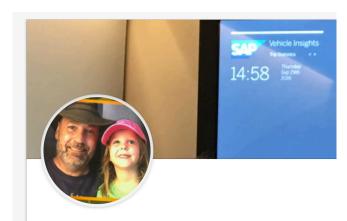


Fully Connected: Enabling the Modern Data Ecosystem





Today's Presenters



Eric Kavanagh eGov Consultant at United Nations Wimberley, Texas



Craig Chaplin • 1st
Senior Product Manager at Magnitude Software
Vancouver, Canada Area

salesforce



marketo



Marketo was founded in 2006 by B2C marketing software executives who previously helped transform marketing at Epiphany. They started Marketo with a mission to change the way marketing and sales teams collaborate throughout the revenue cycle by realigning the impact of B2B marketing automation and sales effectiveness solutions on revenue growth.

Salesforce.com was founded in March 1999 by former Oracle executive Marc Benioff along with Parker Harris, Dave Moellenhoff, and Frank Dominguez. Harris, Moellenhoff and Dominguez, three software developers previously at Clarify, wrote the initial sales force automation software.



https://www.marketingautomationinsider.com/marketo-vs-salesforce/



Marketo

CURRENT WEBSITES

22,380

CATEGORY POSITION

#11

MARKET SHARE

1.69%



TECHNOLOGY

Salesforce Marketing Cloud

CURRENT WEBSITES

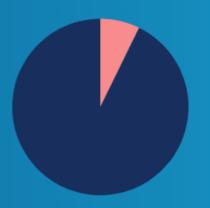
96,103

CATEGORY POSITION

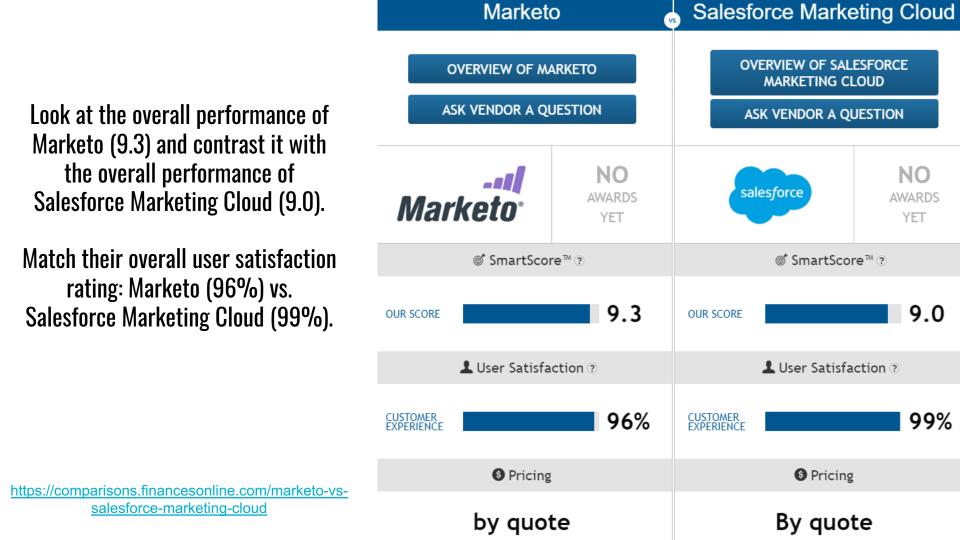
#5

MARKET SHARE

7.25%



https://www.datanyze.com/market-share/marketing-automation/marketo-vs-salesforce-marketing-cloud

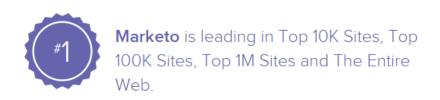


Marketo vs. Salesforce Marketing Cloud:

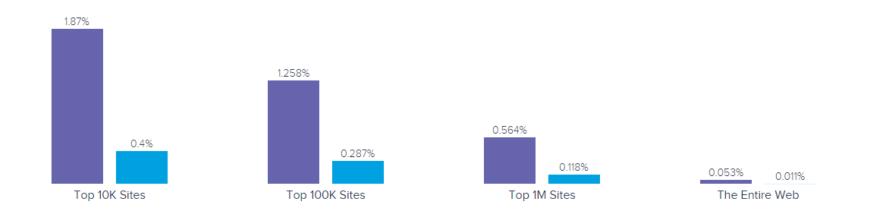
A Comparison of Enterprise Marketing Platforms

One primary difference between Marketo and Salesforce Marketing Cloud is that each was originally designed to meet the needs of different types of marketers. Marketo is usually considered a Business to Business (B2B) solution while Marketing Cloud is positioned more like a Business to Consumer (B2C) platform.

Market Share by Top Websites



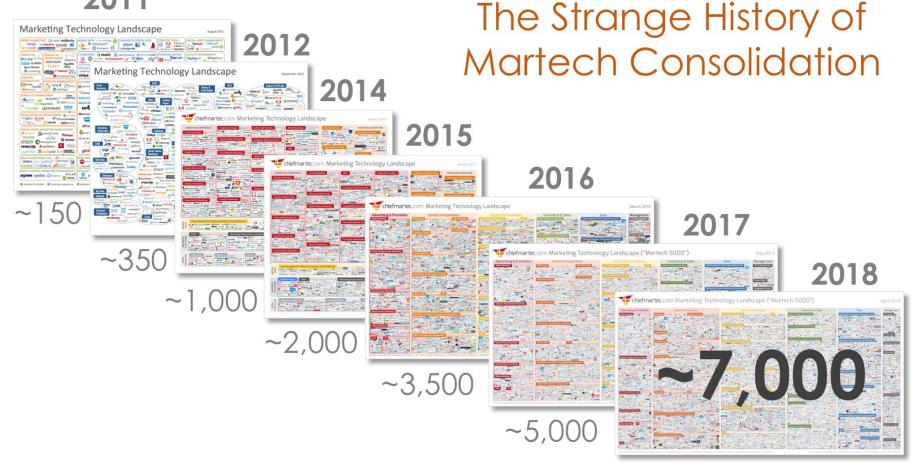




https://www.similartech.com/compare/marketo-vs-salesforce-marketing-cloud



What about getting data out of these platforms?

Legacy data models make this a bit tricky! 

microsoft azure



amazon web services

Amazon Web Services: The first of the three on the market, they have the widest offering of products and services and saw \$25.7 billion in revenue in 2018. Amazon has dominated the cloud computing market for the past decade and their cloud experience is second to none.





Microsoft Azure: Microsoft's key advantage is that many businesses already use their services (Office, SharePoint, Windows/SQL Server, etc). This familiarity and compatibility make Microsoft Azure a very attractive option for companies with a pre-existing reliance on Microsoft products. They have posted \$23.2 billion in commercial cloud revenue in their 2018 annual report.

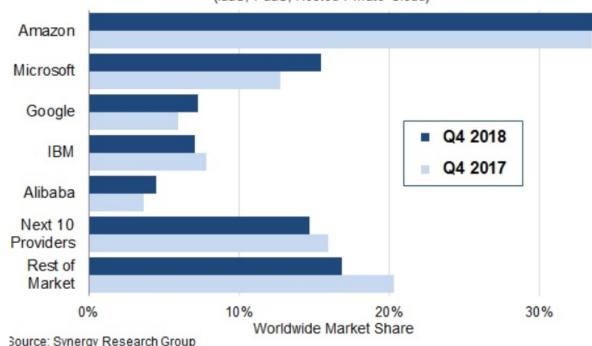
As the leading public cloud platforms, Azure and AWS each offer businesses a broad and deep set of capabilities with global coverage. Yet many organizations choose to use both platforms together for greater choice and flexibility, as well as to spread their risk and dependencies with a multicloud approach.



https://docs.microsoft.com/enus/azure/architecture/awsprofessional/services

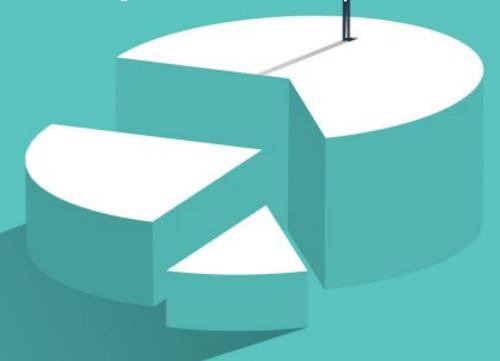


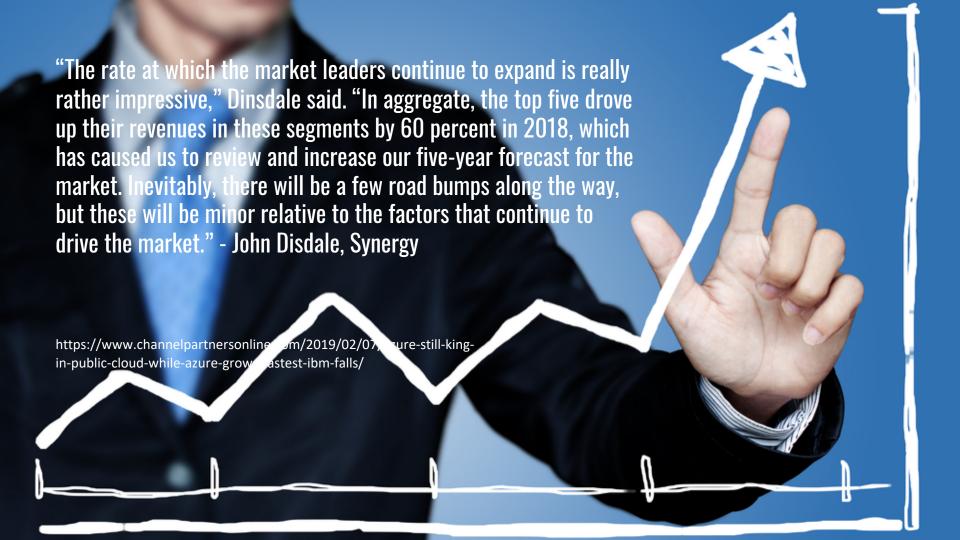
(laaS, PaaS, Hosted Private Cloud)



Cloud Market Q3 Snapshot: **Azure Is Fastest, But AWS Is Biggest**

https://awsinsider.net/articles/2018/11/01/az ure-fastest-but-aws-biggest.aspx In terms of revenue, Amazon Web Services dominates the public cloud market with revenue growing at 49% in Q2 of 2018. In its most recent earnings statement for Q2 of 2018, AWS reported revenues of \$6.1 billion. While Microsoft Azure is gradually catching up to Amazon, it, along with Google Cloud Platform, lags behind AWS in market penetration and adoption.







MAGNITUDE

Fully Connected, Enabling the Modern Data Ecosystem

April 23, 2019

Craig Chaplin

Agenda

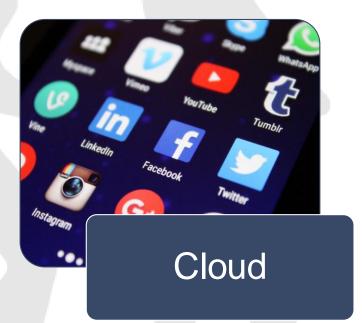
- Evolution from homogeneous on-premise applications to heterogeneous onpremise and cloud deployments
 - Homogeneous deployments
 - Heterogeneous deployments
 - Cloud deployments
- Deployment Patterns
 - In place real time access
 - On premise DW
 - Cloud DW
 - Hybrid DW Deployments
- What pattern is best for me?



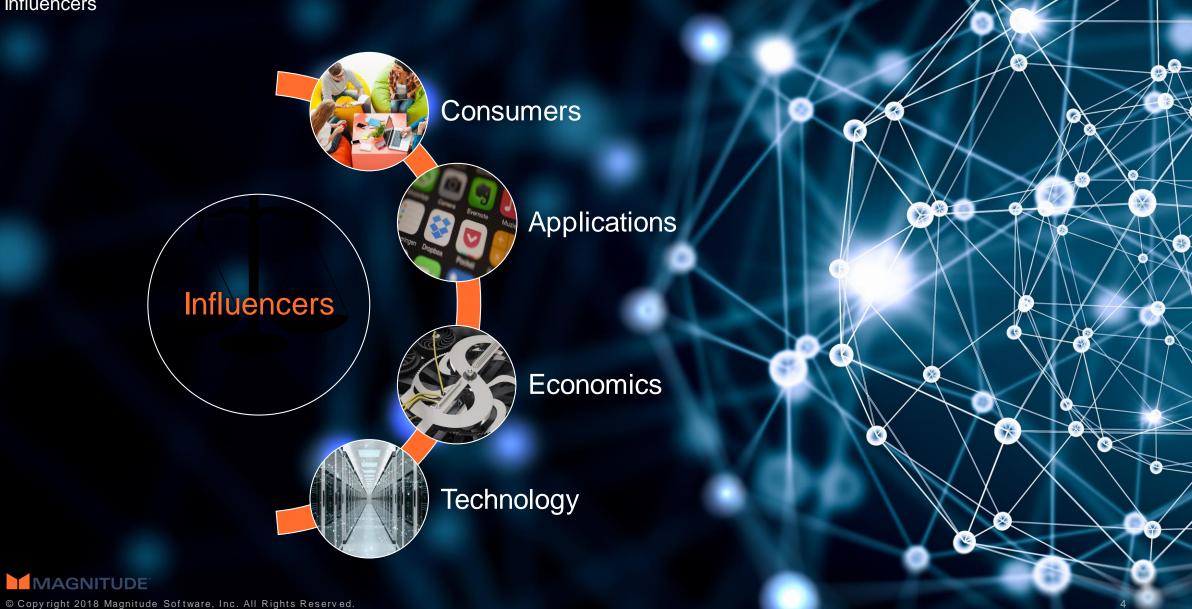
Homogeneous on-premise to heterogeneous on-premise and cloud deployments







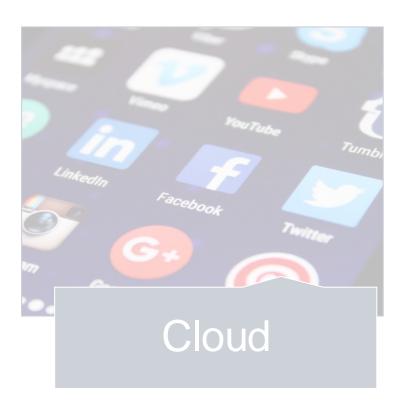
Influencers



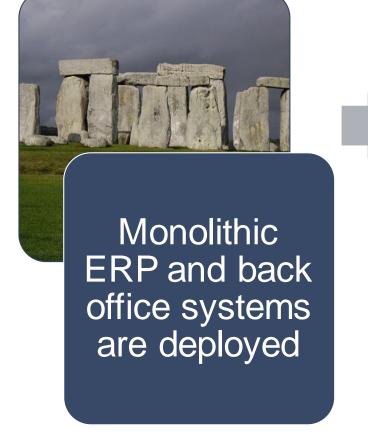
Homogeneous on-premise deployments







Homogeneous Applications and Data



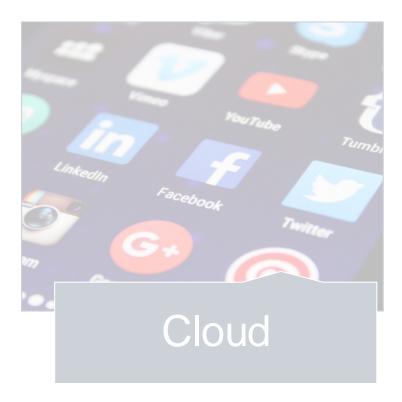




Heterogeneous on-premise deployments







Heterogeneous Applications and Data

The Wild West of Application and Data Deployments

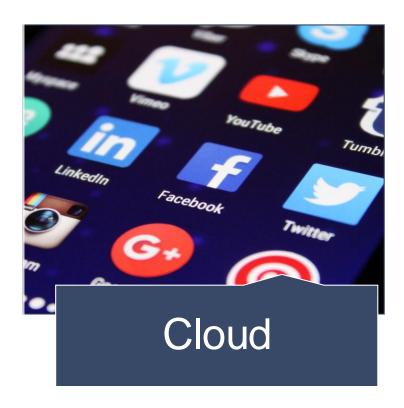
- Best of breed point solutions introduced into an organization
- Dependency on IT support decreases for analysis but... increases for application support
- Data proliferation accelerates as do the number of users accessing the data
- Datawarehouse solutions become exponentially larger and more complicated



Cloud deployments



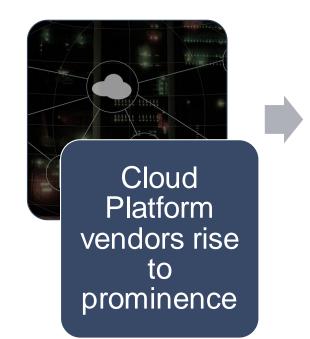




Cloud Applications and Data









Evolution is a process, not an event.

- Homogeneous deployments still exist (and thrive)
- Cloud deployments are pushing boundaries
- The reality for most companies is somewhere in between





So here we are...

Was what we had before *really* that bad?

- Data resides both on premise and in the cloud
- Sources of data include ERP systems, best of breed applications for horizontal and vertical lines of business, data warehouses
- Failure to govern who can access what data in each of these systems can be costly due to data privacy requirements
- Data warehouse strategies are complicated by ever increasing data volumes as well as the challenges extracting data from cloud applications





In Place Real-time access

Advantages

- Real time data access
- Transient data that has minimal historic value
- Semi-unstructured data with schemas that change frequently
- Application security controls and business logic applied natively
- No costly setup and maintenance of a data warehouse infrastructure

- Usually constrained to small discrete data sets due to system impact
- Increased complexity and performance impact when combining with other data sources
- Cloud application monetization schemes can make query and analysis operations costly
- Consumer to data store connectivity
 possibly many to many

On Premise Data Warehouse

Advantages

- Data store optimized for querying and analysis
- Transient data can be archived
- Semi-unstructured data can be normalized
- Additional sources of data can be ingested
- Cloud application query costs lowered through reduced "extract" operations
- Connectivity of many users to a single data store

- Timeliness of data
- Application security controls and business logic may need to be replicated
- Capex setup and maintenance of a data warehouse infrastructure
- Connectivity management of many sources of extraction



Cloud Data Warehouse

Advantages

- Opex setup and maintenance of a data warehouse infrastructure
- Cloud sources are easily ingested and/or referenced
- Data store size is not limited by on premise resources
- Data warehouse hardware managed and updated as part of PaaS

- Timeliness of data
- Application security controls and business logic may need to be replicated
- Complexity of extracting and loading from on premise data to the Cloud
- Connectivity management of many sources of extraction



Hybrid Data Warehouse

Advantages

- Align with application deployment plans
- Separation of concerns on premise vs. cloud sources
- Data store size is not limited by on premise resources
- Data warehouse hardware managed and updated as part of PaaS

- Timeliness of data
- Application security controls and business logic may need to be replicated
- Complexity of extracting and loading from on premise data to the Cloud
- Connectivity management of many sources of extraction

So where do we go from here?

As with all other technology – there is no one size fits all

- When determining where data should reside, ask these questions:
 - How timely does the data need to be?
 - What type of data and size of data volumes will I need to persist in my data store?
 - What sort of security, business logic, and compliance controls need to be in place for this data?
 - Is extracting data from a cloud source prohibitively expensive to do in an ad hoc manner?
 - Do I have the IT infrastructure and budget to manage an on-premise data warehouse deployment or does some of that cost need to be mitigated using PaaS?
 - Is the necessary connectivity to all my data sources available for extraction purposes and how will I manage that connectivity?