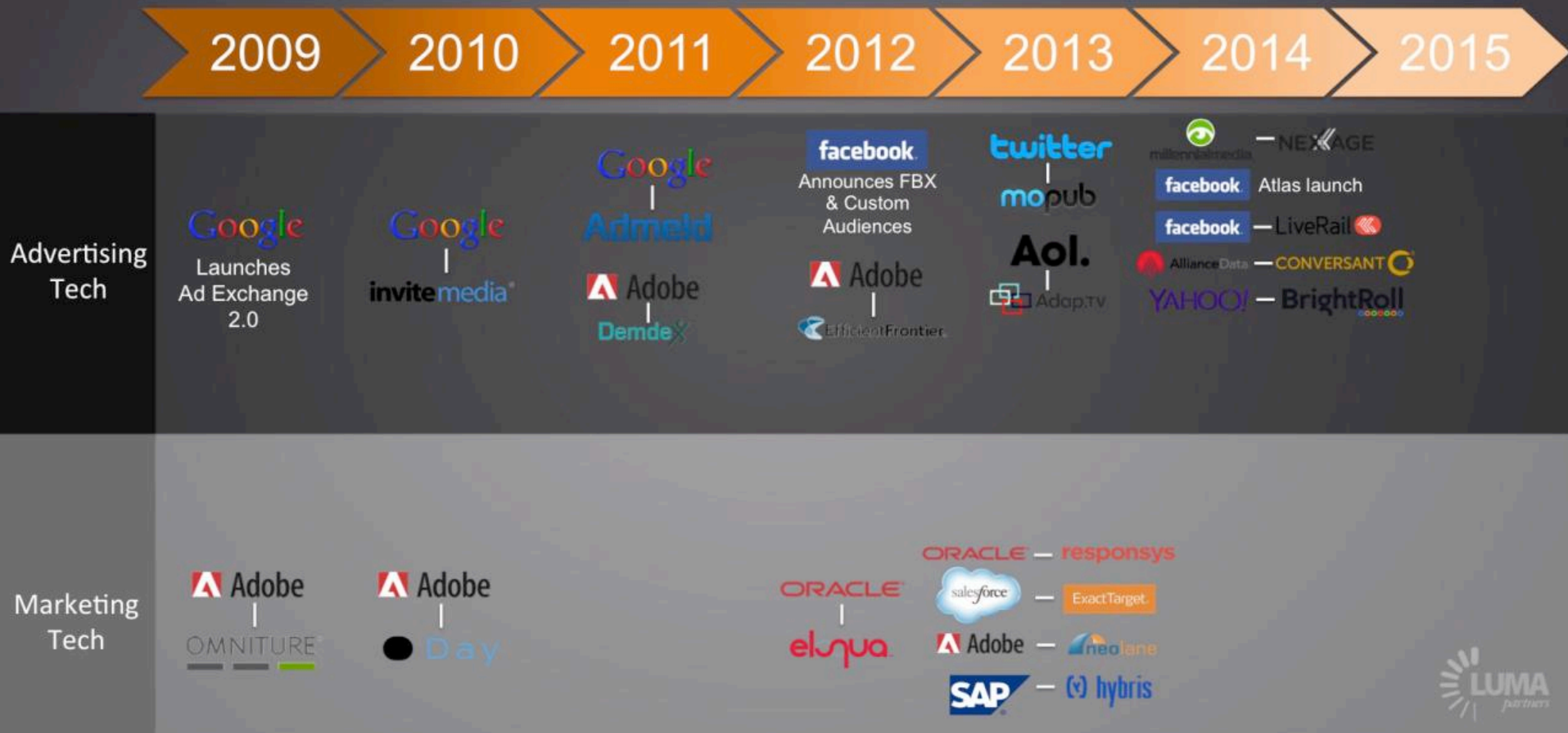
3. **Future of Ecosystem**

# Significant Ad Tech / Mar Tech Milestones

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|

**Advertising Tech**

- **2009:** Google Launches Ad Exchange 2.0
- **2010:** Google — invite media
- **2011:** Google — Admeld; Adobe — Demdex
- **2012:** facebook Announces FBX & Custom Audiences; Adobe — Efficient Frontier
- **2013:** twitter — mopub; Aol. — Adap.tv
- **2014:** millennialmedia — NEXAGE; facebook — Atlas launch; facebook — LiveRail; Alliance Data — CONVERSANT; YAHOO! — BrightRoll
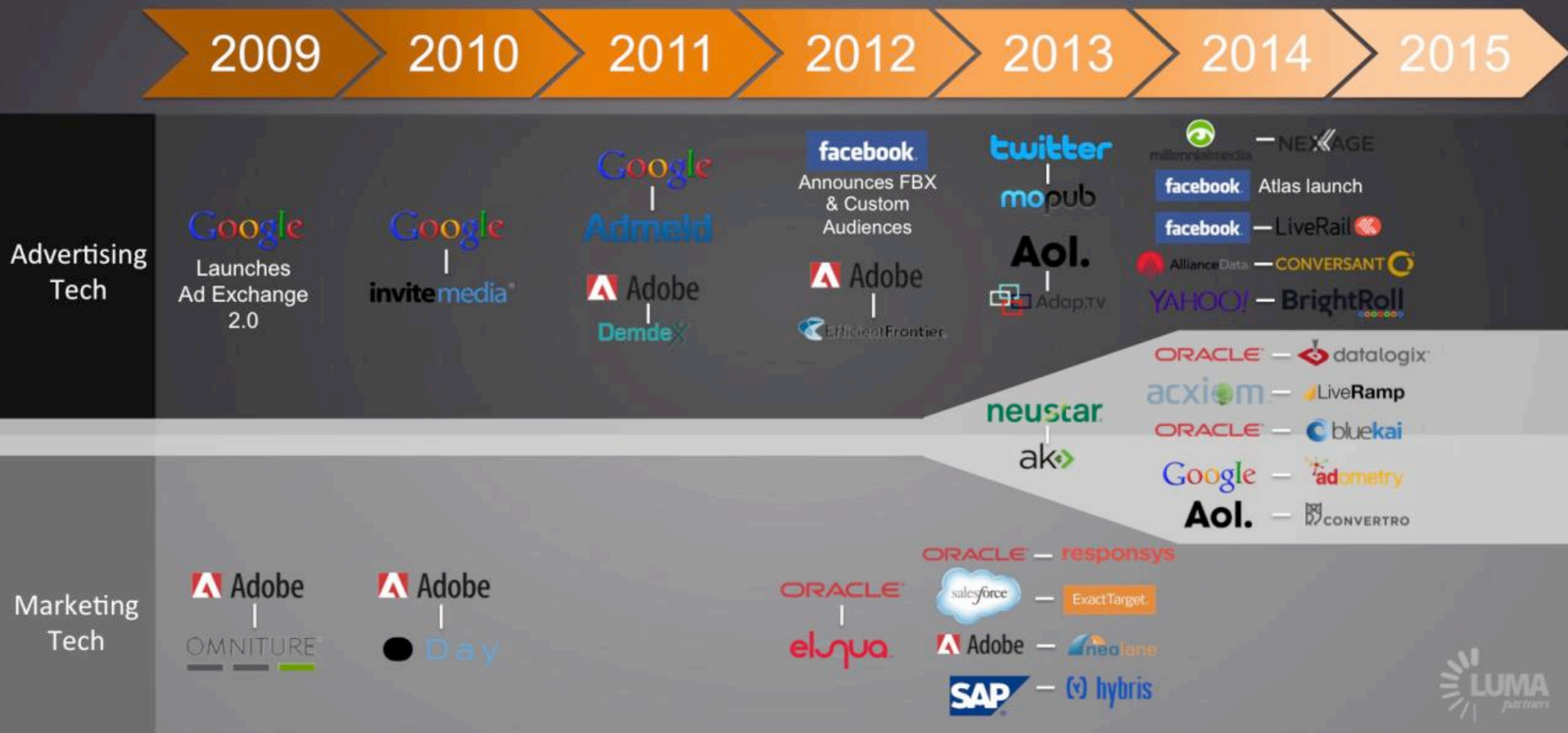
*2009 was a critical year for AdTech, when Google launched AdEx 2.0, the first time RTB inventory was available at scale – essentially kicking off the "programmatic" market. Google quickly assembled a full-stack solution with Invite Media and Admeld, providing them with programmatic solutions for both advertisers and publishers. Facebook has also become very aggressive with its AdTech strategy, launching Atlas for advertisers and acquiring LiveRail for a programmatic solution for publishers.*

# Significant Ad Tech / Mar Tech Milestones



| 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |

**Advertising Tech**

- Google Launches Ad Exchange 2.0 (2009)
- Google | invitemedia (2010)
- Google | Admeld — Adobe | Demdex (2011)
- facebook Announces FBX & Custom Audiences — Adobe | EfficientFrontier (2012)
- twitter | mopub — Aol. | Adap.tv (2013)
- millennialmedia — NEXAGE; facebook Atlas launch; facebook — LiveRail; Alliance Data — CONVERSANT; YAHOO! — BrightRoll (2014)

**Marketing Tech**

- Adobe | OMNITURE (2009)
- Adobe | Day (2010)
- ORACLE | eloqua (2012); ORACLE — responsys; salesforce — ExactTarget; Adobe — neolane; SAP — hybris (2013)

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2009 was also a key year for Marketing Tech with Adobe's acquisition of Omniture, launching its digital marketing business. Other acquisitions have strengthened its position, where they now arguably have the strongest web technologies capabilities across web analytics, web optimization and web content management (from the Day Software and Omniture acquisitions). Other key milestones include Salesforce's acquisition of Exact Target and SAP-Hybris, providing each with strong capabilities in MarTech and eCommerce, respectively.
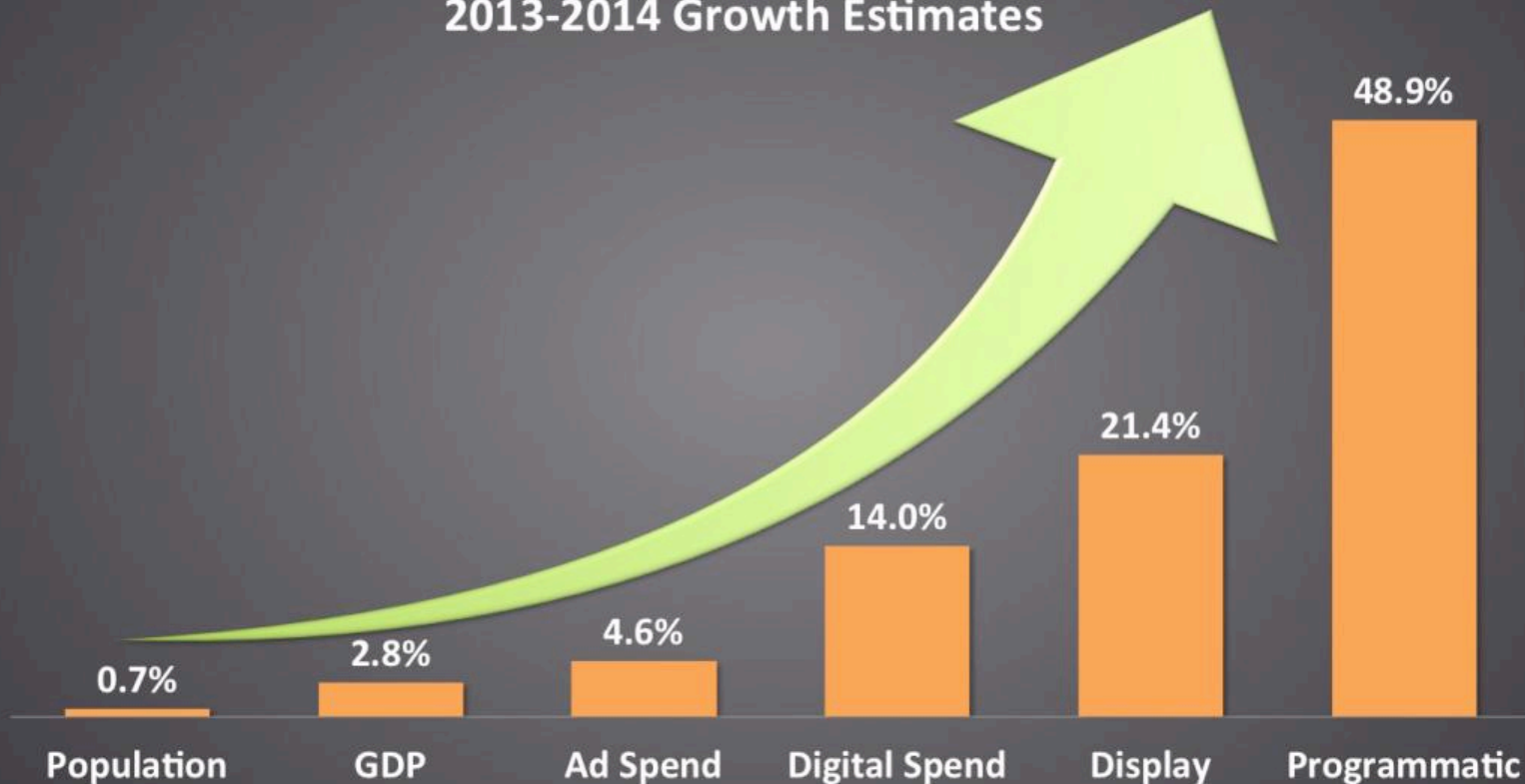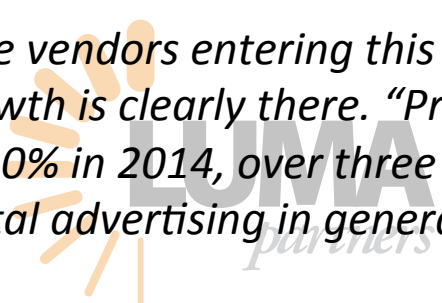
# Significant Ad Tech / Mar Tech Milestones

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|------|------|------|------|------|------|------|

**Advertising Tech**

- **Google** Launches Ad Exchange 2.0 (2009)
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- millennialmedia — NEXAGE; facebook Atlas launch; facebook — LiveRail; Alliance Data — CONVERSANT; YAHOO! — BrightRoll (2014)

- ORACLE — datalogix
- acxiom — LiveRamp
- ORACLE — bluekai
- Google — adometry
- Aol. — CONVERTRO
- neustar
- ak

**Marketing Tech**

- **Adobe** — OMNITURE (2009)
- **Adobe** — Day (2010)
- ORACLE — eloqua (2012)
- ORACLE — responsys; salesforce — ExactTarget; **Adobe** — neolane; SAP — hybris (2013)

*The unifying element between AdTech and MarTech is data-driven marketing. Recently there have been a number of strategic acquisitions by the large software and media companies of data-centric capabilities – DMPs, online-offline data and attribution – that are the "glue" between these categories. Oracle has moved very aggressively the past couple years, assembling both a Marketing Cloud (Eloqua, Responsys, Bluekai DMP) and Data Cloud (Bluekai exchange, Datalogix) and now have the strongest data-centric offerings.*

## Growth: Data-Driven Digital Marketing on the Rise

### 2013-2014 Growth Estimates

- Population: 0.7%
- GDP: 2.8%
- Ad Spend: 4.6%
- Digital Spend: 14.0%
- Display: 21.4%
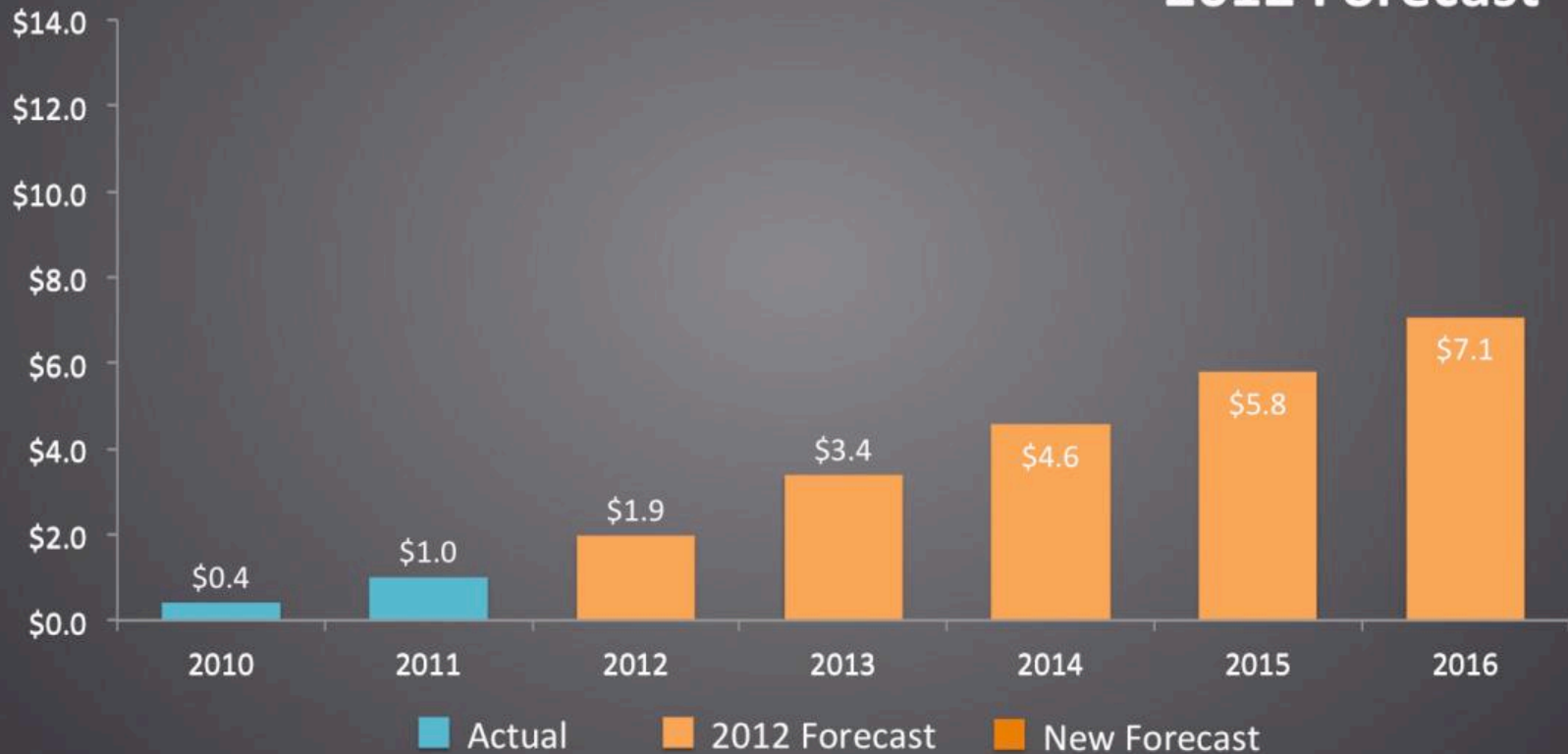- Programmatic: 48.9%

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*Why are the large software vendors entering this space so aggressively? Scale and growth. The growth is clearly there. "Programmatic" was expected to grow almost 50% in 2014, over three times higher than the robust 14% growth of digital advertising in general.*
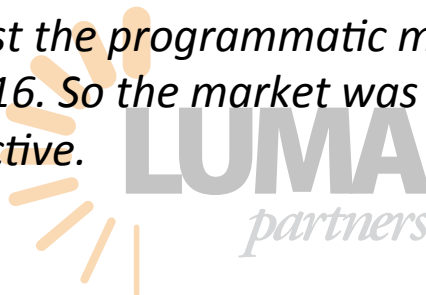
# Programmatic Forecasts Continue to Increase

## 2012 Forecast

Actual: 2010 $0.4, 2011 $1.0

2012 Forecast: 2012 $1.9, 2013 $3.4, 2014 $4.6, 2015 $5.8, 2016 $7.1

Legend: Actual | 2012 Forecast | New Forecast

Source: eMarketer

*In 2012, eMarketer forecast the programmatic market to be $2 billion, growing to $7 billion in 2016. So the market was starting to look interesting from a market size perspective.*

# Programmatic Forecasts Continue to Increase

## 2014 Forecast



Legend: Actual | 2012 Forecast | New Forecast

Values by year:
- 2010: $0.4 (Actual)
- 2011: $1.0 (Actual)
- 2012: $1.9 (2012 Forecast)
- 2013: $4.2 / $3.4 (Actual)
- 2014: $9.3 / $4.7 / $4.6
- 2015: $11.0 / $6.2 / $5.8
- 2016: $11.8 / $7.8 / $7.1

Source: eMarketer

*In 2013, eMarketer increased its 2016 forecast about 10%, since the market was growing faster than expected. But in 2014, the programmatic market exploded. Growth increased dramatically and eMarketer significantly increased its 2016 estimates to $12 billion — now a market with the scale to attract the interest of the large software companies.*

# Digital Advertising: "The Dream"
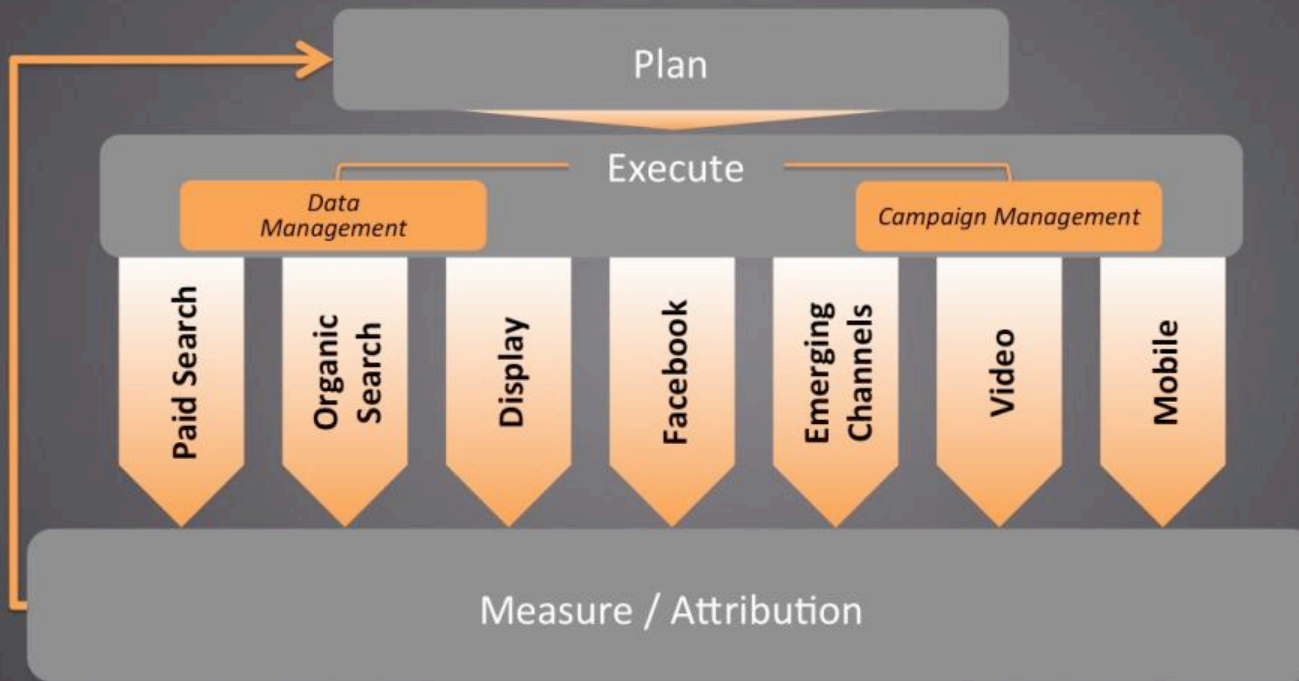
*If you were to draw up a fully integrated advertising platform for enterprises, it would look something like this. A planning capability to plan out marketing/advertising spend, an integrated execution platform with common data management and campaign management that could execute advertising across all channels and an attribution system to measure results in real-time – with a feedback loop to the planning software to adjust/optimize spend.*

# Digital Advertising: "The Reality"

However, that is not how the real world works. While there is an enterprise stack developing, the execution of marketing campaigns – especially media campaigns – is performed outside the enterprise. Digital agencies running digital programs, media agencies executing TV buys, and many other specialized networks for other channels (display/retargeting, mobile, video, etc.) And each entity is planning and measuring its campaigns/channel independently.

# Digital Advertising: The Enterprise Stack

"The Intelligence Layer"

Plan

Data Management

CRM

Attribution

Digital Agency

Search Agency

Media Agency

Digital Video Agency

STORE
SALE!

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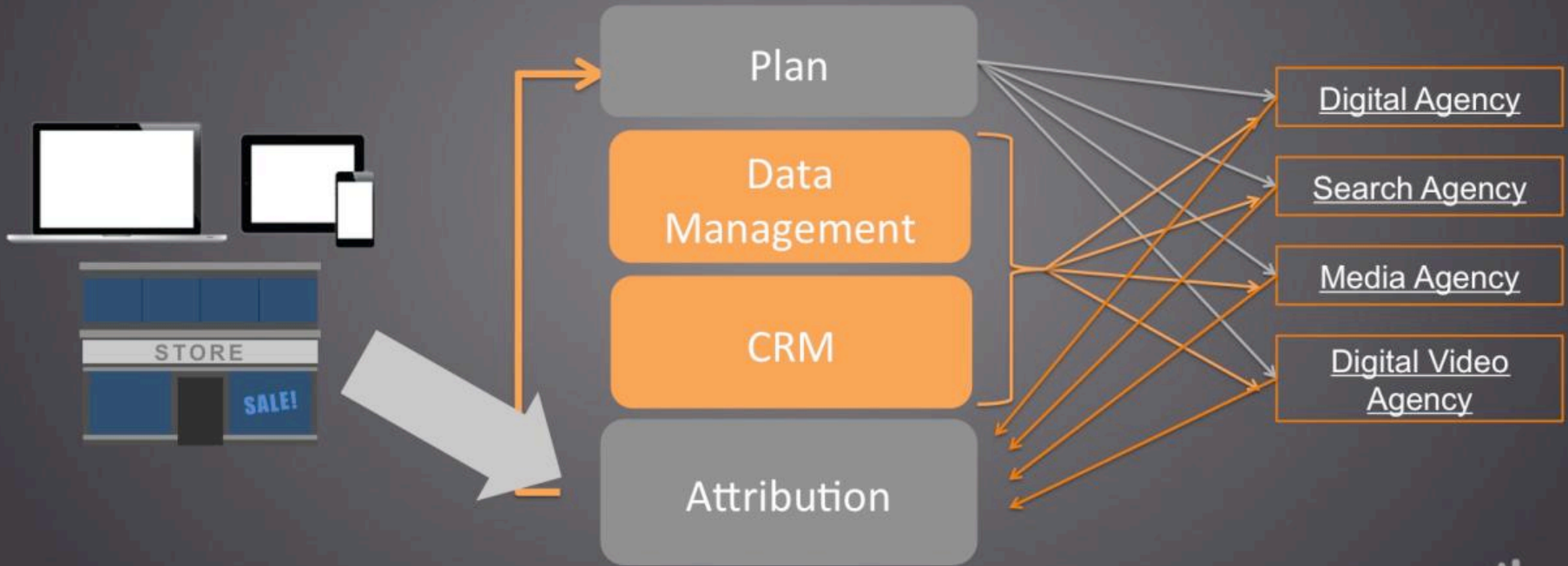
*But there is an "enterprise stack" emerging. A planning software solution to allocate the spend, a DMP to manage anonymous data, CRM to manage known customer data and an attribution system to measure results. With the more robust APIs of SaaS offerings, we will see greater integration within these stacks as well as with partners' systems, enabling better targeting and attribution. And "big data" enables real-time analysis for optimization.*
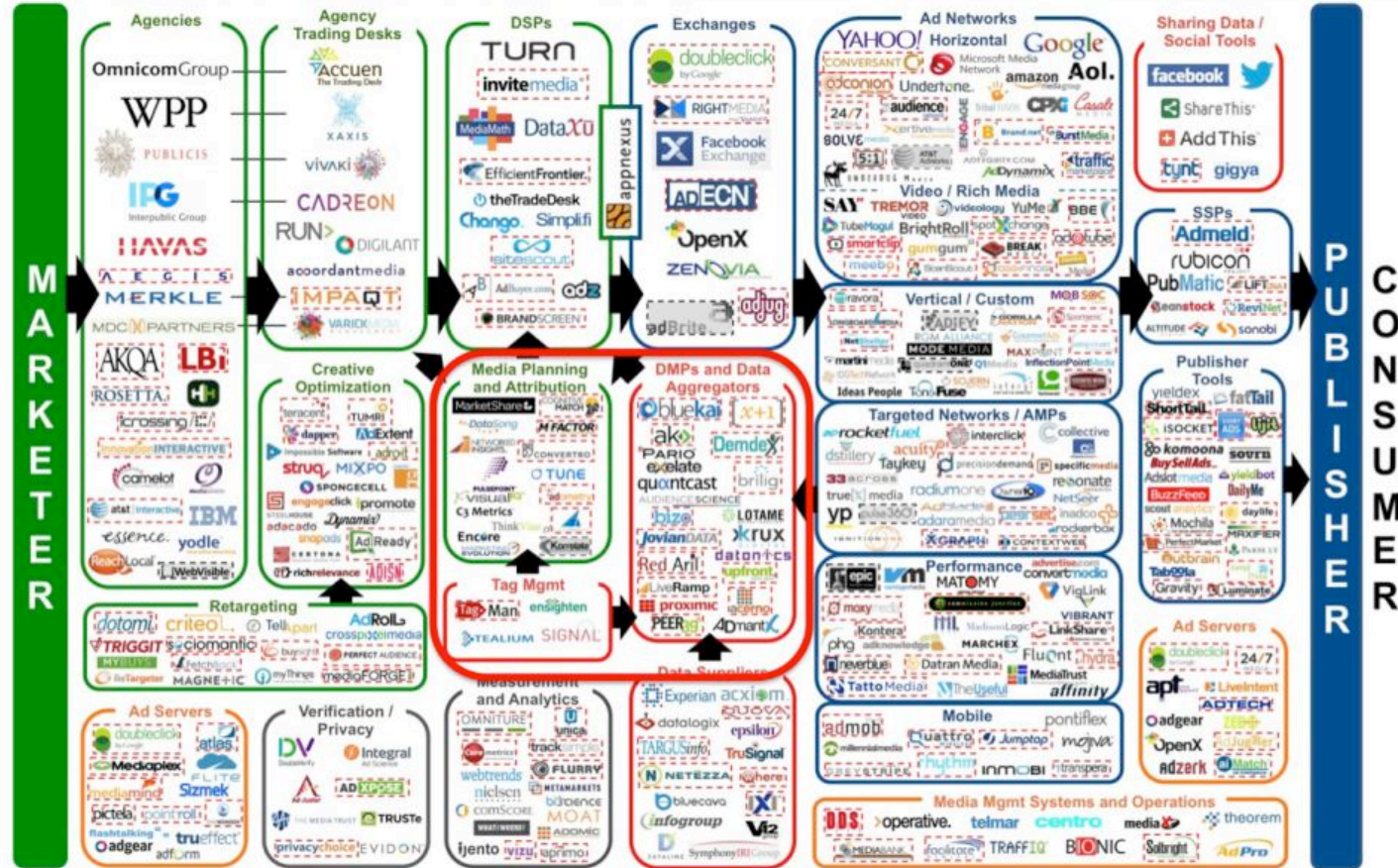
*It is no surprise to us at LUMA that this "Enterprise Stack" is finally emerging. We have been focused on the "Intelligence Layer" at the heart of the Display LUMAscape for quite some time. It is no coincidence that these types of offerings – DMPs, Attribution, Planning – are at the center of the LUMAscape. They are the systems that are enabling marketers to effectively implement audience buying and data-driven marketing strategies.*

# Top 5 Digital Marketing Trends

**LUMA** *partners*

**Top 5 Trends**

1. Programmatic
2. Mobile
3. Native / Content Marketing
4. Convergent TV
5. Omni-Channel

*These are the top five digital marketing trends we have been focused on at LUMA. Some programmatic commentary has been provided in the preceding slides. This section touches on a couple important aspects of mobile.*
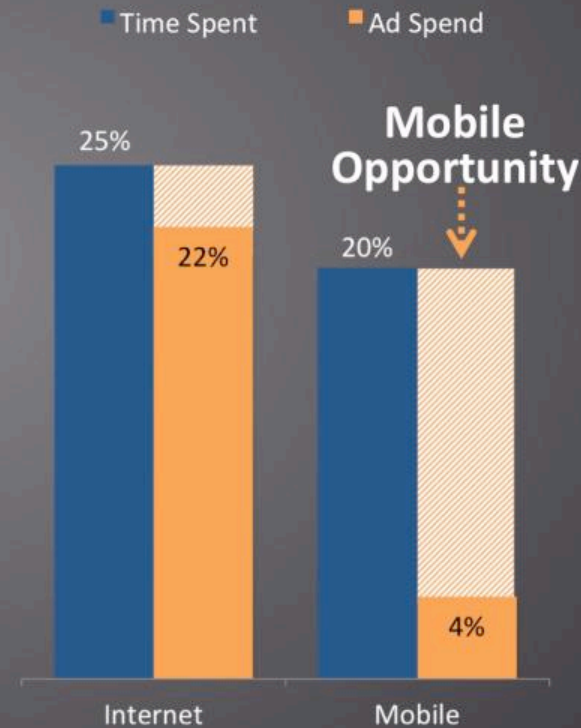
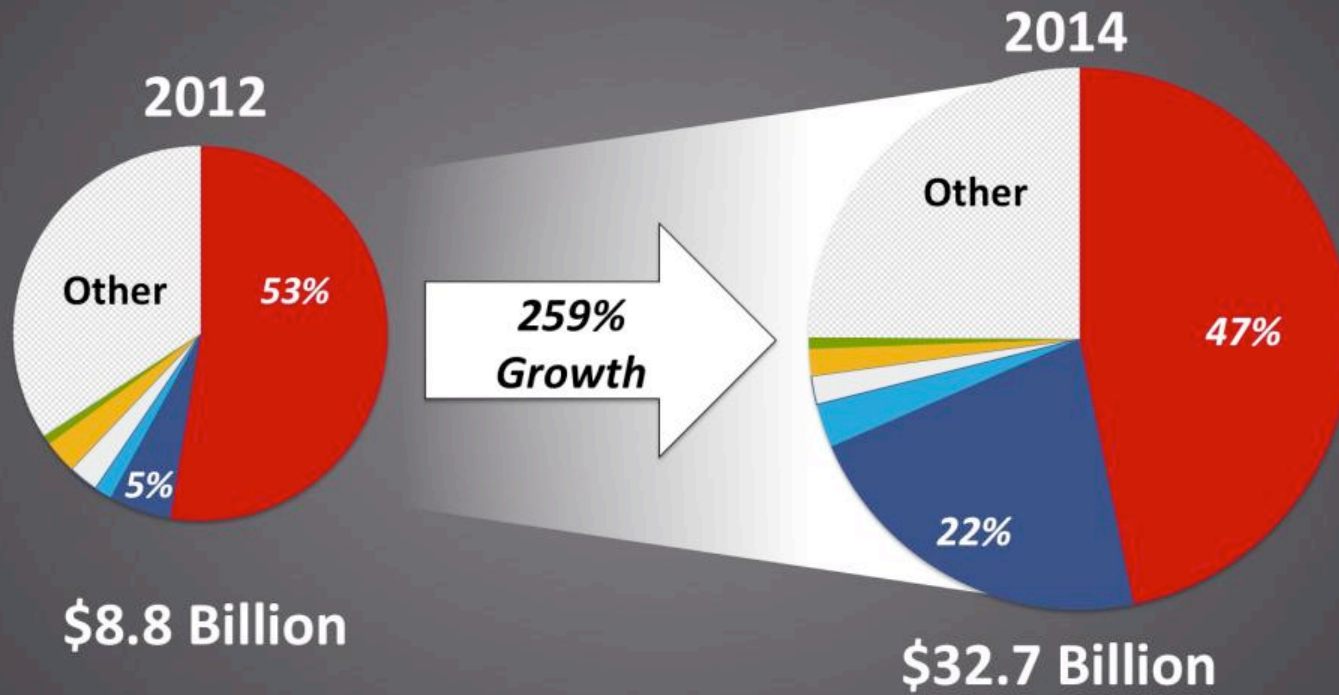# Mobile Advertising Scale & Growth

## Global Mobile Ad Spend ($BN)

CAGR: 52%

- 2012: $8.8
- 2013: $17.8
- 2014: $32.7
- 2015: $49.7
- 2016: $69.1
- 2017: $88.6
- 2018: $108.9

## Dollars vs. Time Spent in US

- Time Spent
- Ad Spend

Internet — Time Spent: 25%, Ad Spend: 22%

Mobile Opportunity

Mobile — Time Spent: 20%, Ad Spend: 4%

Source: eMarketer, KPCB

*The "year of mobile" has arrived – especially from a "time spent" perspective. However, while online ad dollars have essentially caught up to time spent in that category, this is not the case in mobile where there remains a big gap between time spent and ad spend. Per the classic Mary Meeker analyses, this gap will continue to drive significant growth in mobile advertising – currently projected at a CAGR of over 50%.*

# Mobile Advertising is Concentrating

**2012**

Other
53%
5%

**259% Growth**

$8.8 Billion

**2014**

Other
47%
22%

$32.7 Billion

Source: eMarketer

*While the mobile advertising pie is getting larger, the spend is actually concentrating. In 2012, Google and Facebook combined received 58% of mobile budgets. By the end of 2014, the mobile market was projected to be significantly more concentrated with Google and Facebook together forecasted to comprise nearly 70% of the market. While the next largest players continue to grow, the "other" bucket has continued to shrink.*

# The "Walled Gardens" of First Party Data...



*And it is no surprise these players are leading the market. Google and Facebook have incredible data and reach. Additionally, Facebook and Twitter have led the way to show that in-stream / in-feed "native" ads is an effective format on mobile. These players with perfect knowledge and logged-in user bases are creating "Walled Gardens" of data to use for advertising and marketing on their owned sites ...*

# ...Propagate Through 3ʳᵈ Party Networks
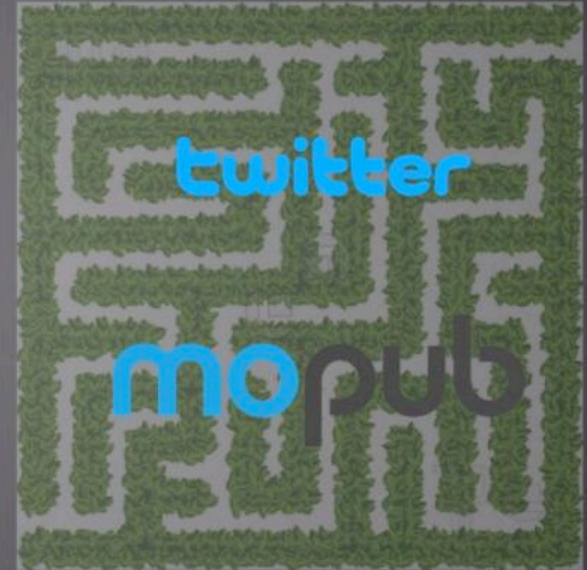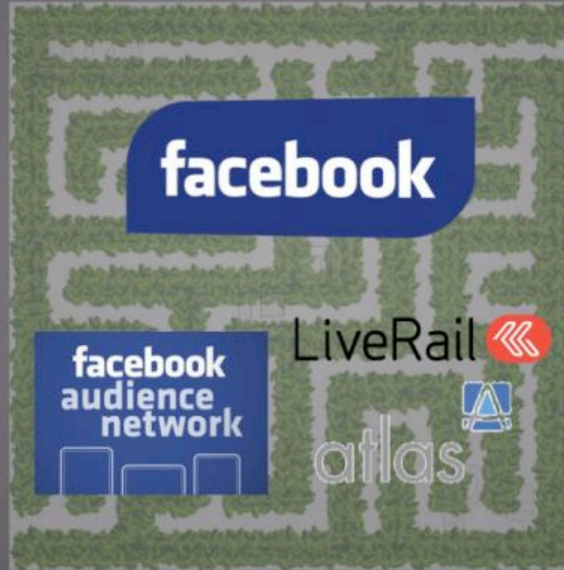


*...and these "Walled Gardens" are growing as these companies build and acquire third party networks off their sites utilizing their proprietary data.*

# Cross-Screen is Now a Marketing Imperative

**Types of Device Matching**

| Perfect Knowledge | Deterministic Matching | Probabilistic Matching |
|---|---|---|
| facebook · Twitter · g+ · amazon | MYBUYS · TellApart | drawbridge · TAPAD |
| *Logged in individuals* | *Direct match of devices to people* | *Algorithmic match* |

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*Marketers desire to provide a consistent, coordinated experience to consumers across all their devices. To achieve this, device matching has become a marketing imperative. The companies that have perfect knowledge of the consumer due to those individuals being logged in have a clear advantage to deliver a cross-screen experience. Firms without logged-in consumers use deterministic and probabilistic matching techniques to deliver cross-screen capabilities – and this will be a critical capability and an area of M&A activity.*

# Top 5 Digital Marketing Trends

**Top 5 Trends**

1. Programmatic
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THE FUTURE OF (Digital) TV

A Collaborative Perspective on Convergence

*LUMA created a report title "The Future of (Digital) TV that explores the convergence of traditional TV and digital video. For a more in depth analysis of Convergent TV, please view our presentation "The Future of (Digital) TV". This presentation can be found on our website and...*

"fascinating analysis"  "epic presentation"  "flat-out amazing"

"terrific piece of work"  "best digest ever"  "best presentation on the topic ever"

"stellar"

# THE FUTURE OF (Digital) TV

## A Collaborative Perspective on Convergence

"brilliant"  "awesome"

3 8 8 , 1 6 6

"a must-see"  "very insightful"

"seriously mind blowingly epic"  "very comprehensive analysis"  "really excellent"

"fantastic"

"must read, reread, and read again"  "succinct analysis"  "#mustread"

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*It has been viewed nearly 400,000 times with great qualitative feedback. This Industry Preview presentation extracts a small subset of the content from the larger presentation. If you are interested in a deeper look at the convergence of traditional TV and digital video, please visit the LUMA website at www.lumapartners.com/presentations.*
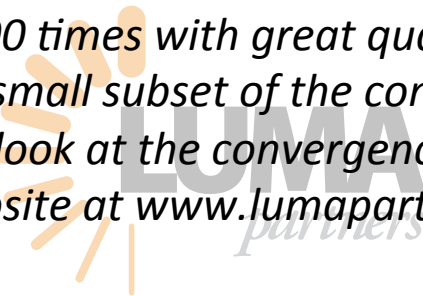
# Traditional TV vs. Digital Video Players

**Traditional TV Landscape**

**100 : 1**

| 19 | **Buckets** | 36 |
| ~ 100 | **Companies** | ~ 400 |
| $150 billion | **Total Spend** | $6 billion |
| $1.5 Billion | **$ / Company** | $15 Million |

*Traditional TV and digital video are two fundamentally different ecosystems. The traditional TV landscape is much more mature with half as many categories of companies and a quarter of the number of players as compared to digital video. When you factor in the amount of spend per company in each of these ecosystems it's a 100 to 1 ratio between traditional TV and digital video. While Digital Video is bringing significant innovation to the market, it is not these players that will materially disrupt traditional TV...*

# New Entrants...Which are Massive
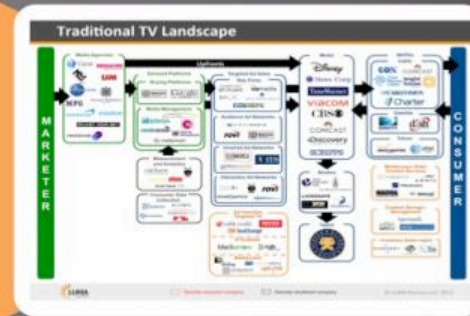


**Market Cap: $1.6 Trillion**
**Cash: $400 Billion**

*... the disruption will come from these new entrants with massive market capitalization and balance sheets. These are household names like Google, Apple, Verizon, Samsung, Amazon, Netflix, Microsoft and Sony that have combined market caps and cash that are multiple times greater than the entire traditional TV market. So while the digital video start-ups will definitely be a factor in the video ecosystem and provide significant innovation, the true disruption will likely come from these entrants.*
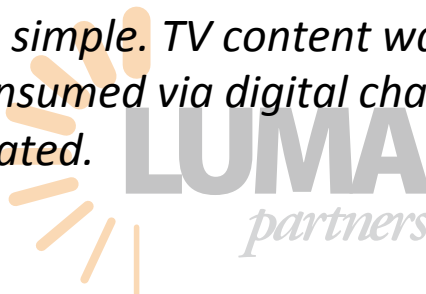
# What Used to be Simple...



*The video world used to be simple. TV content was consumed on televisions and digital content was consumed via digital channels. It was straightforward and bifurcated.*

# Is Now the Convergence of Two Worlds

**Screens**

Second Screen
Chromecast / Airplay

OTT

TV Everywhere

**Delivery**

CABLEVISION · COX · at&t · DIRECTV · verizon · dish · COMCAST

fan+ · Roku · XBOX · Wii · tv · Google

CABLEVISION · COX · at&t · DIRECTV · verizon · dish · COMCAST

**Content**

COMCAST · DISNEY · CBS · 21ST CENTURY FOX · Discovery Communications · scrippsnetworks interactive · viacom · TimeWarner

Partnerships
"Netflix + Disney"

NETFLIX · YAHOO! SCREEN · metacafe · amazon Prime · VICE · Dailymotion · Justin.tv · vevo · YouTube · vimeo · alloydigital

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*But then came the adoption of multiple screens. OTT emerged as a means to bring digital content to TVs – and is the enabler for "cord cutting." The distribution companies (cable, satellite TV), and recently media companies as well, are combating OTT with TV Everywhere, enabling their subscribers to watch their content wherever they are, on any screen. We are also witnessing early content partnerships between traditional and digital-first players. Finally, the devices themselves are interacting, and can "cast" or "fling" content among devices.*

*LUMA believes the future will be less complicated for consumers, where there will be little distinction between what was previously thought of as traditional linear and digital delivery. Content companies will offer all forms of content (long-form, short form). Consumers demand the ability to view their content whenever they want, wherever they are, on whatever device they are on. Therefore, eventually the market will move to a mostly on-demand, IP-delivered environment.*

# Incremental is Increasingly Expensive on TV!
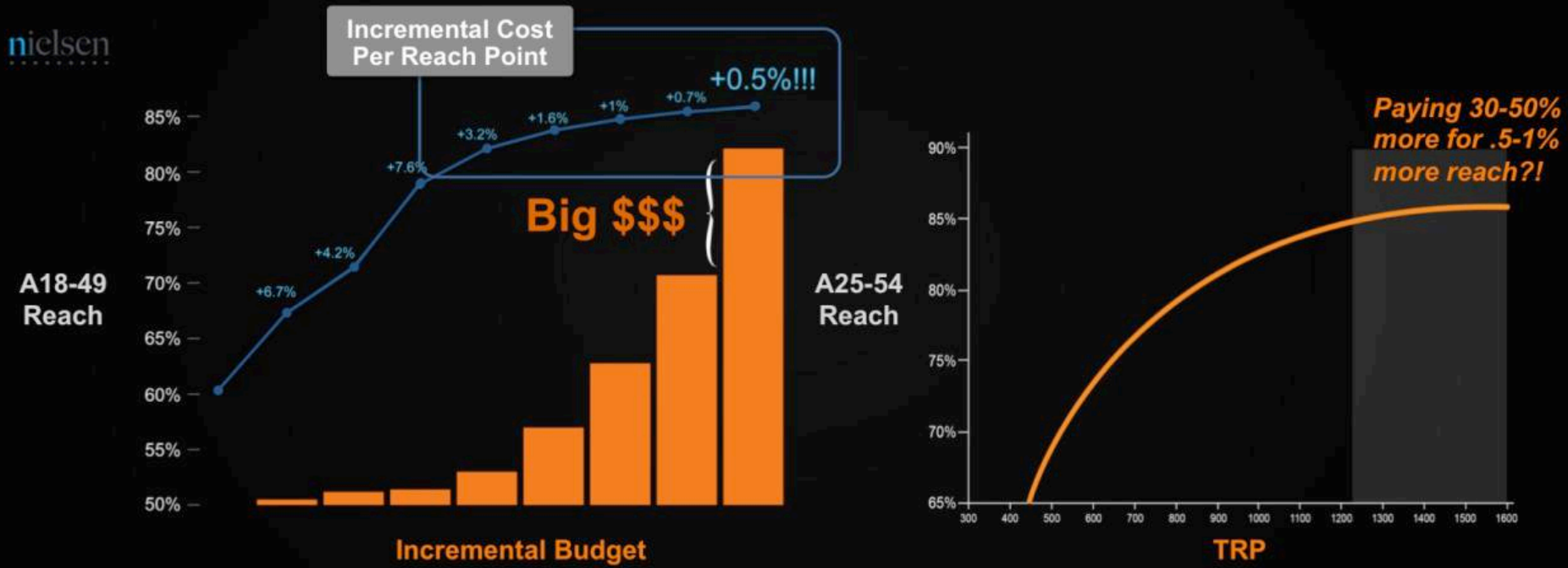
*We do believe the way video advertising is bought will change. Currently, traditional TV buying is very separate from digital video buying. Traditional TV advertisers buy on a "gross rating point," or GRP, which is a calculation of advertising reach and frequency, or essentially buying an audience segment. The reality of the TV market is that the last GRP, or marginal GRP, is very expensive.*

# Digital Video Doubles Overnight if 7% Inefficient TV is Shifted to Digital Video!!!
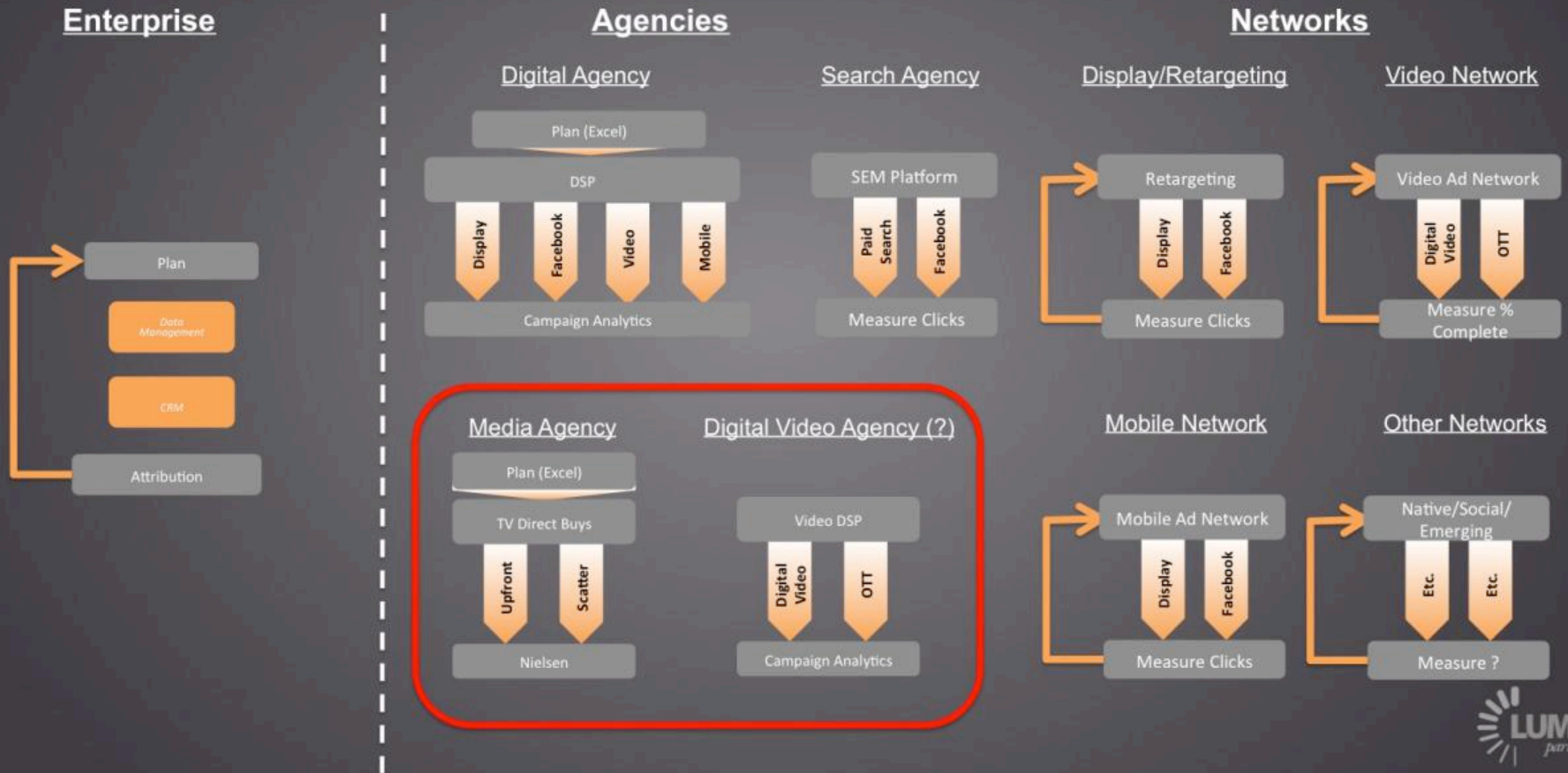
## eMarketer TV Spend Projection

Y-axis: $80B, $60B, $40B, $20B, $0

X-axis: 2001 2003 2005 2007 2009 2011 2013 2015 2017
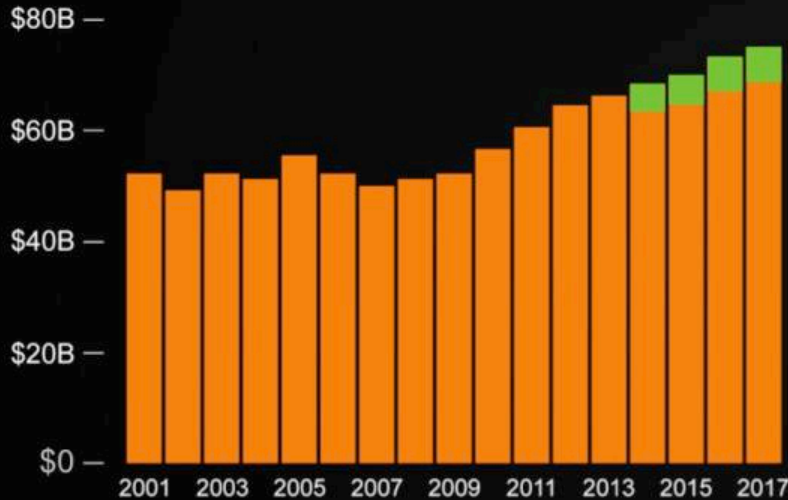
## eMarketer Digital Video Spend Projection

Y-axis: $16B, $12B, $8B, $4B, $0

X-axis: 2011 2012 2013 2014 2015 2016 2017

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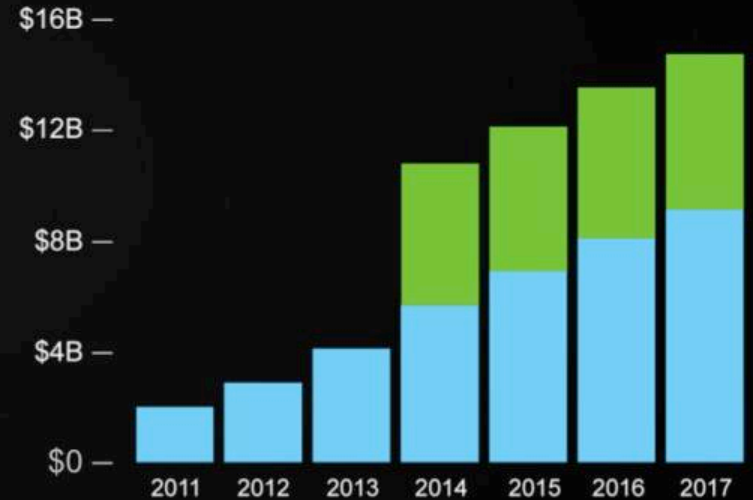
*This inefficiency creates a big opportunity for marketers buy video holistically rather than separately. A Nielsen study found that when 15% of a TV budget was allocated to digital video, there was an increased incremental reach of 4.2% for the same spend. And if you were to take the last 7% of television spend, which is arguably the most inefficient of TV spending, and apply it to digital, you would double the size of the digital video market! Some studies argue that up to 25% of TV spend would be more efficiently used in the digital channel.*

# Digital Advertising: "The Reality"

**Enterprise**

- Plan
- Data Management
- CRM
- Attribution

**Agencies**

**Digital Agency**
- Plan (Excel)
- DSP
  - Display
  - Facebook
  - Video
  - Mobile
- Campaign Analytics

**Search Agency**
- SEM Platform
  - Paid Search
  - Facebook
- Measure Clicks

**Media Agency**
- Plan (Excel)
- TV Direct Buys
  - Upfront
  - Scatter
- Nielsen

**Digital Video Agency (?)**
- Video DSP
  - Digital Video
  - OTT
- Campaign Analytics

**Networks**

**Display/Retargeting**
- Retargeting
  - Display
  - Facebook
- Measure Clicks

**Video Network**
- Video Ad Network
  - Digital Video
  - OTT
- Measure % Complete

**Mobile Network**
- Mobile Ad Network
  - Display
  - Facebook
- Measure Clicks

**Other Networks**
- Native/Social/Emerging
  - Etc.
  - Etc.
- Measure ?

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However, for this to happen, there are structural changes that must occur. Currently, media agencies run TV spend, while digital agencies run digital video spend. To buy video holistically, this spend will need to be managed by a single entity (most likely the media agencies) using a common platform. There are already platforms in the market from Videology and TubeMogul that enable media agencies to buy digital, so organizational structures are the biggest impediment to coordinated video buying.

# Convergence of Two Worlds
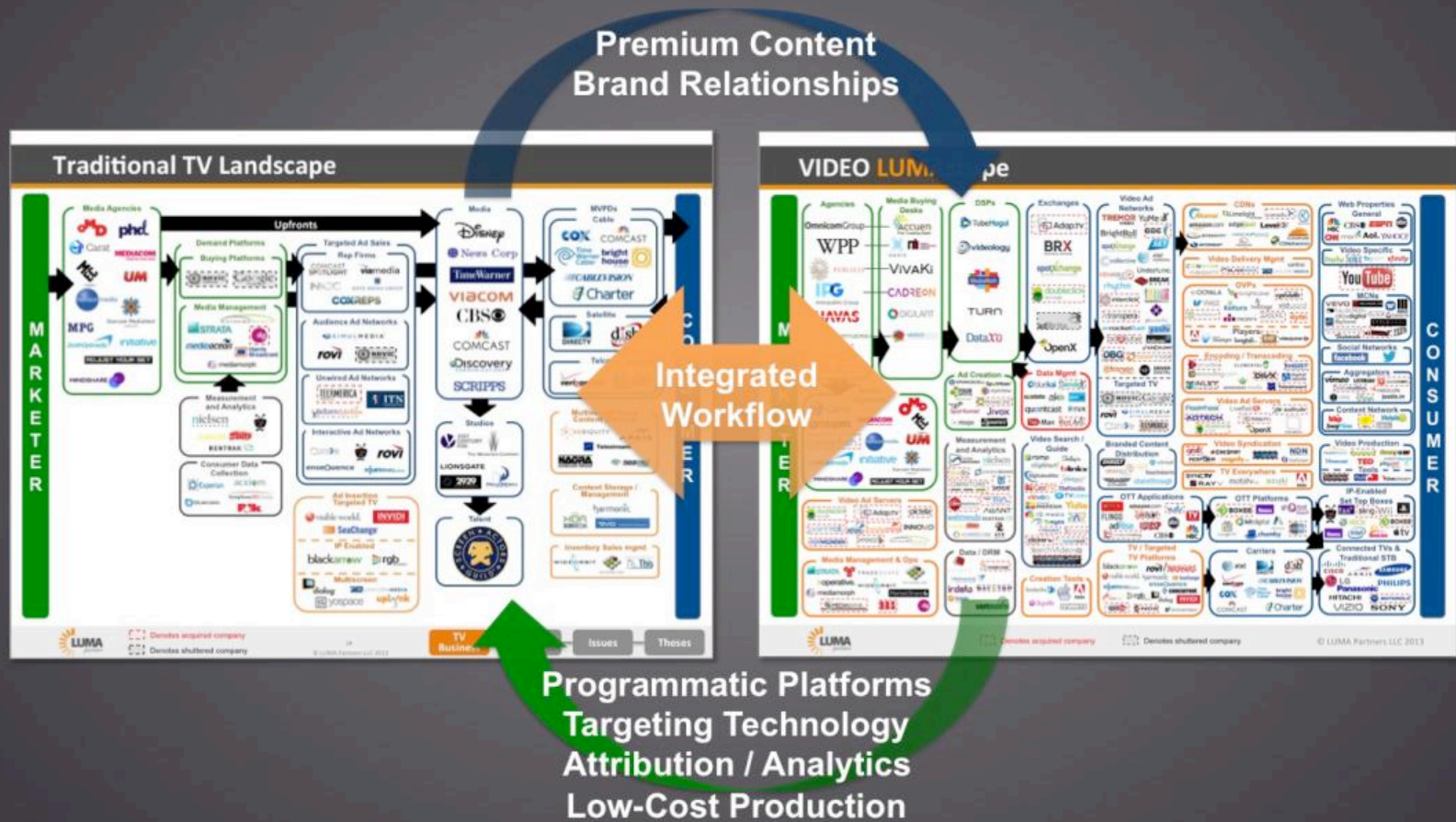


At LUMA, we are firm believers in the convergence of traditional and digital video. And a key to this convergence will be M&A. The traditional linear TV world brings premium content, brand relationships and a sense of standardization to digital. The digital players bring targeting, attribution, programmatic capabilities and innovative, lower-cost content production. Additionally, integrated ad buying workflows will unite TV and digital ad buying.

# 12 Video Deals Over $100 Million in 18 Months

| | | |
|---|---|---|
| Aol. → Adap.TV | $405 Million | |
| Rakuten → viki | $200 Million | |
| COMCAST → FreeWheel | $360 Million | |
| Disney → MAKER | $500 Million | |
| OPERA software → ADCOLONY | $230 Million | |
| facebook → LiveRail | $450 Million | |

## $4.7 Billion

| | | |
|---|---|---|
| RTL GROUP → spotXchange | $222 Million | |
| Telstra → OOYALA | $360 Million | |
| amazon.com → twitch | $970 Million | |
| at&t → FULLSCREEN | $250 Million | |
| RTL GROUP → STYLEHAUL | $151 Million | |
| YAHOO! → BrightRoll | $640 Million | |

*The consolidation and convergence in video is already occurring, with approximately 30 material transactions in the past 18 months - 12 of which were over $100 milion.*

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# Convergent TV via M&A



*And you are seeing these transactions across the spectrum, in content, distribution and monetization. While there are a significant number of "traditional-traditional" and "digital-digital" transactions, there are an accelerating number of "traditional-digital" combinations occurring already.*
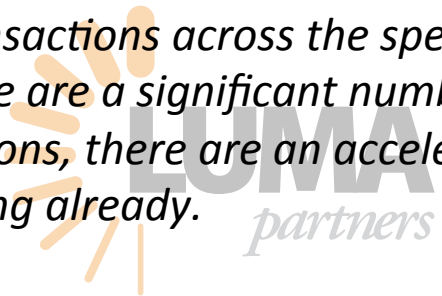
# Multi-Channel / Multi-Stage Marketing



*Technologies used for advertising, websites, eCommerce, customer support, loyalty and email have traditionally been disconnected systems – which has created a disjointed experience for consumers.*
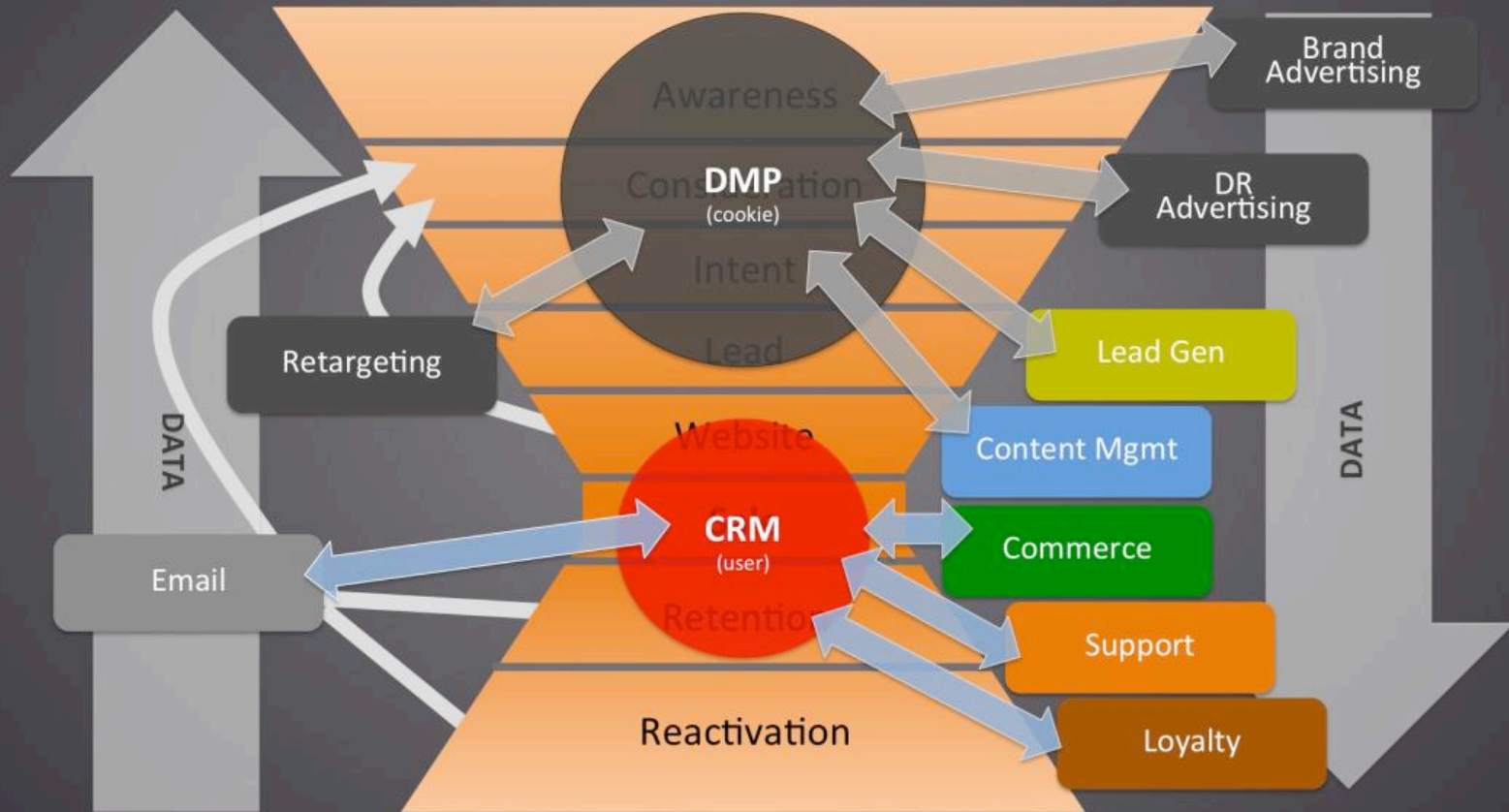
*However, leading organizations are using data to coordinate marketing activities across stages of the purchase funnel. CRM systems (with the term used generically to mean a customer database), which include customer names, contacts and purchase histories, have been used for years to tie together the stages on the bottom of the funnel. More recently, we have seen data management platforms ("DMPs") be deployed to manage cookie-based, anonymous data, and tie together the upper stages.*

# Email
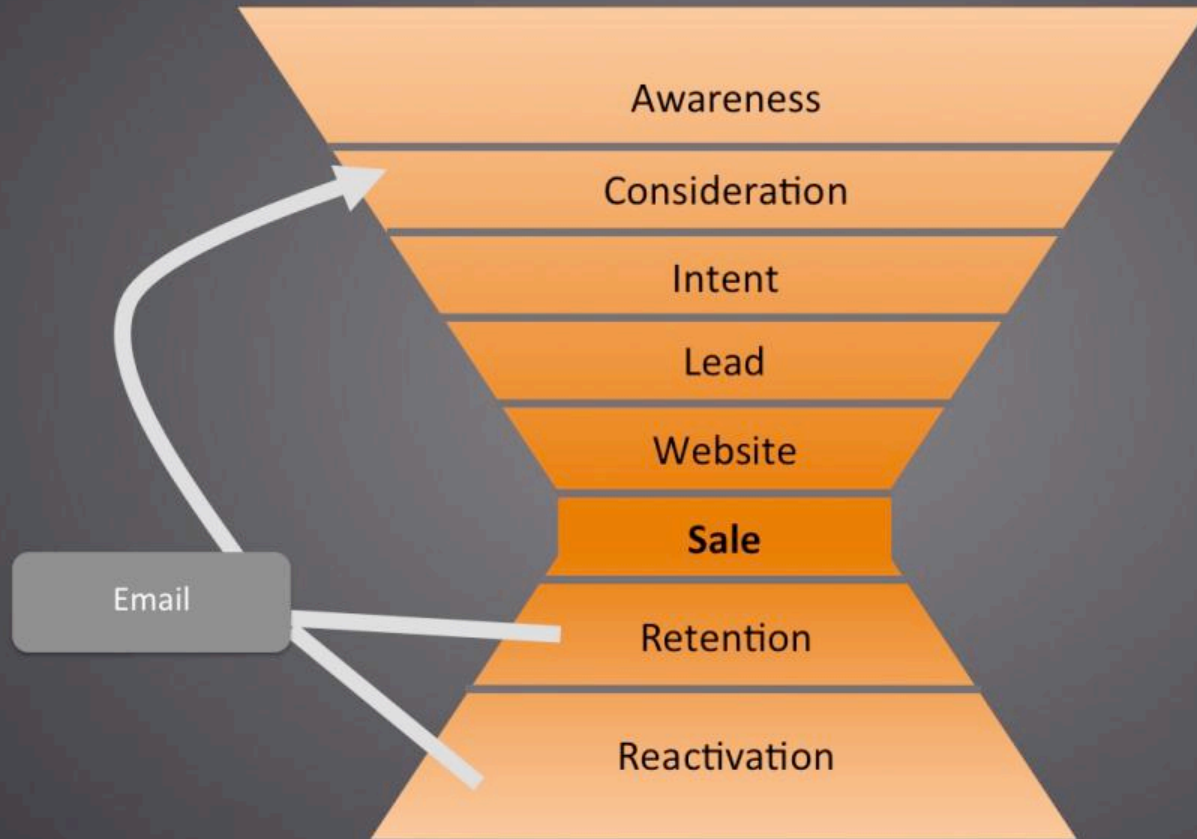


*We want to step back for a moment to discuss one channel: email. Not too long ago (within five years), we would consistently hear in the market that email was boring, slow-growth, commoditized and non-strategic.*

# Email: Highest ROI Digital Channel...



## CHANNEL ROI INDEX

While TV and radio are valuable awareness tools, they rank low on the ROI efficiency index because of their wide reach and high price.

8 — TV
7 — RADIO
6 — SOCIAL
5 — VIDEO
4 — DISPLAY
3 — PAID SEARCH
2 — AFFILIATE
1 — EMAIL

Social, video and display ads are influential marketing touchpoints that prove to have a significant impact on consumer awareness and research prior to conversion.

Paid search, affiliate and email advertising are highly targeted and relatively low cost—often used for direct response marketing. These channels are typically the last touchpoint before a conversion happens.

8 = Lowest ROI; 1 = Highest ROI

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*But what is email really? It has consistently been the highest ROI marketing channel there is. Aol just released a report (Jan 2015) where, once again, email is shown to be the highest ROI marketing channel.*

# Email: ... and the Digital Connective Tissue

*Inspired by:* **LiveIntent**

Awareness Consideration Intent Lead

**Display** **Video**

**Social**

**Advertising**

Email is cross-channel and cross-device, enabling adverting and marketing integration.

**Email #**

**SALE**

**Retention** **Reactivation** **Upsell**

*Anonymous Data*

1st **Party**

**DATA**

**CRM**

*Identifiable Data*
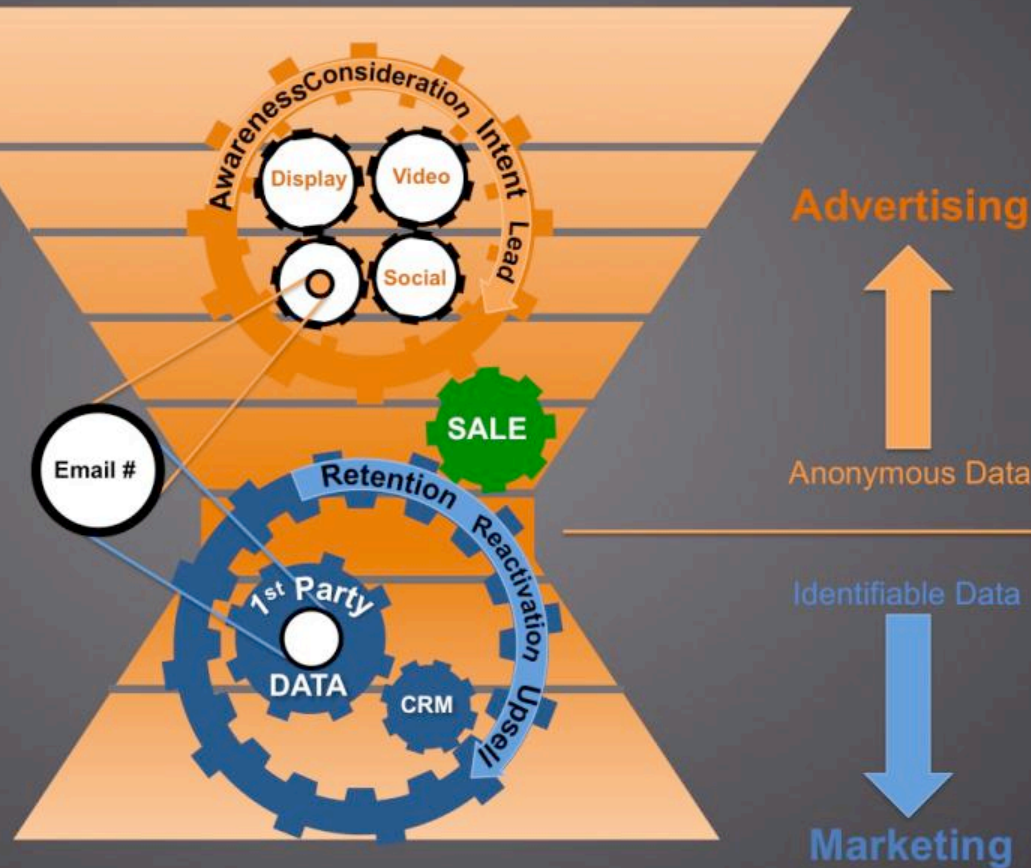
**Marketing**

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*Additionally, email has also become the "connective tissue" for marketing. Using Facebook as an example, they launched their "Custom Audiences" product in 2012 so marketers can target their known customers on FB. They partnered with Epsilon, Acxiom and Datalogix – who power the customer loyalty programs for in-store purchases - and use email hashes to link online advertising to offline purchases to derive attribution. So email can be used very effectively for targeting and attribution – and link "marketing" and "advertising."*

# Multi-Channel / Multi-Stage Marketing
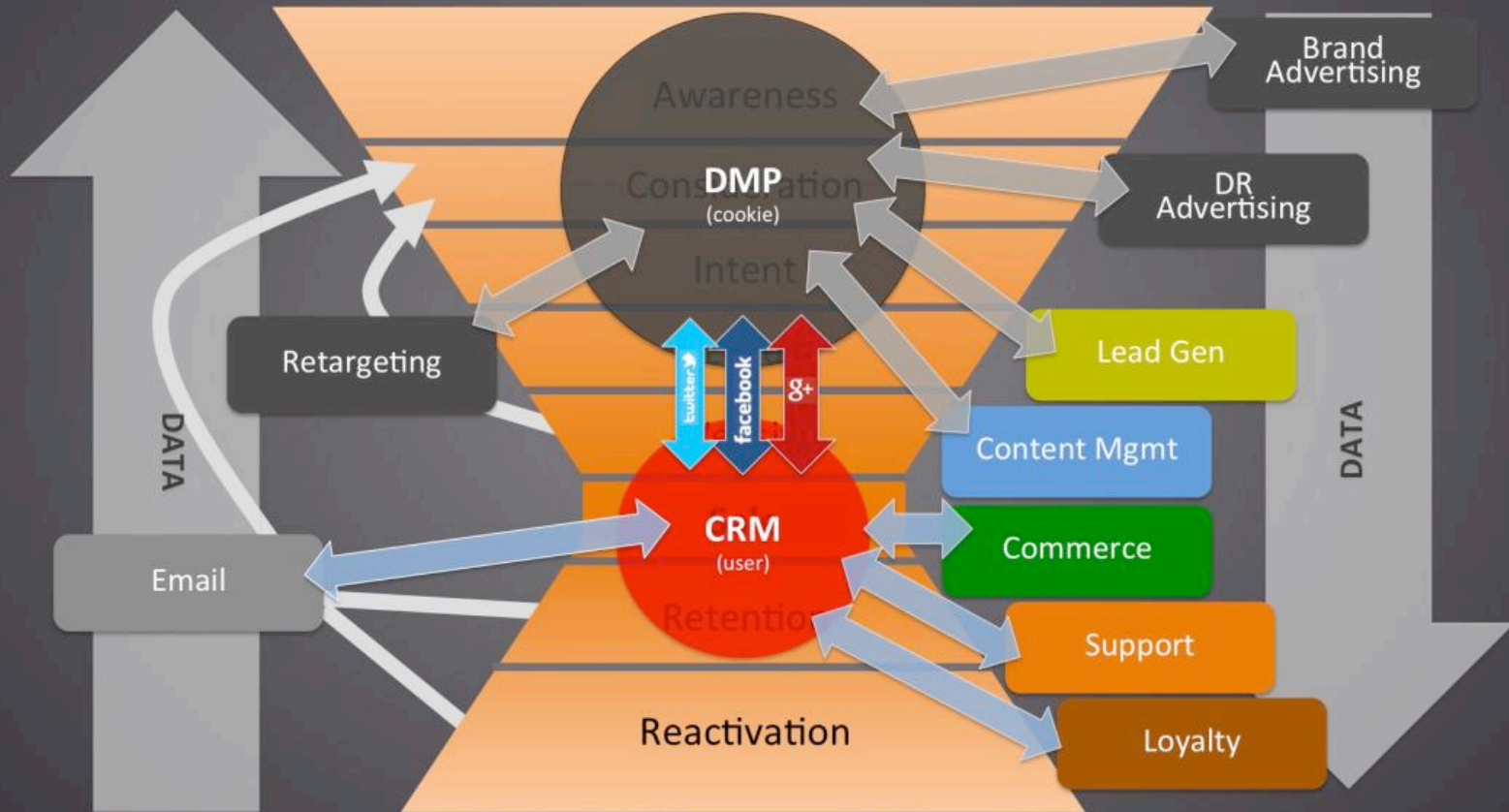
*While the DMP and CRM systems have largely been used independently, you are going to see much more integration of these systems going forward. Companies with logged-in users, with cookie data as well as customer data (with emails) have an advantage to do this, such as the Facebook example provided in the prior slide.*
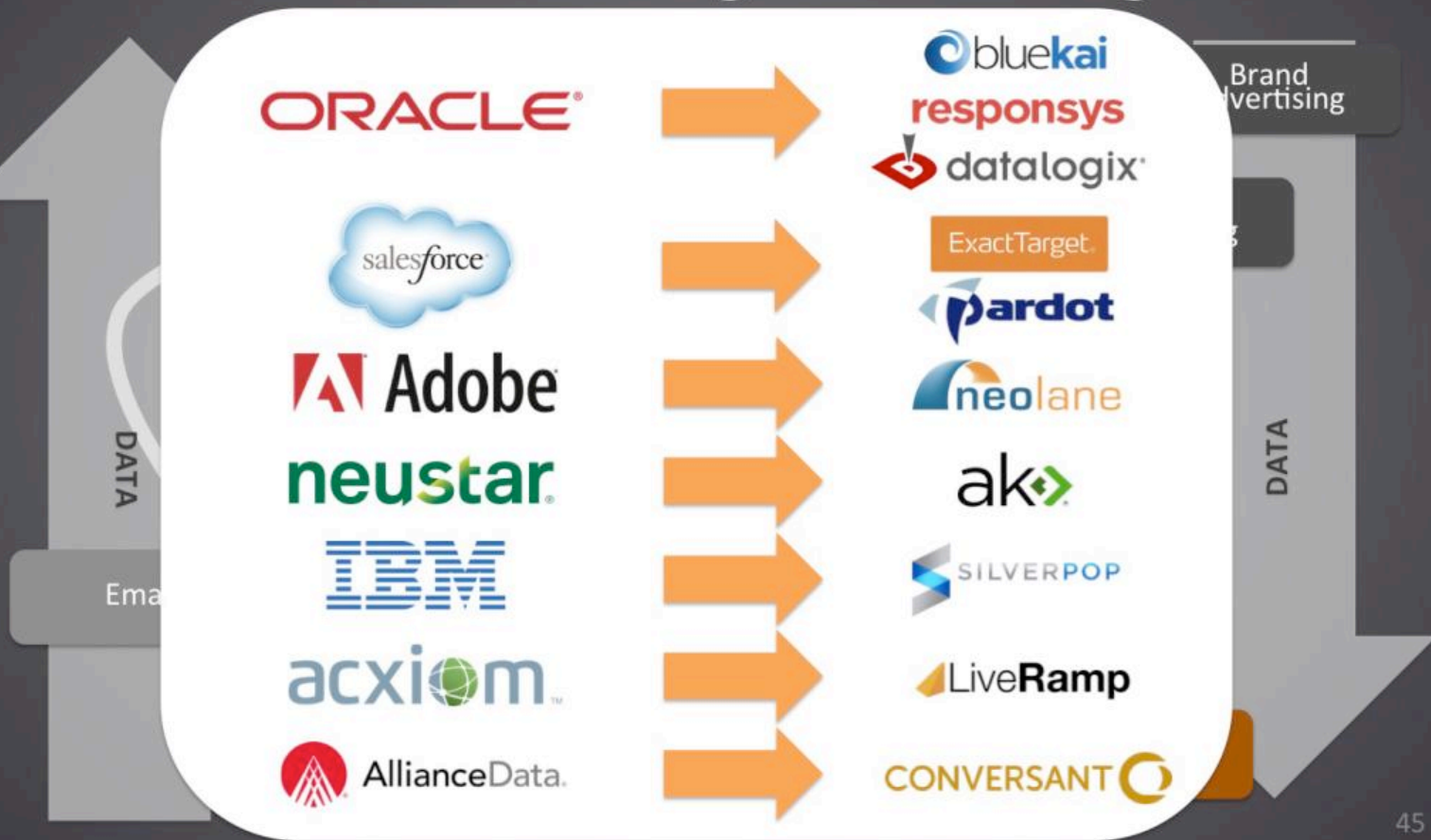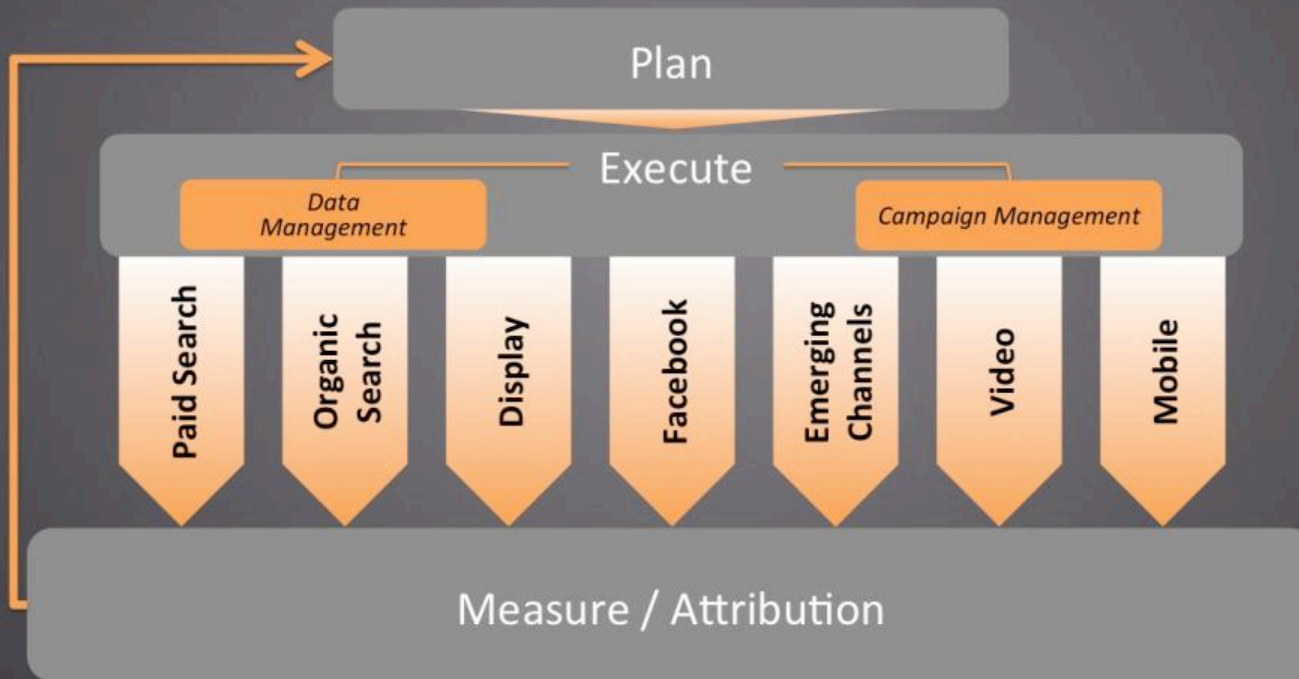
Software firms are using M&A to acquire capabilities to complete the marketing – and actually the whole "customer experience" - cycle. For instance, Oracle, with its recent acquisitions, now have "CRM" systems that contain customer data (ATG, Responsys, Siebel), a DMP (Bluekai), online-offline data (Datalogix) and customer support (RightNow). While they do not have consumer logged-in information, they have systems that can enable enterprises to utilize both CRM and cookie-based information for "customer experience" solutions.

Digital Advertising: "The Dream" *(crossed out)*

E-Commerce: "Omnichannel"

Plan

Execute

Data Management

Campaign Management

Paid Search | Organic Search | Display | Facebook | Emerging Channels | Video | Mobile

Measure / Attribution

LUMA partners

*Coming back to the Digital Advertising "Dream," there is actually one segment where this is becoming a reality: E-Commerce. E-Commerce is unique in that digital advertising is much more closely coupled with the actual sale. Additionally, especially for companies with a large number of SKUs, personalization is becoming much more critical to their success. Therefore, much tighter integration of execution channels with a common personalization "hub" is required.*
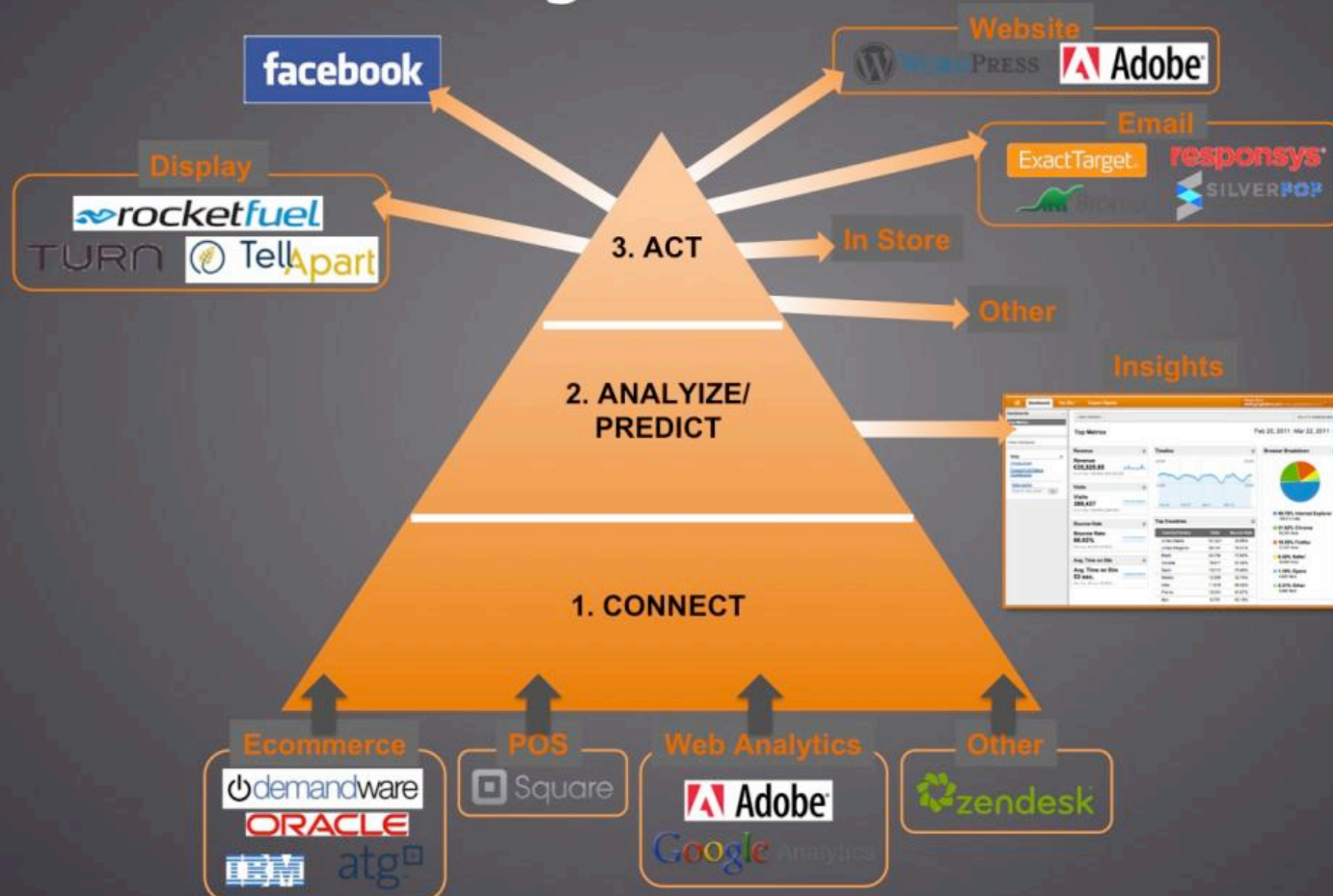
*We have observed that there is a new category emerging that we call "predictive marketing." These systems have three main capabilities: 1) connecting different data systems (but always customer databases and web browsing data), 2) predictive analytics, and 3) the ability to push personalized recommendations/content to various execution channels (email, advertising, websites, in-store). These predictive marketing systems tie together execution channels with 1:1 personalized messages, and enable true "omni-channel" execution.*

# Omnichannel & the Predictive Marketing Platform
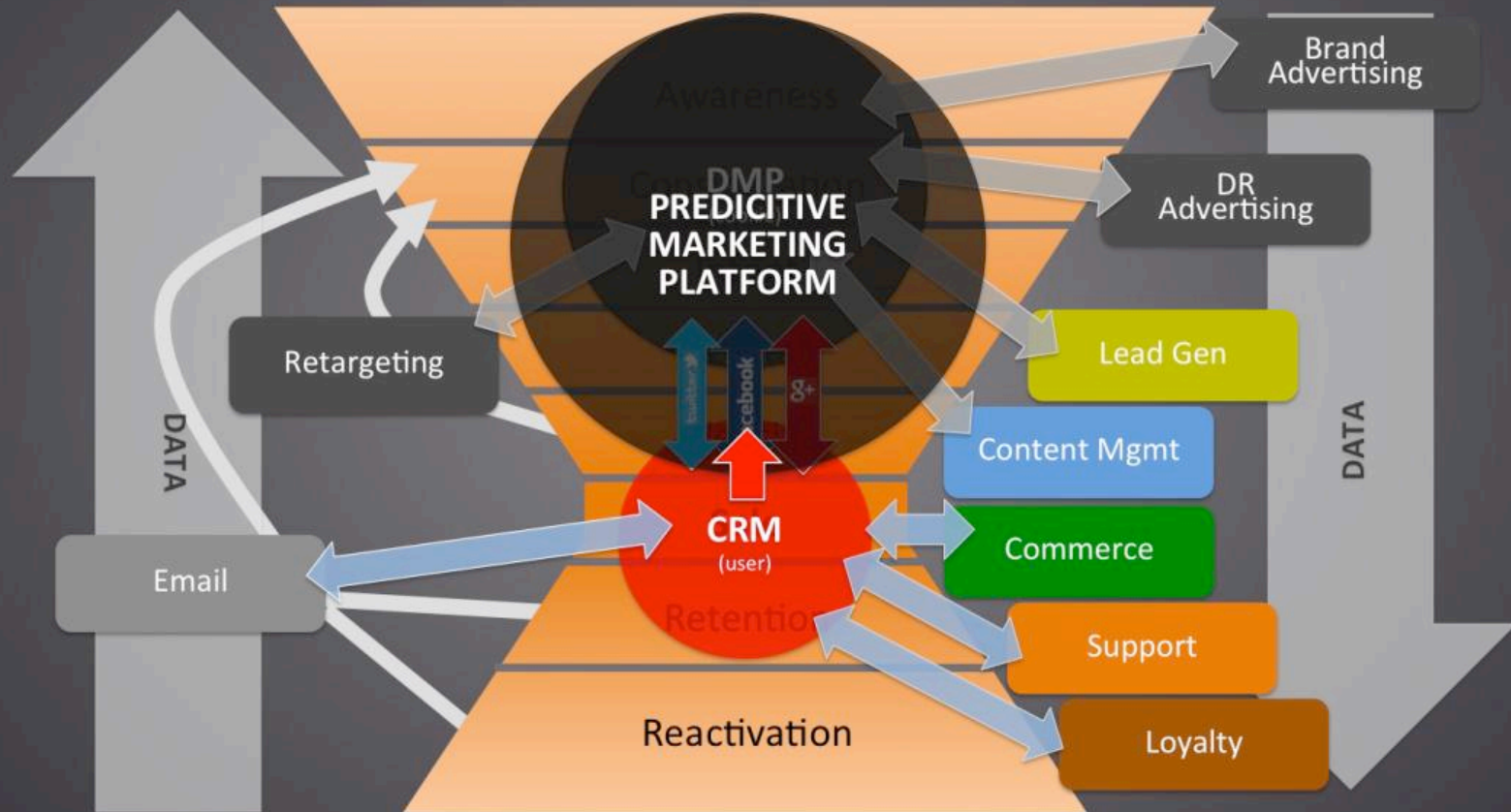
*We previously described how DMPs are a critical element for digital marketing. However, while DMPs are excellent for segment-based analysis/execution, they typically don't enable the 1:1 targeting necessary for E-Commerce. Therefore, where 1:1 personalization is necessary, we see the predictive marketing platforms emerging as the core data management and personalization system to coordinate interactions with consumers across the various channels.*

# Agenda

1. Intersection of AdTech & MarTech

2. Significant Industry Trends
    i. Mobile
    ii. Convergent Video
    iii. Omni-Channel

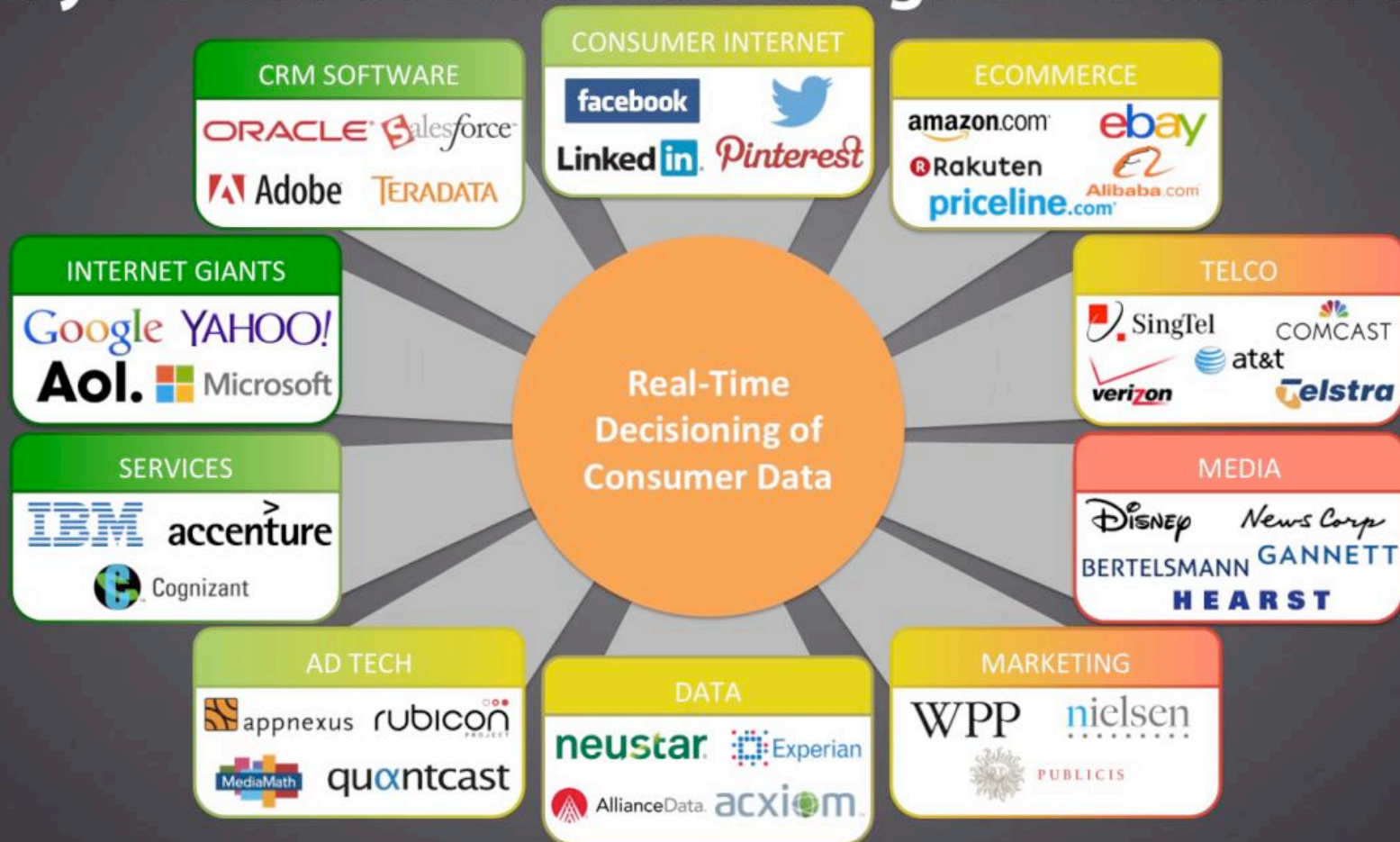3. Future of Ecosystem

LUMA
*partners*

**WARNING:** All LUMA presentations conclude with more M&A!

*As investment bankers who specialize on intermediating M&A discussions, we could be accused of having a biased view on the prospects for M&A activity. After all, when you're a hammer, everything looks like a nail! However, we believe that on an objective basis, it is clear that more deal activity will result from this rapidly evolving ecosystem.*

# Everyone's After Real-time Insights & Decisioning

*"The Future of the Ecosystem"… was actually already covered in the prior slides. We are going to experience significant changes in digital marketing in all the areas discussed. If you had to boil it down to one thing, the market is moving to capabilities that enable real-time decisioning of consumer data.*
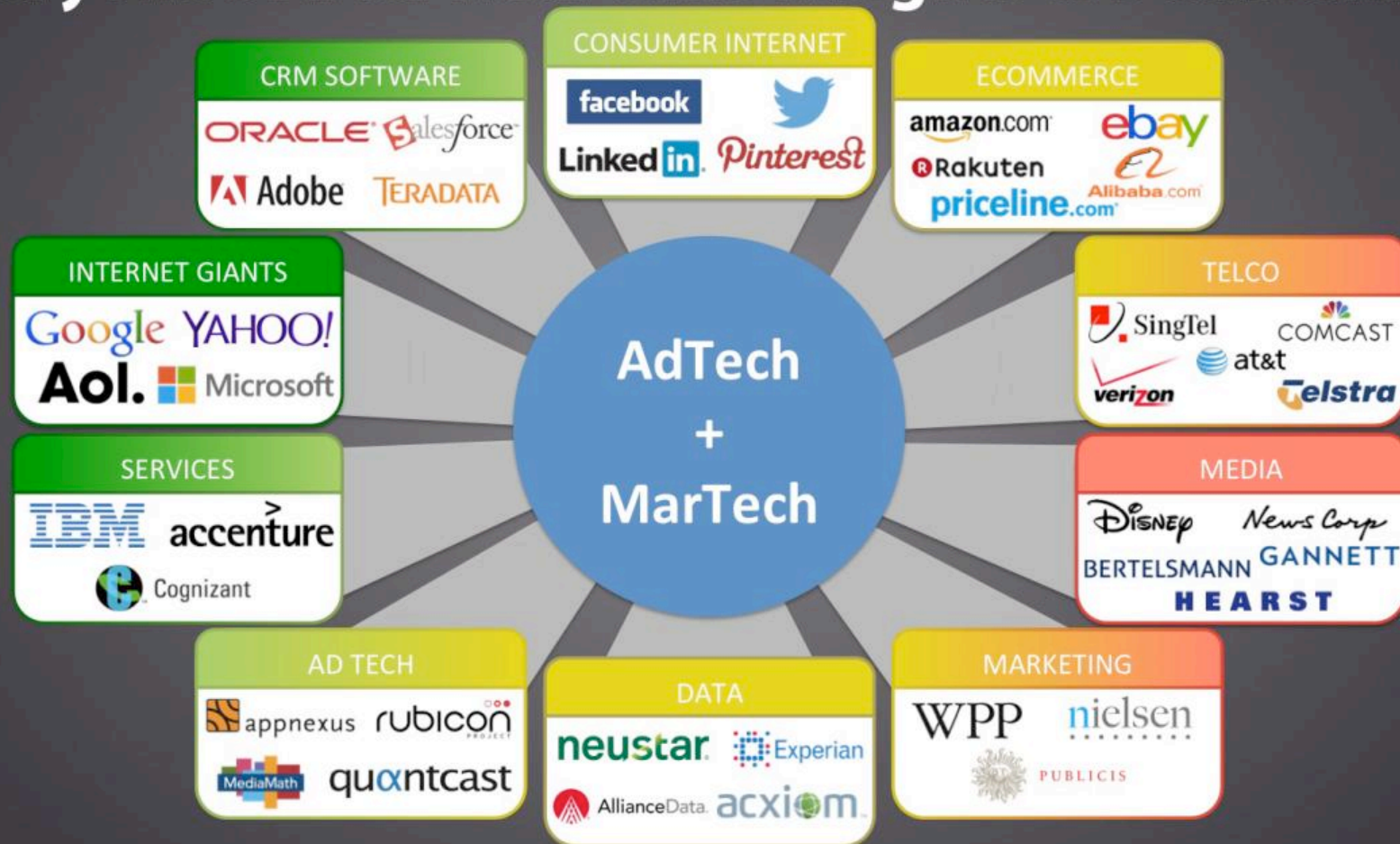
*And the systems powering AdTech and MarTech are at the center of this trend. Acquirers across many categories new to digital media and marketing have emerged as buyers of AdTech and MarTech companies. So a very robust M&A market is certain to continue in the years to come!*