KANSEN VOOR MARKETING OM SNEL EN SLIM TE ANALYSEREN EN TE ACTIVEREN

Jan Hendrik Fleury
DDMA & Crystalloids

CRYSTALLOIDS + VISION

TECHNOLOGY

- Technology stack
- Data by design
- Information modeling

PEOPLE

- Ownership data
- Working with IT
- Knowledge and skills

PROCESS

- Scrum/Agile + DataOps
- Privacy & Security
- Automated monitoring

8 TAKE AWAYS

crystalloids

We apply cutting-edge cloud and marketing technology. We are seasoned data specialists with experience in big data, cloud, machine learning and scalable architectures. Combined with our in-depth marketing knowledge we are making the difference.
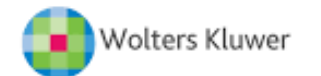
Data

Decision Making

Engagement

It's hard to make a decision if you don't have the whole and truthful picture

OUR CUSTOMERS

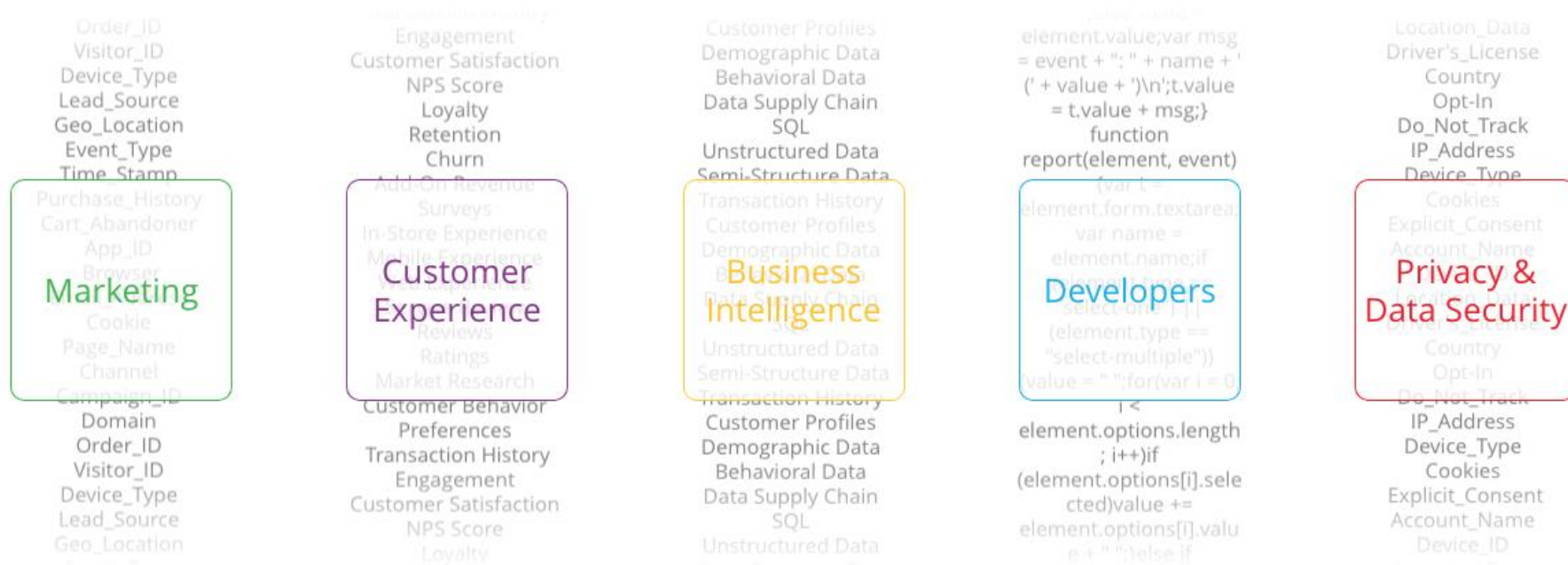# PLATFORM AND DATA INTEGRATION KEEPS A CHALLENGE…

Company Data & Systems

Marketers on average are using
4.9 platforms to execute a single campaign

In addition, large amounts of marketing & customer
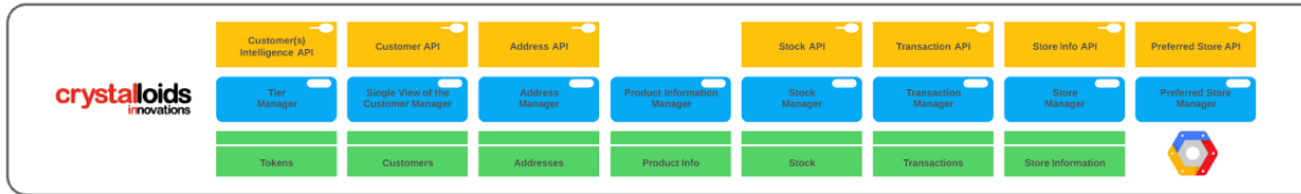signals live in data stores in the enterprise
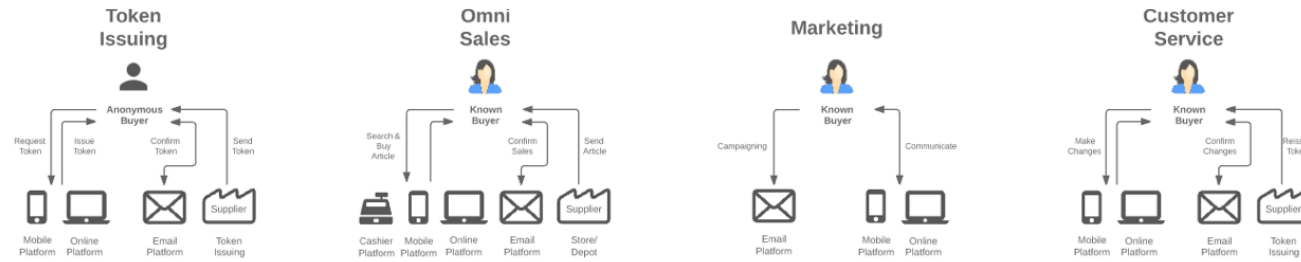
…SO DON'T PERSIST YOUR DATA IN THESE APPLICATIONS

DATA MUST BE CENTRALIZED…

…AND MADE AVAILABLE SO ACTIVITY IN ONE CHANNEL CAN IMMEDIATELY SUPPORT ENGAGEMENT IN ANOTHER CHANNEL

VISION

Curious

Demanding

Impatient

LET MARKETING MANAGE CUSTOMER DATA

VISION

Marketing Responsibilities

■ leaders   ■ mainstream

	leaders	mainstream
customer data operations	44%	25%
governance and compliance	42%	20%
data security	29%	11%
data schemas, metadata, etc.	27%	14%
marketing automation rules	48%	38%
customer insight	47%	48%
measureme and optimize	42%	48%
customer data acquisition	38%	32%

Source: Econsultancy, The Customer Data Imperative, 2018

DRIVERS FOR MARKETING AT THE STEERING WHEEL

VISION

TECHNOLOGY

- 10x cost reductions
- Maturity SAAS and PAAS
- Easier integrations
- Growing ease of use
- Now is the time ☺

BUSINESS AND CUSTOMER JOURNEY

- Customer centricity is imperative
- Business information at fingertips
- Truthful data and information

COMPLIANCY

- Store customer data only once (GDPR)
- Customer in control as part of journey
- Encrypted and aggregated

EASIER TRANSFER SERVICES AND INTEGRATIONS

Merchant Center Connector for product and product diagnostics data
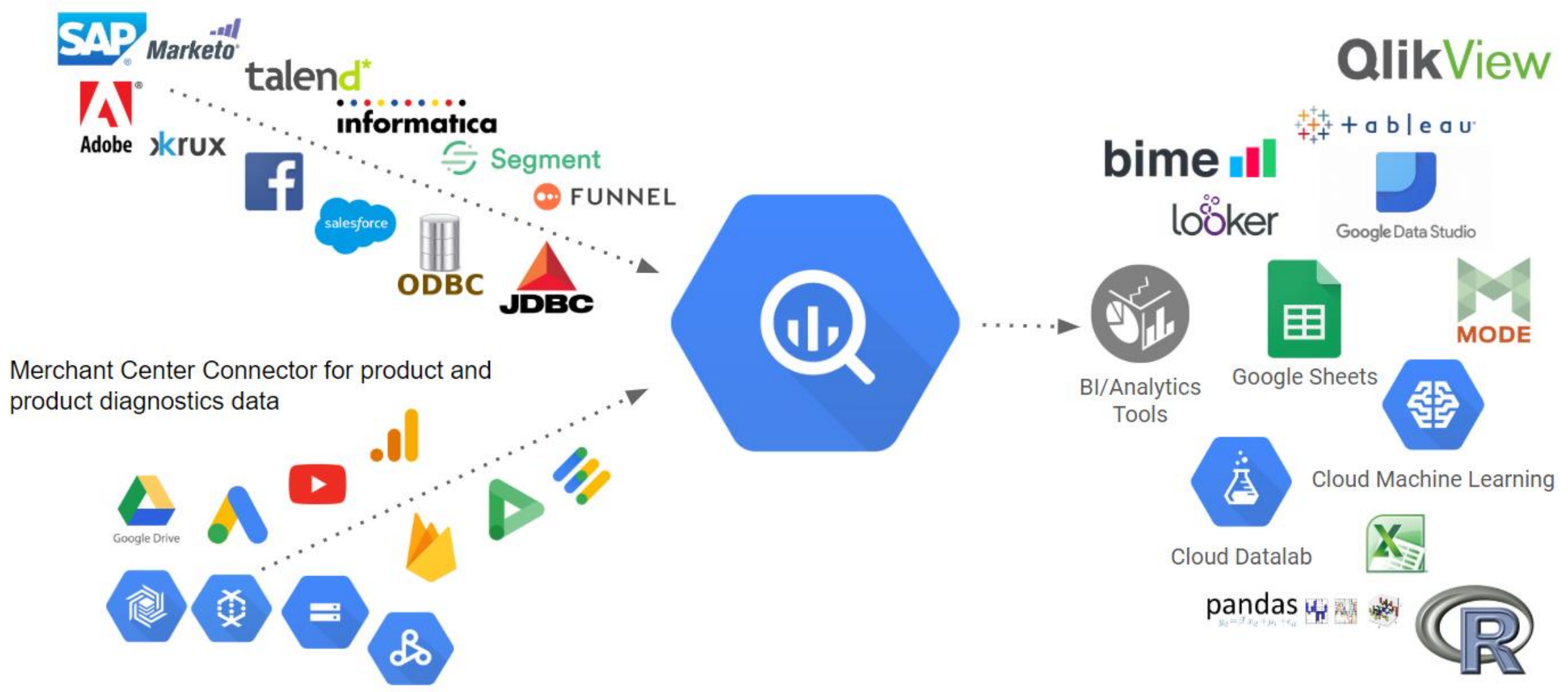
7 WAYS CLAIMING CENTRALIZED VIEW

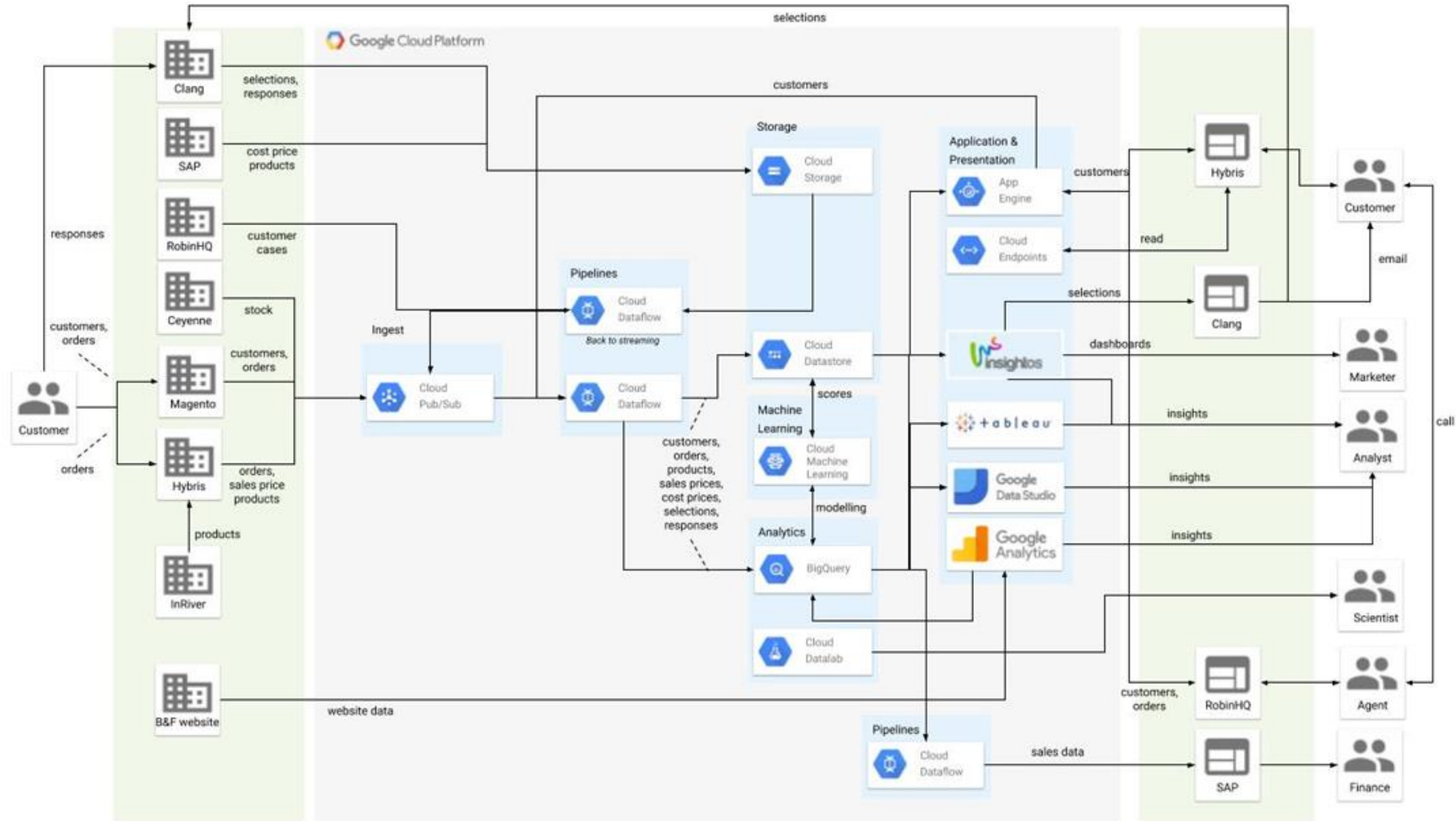|	Analytical DWH	Headless transactional CDP / PAAS	Packaged CDP / SAAS	DMP	CRM / marketing automation	Marketing cloud
Example brands	Google Cloud Platform SAP AWS	Google Cloud Platform MS Azure AWS	NG Data Nominow SAS CI360	Relay42 Adobe audience manager	Selligent Clang	SalesForce Adobe

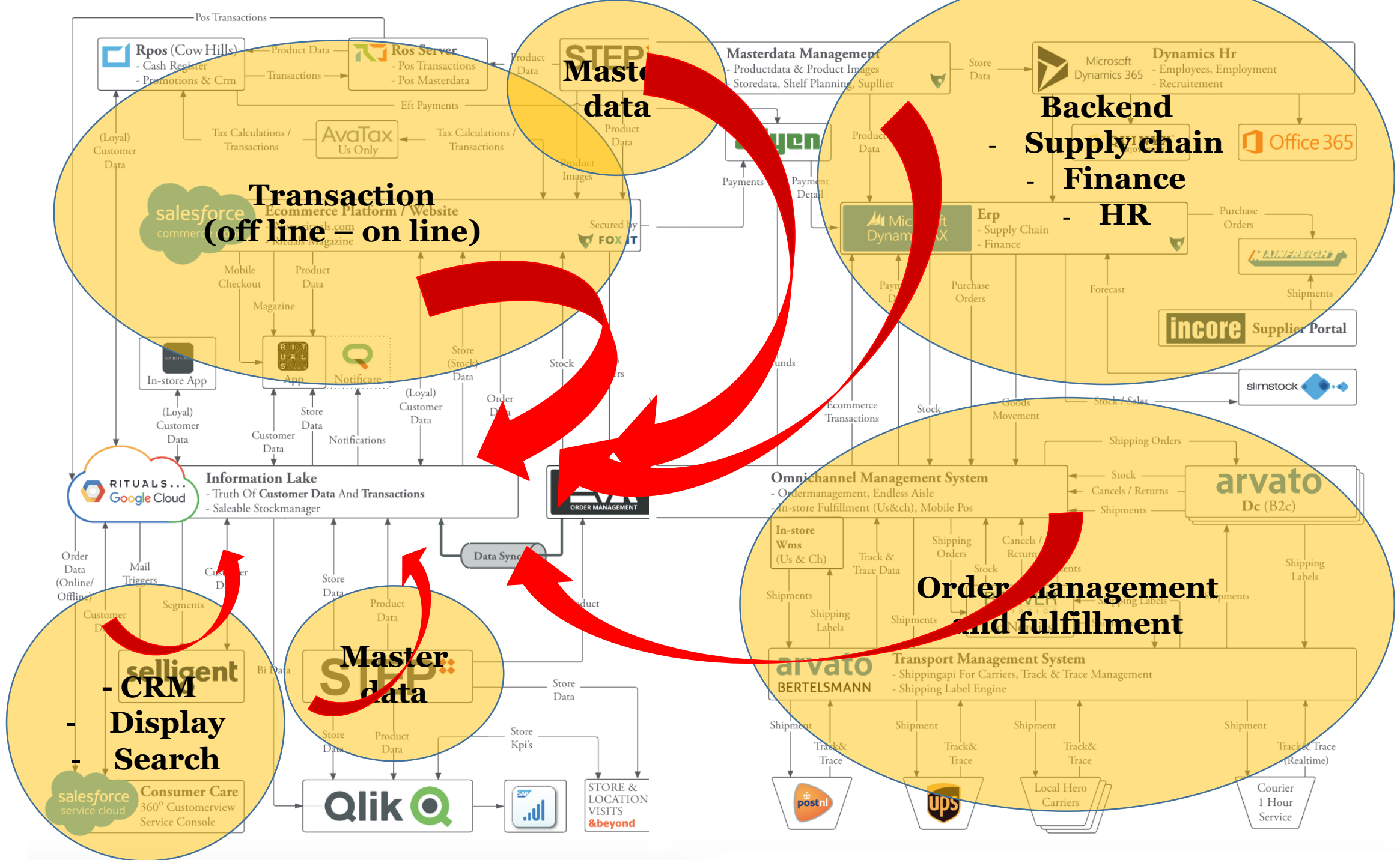# HIGH LEVEL COMPARISON CENTRALIZED DATA OPTIONS

TECHNOLOGY

	Analytical DWH	Headless transactional CDP / PAAS	Packaged CDP / SAAS	DMP	CRM / marketing automation	Marketing cloud
Packaged						
True central view potential						
Customizable						
Persistent						
Unified data						
Open access						
Application vendor lock-in						
Need change existing Martech						
Decisions & delivery						
Realtime						

COMPARISON HEADLESS/DATA AND PACKAGED CDP

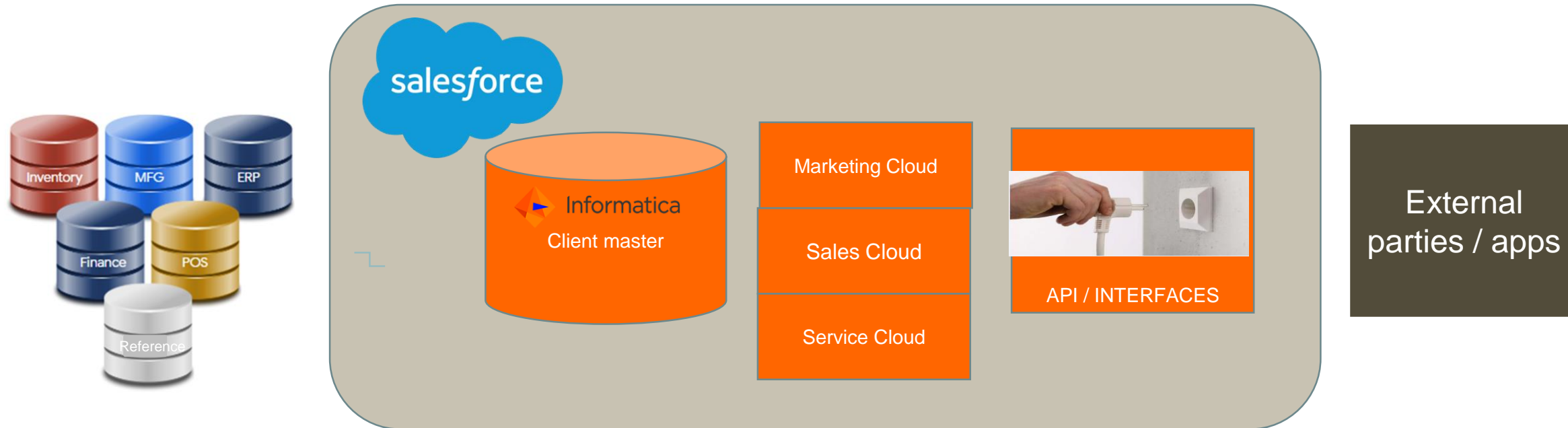| Packaged	Unpackaged
Sources include un- and semi structured data	Sources include un- and semi structured data
Multiple source and execution systems	Multiple source and execution systems
Spend more time on requirements analysis	Spend less time on requirements analysis
If standard functionality will do, faster implementation	You want standard and bespoke functionality
Central view in packaged CDP, not in central data lake	You want to solve central view once and for all
Code and also codeless UI	Code; you want to work with IT and engineers

EXAMPLE HEADLESS DATA CDP

EXAMPLE MARKETING CLOUD

TECHNOLOGY

Inventory
MFG
ERP
Finance
POS
Reference

salesforce

Informatica
Client master

Marketing Cloud

Sales Cloud

Service Cloud

API / INTERFACES

External parties / apps

- High budget due to type of licensing model
- Maximum use of integrations
- Lack of engineering skills or don't want to hire these
- Need for speed
- You are not afraid of vendor lock-in
- You are open to end best of breed marketing applications

COMPARISON DMP AND CDP

	Data Management Platform DMP	Customer Data Management Platform CDP
Key difference	Focuses on creation of anonymous segments and categories that can be used for advertising	Creates a single customer profile that can be used for more than only advertising. Keeps the historical data.
Data types	Uses mostly second and third-party data: - cookies - IP addresses - device IDs	Uses first-party data: - advertising data (e.g. Google Ads, Facebook) - email management systems (e.g. Hubspot, MailChimp) - CRM systems (e.g. Salesforce or MS Dynamics) - test and personalisation solutions (e.g. VWO, Optimizely) - e-commerce systems (e.g. Magento, Shopify) - web analytics data (e.g. Google Analytics)
Customer profile	Temporary customer segments based on anonymous identifiers (cookie, GAID)	Specific customer profiles based on customer identifiers (email, name, address, login)
Purpose	Mostly advertising	Personalisation in marketing (emails, website content, advertising, acquisition marketing, digital targeting)

HIGH LEVEL COMPARISON CENTRALIZED DATA OPTIONS

TECHNOLOGY

	Analytical DWH	Headless transactional CDP / PAAS	Packaged CDP / SAAS	DMP	CRM / marketing automation	Marketing cloud
Packaged	-	+/-	+	+	+	+
True central view potential	+	+	+/-	-	-	+
Customizable	+	+	+/-	+/-	+/-	+/-
Persistent	+	+	+	-	-	+
Unified data	+	+	+	-	-	+
Open access	+	+	+/-	+	+/-	-
Application vendor lock-in	+	+	+/-	+/-	+/-	-
Need change existing Martech	+	+	-	+	+/-	-
Decisions	+	+	+/-	+/-	-	+/-
Delivery	-	+/-	+	+	+	+
UI	+/-	+/-	+	+	+	+

Marketing

Order_ID
Visitor_ID
Device_Type
Lead_Source
Geo_Location
Event_Type
Time_Stamp
Purchase_History
Cart_Abandoner
App_ID
Browser
Cookie
Page_Name
Channel
Campaign_ID
Domain
Order_ID
Visitor_ID
Device_Type
Lead_Source
Geo_Location

Customer Experience

Engagement
Customer Satisfaction
NPS Score
Loyalty
Retention
Churn
Add-On Revenue
Surveys
In-Store Experience
Mobile Experience
Reviews
Ratings
Market Research
Customer Behavior
Preferences
Transaction History
Engagement
Customer Satisfaction
NPS Score
Loyalty

Business Intelligence

Customer Profiles
Demographic Data
Behavioral Data
Data Supply Chain
SQL
Unstructured Data
Semi-Structure Data
Transaction History
Customer Profiles
Demographic Data
Behavioral Data
Data Supply Chain
SQL
Unstructured Data
Semi-Structure Data
Transaction History
Customer Profiles
Demographic Data
Behavioral Data
Data Supply Chain
SQL
Unstructured Data

Developers

element.value;var msg
= event + "; " + name + '
(' + value + ')\n';t.value
= t.value + msg;}
function
report(element, event)
{var t =
element.form.textarea;
var name =
element.name;if
(element.type ==
"select-one" ||
(element.type ==
"select-multiple"))
value = " ";for(var i = 0
; i <
element.options.length
; i++)if
(element.options[i].sele
cted)value +=
element.options[i].valu
e + " ";}else if

Privacy & Data Security

Location_Data
Driver's_License
Country
Opt-In
Do_Not_Track
IP_Address
Device_Type
Cookies
Explicit_Consent
Account_Name
Device_ID
Driver's_License
Country
Opt-In
Do_Not_Track
IP_Address
Device_Type
Cookies
Explicit_Consent
Account_Name
Device_ID

DATA MANAGEMENT BY DESIGN

Avoid problems in managing data

- Lack of standards: no global codes, definitions or data format exists
- Application specific definitions: terms definitions differ across divisions and lines of business
- No single source of truth: unless 'vetted' it is not to be trusted
- No stewardship 'governance' for the problem: system and process workarounds are created
- Difficult to find and understand data: reliance on key knowledge workers
- Awkward route cause analysis: information and data quality issues are time consuming to understand and verify
- No monitoring: you don't know if it is going wrong

Cost of misunderstanding

- Expensive missteps: action is taken, only to find out later that information was wrong or incomplete
- Higher costs: unclear change impact and creation of redundant processes and information
- Slow response: lack of information clarity slows decision processes and agility for mergers and regulatory like Autoriteit Persoonsgegevens
- Productive loss: those who don't understand data burden the few who do
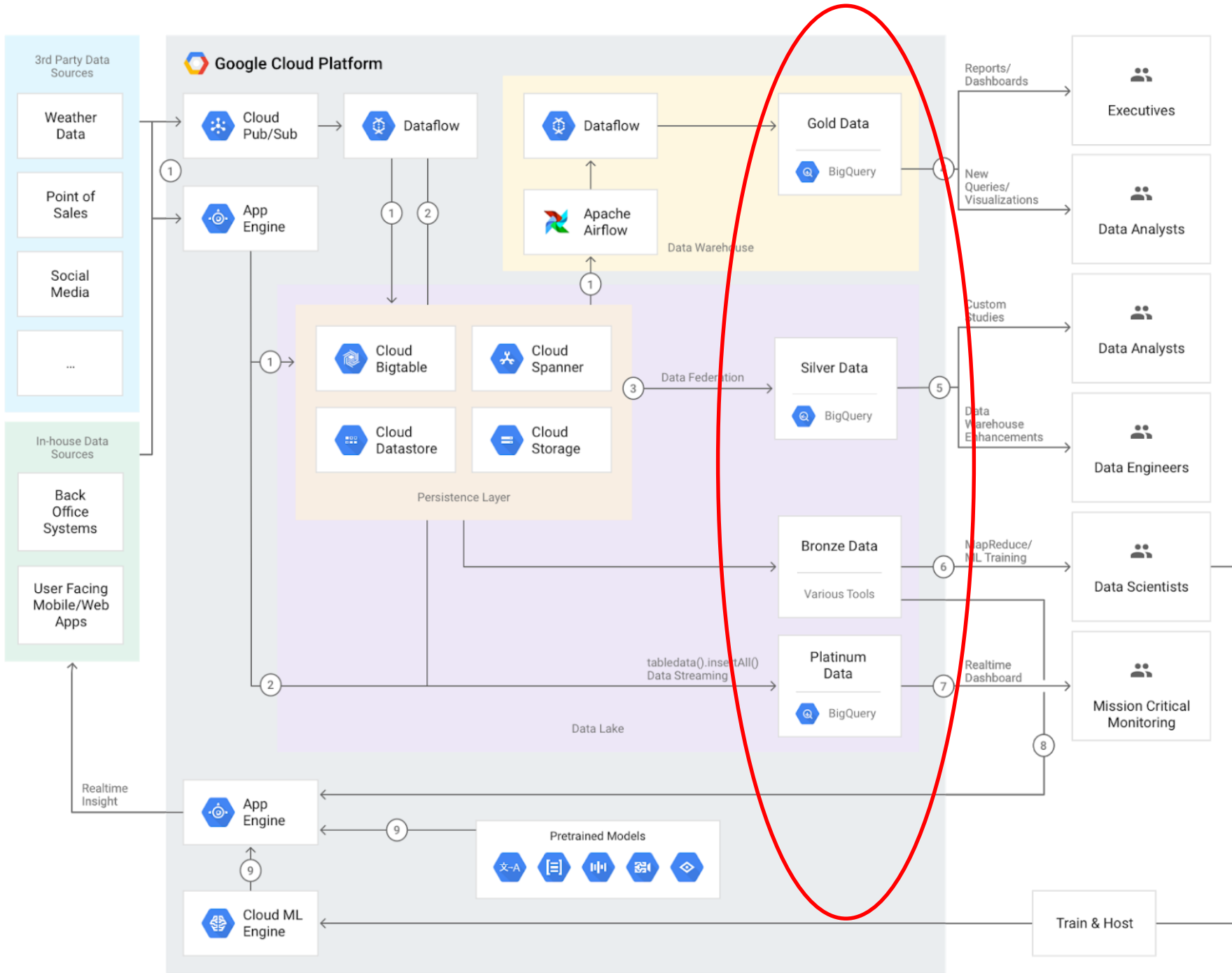
ALWAYS EMBED DATA BY DESIGN

DATA

FACT ORIENTED MODELING

- To create a data model validated by the end user
- To align IT and business
- First step to take in cases where different definitions might occur or have occured

INFORMATION ARCHITECTURE

- Connects people and systems to the information they are looking for
- Establishing data persistence:
  - database design
  - data model
  - reference data

DATA ARCHITECTURE

- Part of enterprise architecture
- Determined on information architecture and application architecture
- Overview of available data and relations:
  - databases
  - data definitions
  - data model
  - data flow diagrams

PEOPLE AND PROCESS
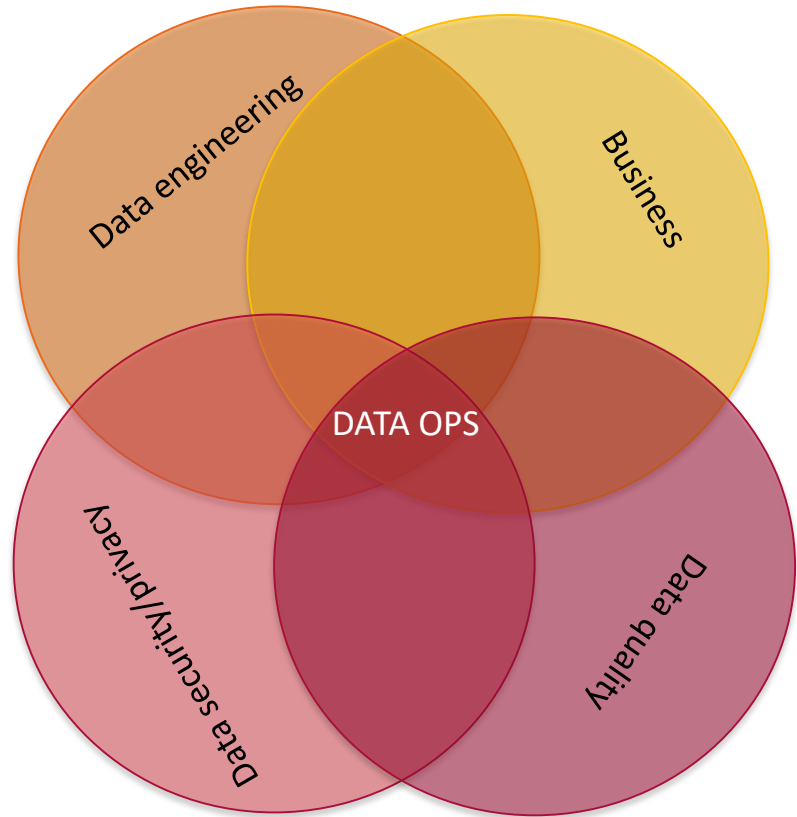# MANAGE SUPPLY AND DEMAND FOR DATA

WHAT
DATA OPS

The alignment of people, process, and technology to enable the rapid, automated, and secure management of data. Goal is to improve outcomes by *bringing together those that need data with those that provide it*, eliminating friction and frustration throughout the data lifecycle.

WHY
DATA OPS

1. Collect and keep digital and non-digital activity is a key capability for enhancing customer interactions
2. Quality customer information fuels realtime decision making and making the interaction more relevant
3. Master Data Management is a critical success factor in constructing these optimal client interaction processes
4. This requires a sound and agile customer information architecture
5. Customer information is not static; new sources, enhancements of current processes and new insights for advanced customer analysis
6. Agility needed for new or enhanced high quality customer information

Resulting in higher quality, more flexibility and faster time-to-market of Advanced Analytics and Marketing Automation

PEOPLE AND PROCESS

Venn diagram with overlapping circles: Data engineering, Business, Data security/privacy, Data quality, with DATA OPS at the center intersection.

Core roles people
- Product owner
- Data Ops team
  - Data engineer
  - Data analist
  - Data scientist
  - Digital marketing
- Scrum master

Ancillary roles
- Stakeholders
- Managers

Process
- Iterative and incremental agile development
- Sprints
- Multi disciplinary
- Self-organizing

Technology
- Monitoring on KPI's
- Monitoring on dataflows
- Data lineage tracking

AUTOMATED MONITORING

TAKE AWAYS

1. Start with thorough mapping of customer and business journey to get clear what you need
2. Always bring the applications to the data and not the other way around
3. Marketing/sales to work closely together with architects, software developers and engineers
4. Work agile adopting DataOps, DevOps and SCRUM Agile
5. Prevent vendor lock-in to stay in control and reduce cost
6. Adopt data by design
7. Adopt privacy and security by design
8. Automated monitoring on dataflows, connectors and cost