Introduction to Salesforce

What we do, how you can be part of it, how we approach a transformation journey

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Lead Solution Engineer

Thank you

Today's Agenda

What is Salesforce?

Salesforce in action!

Be a Trailblazer!

The Salesforce Platform - Under the hood

How do we approach a Transformation Project?

Resources

Today's speakers

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Updated: September 28, 2022

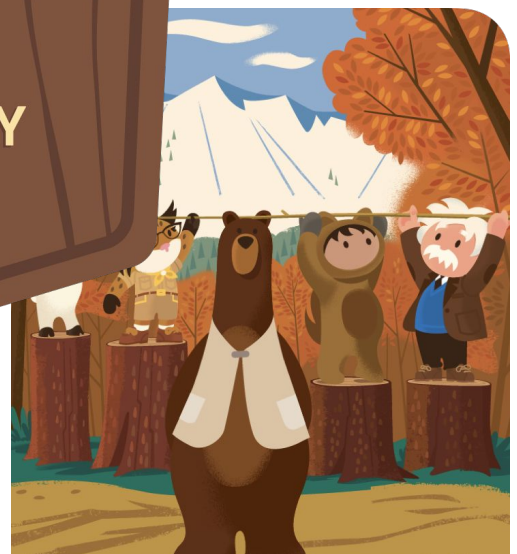
What is Salesforce?

Our Vision

Connect with your customers in a whole new way.

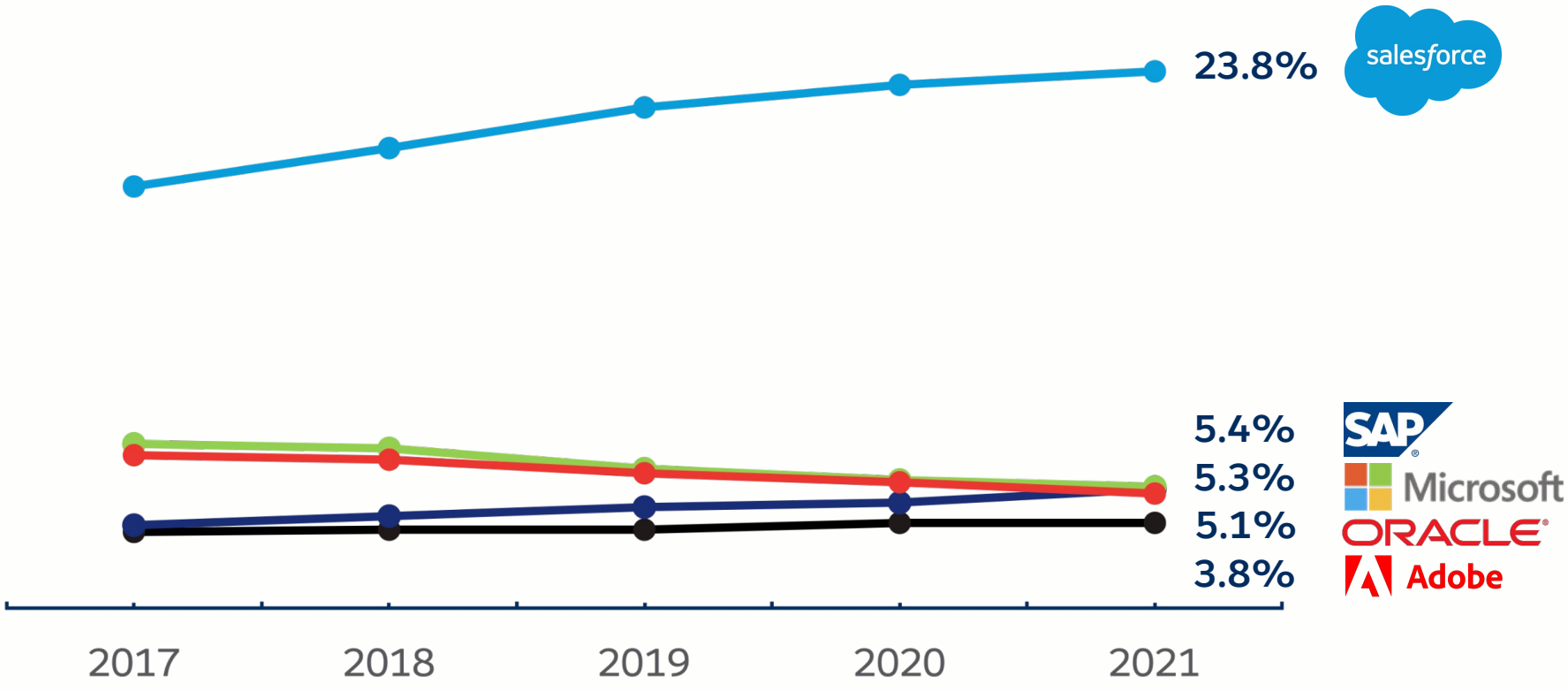
Build a Customer 360.

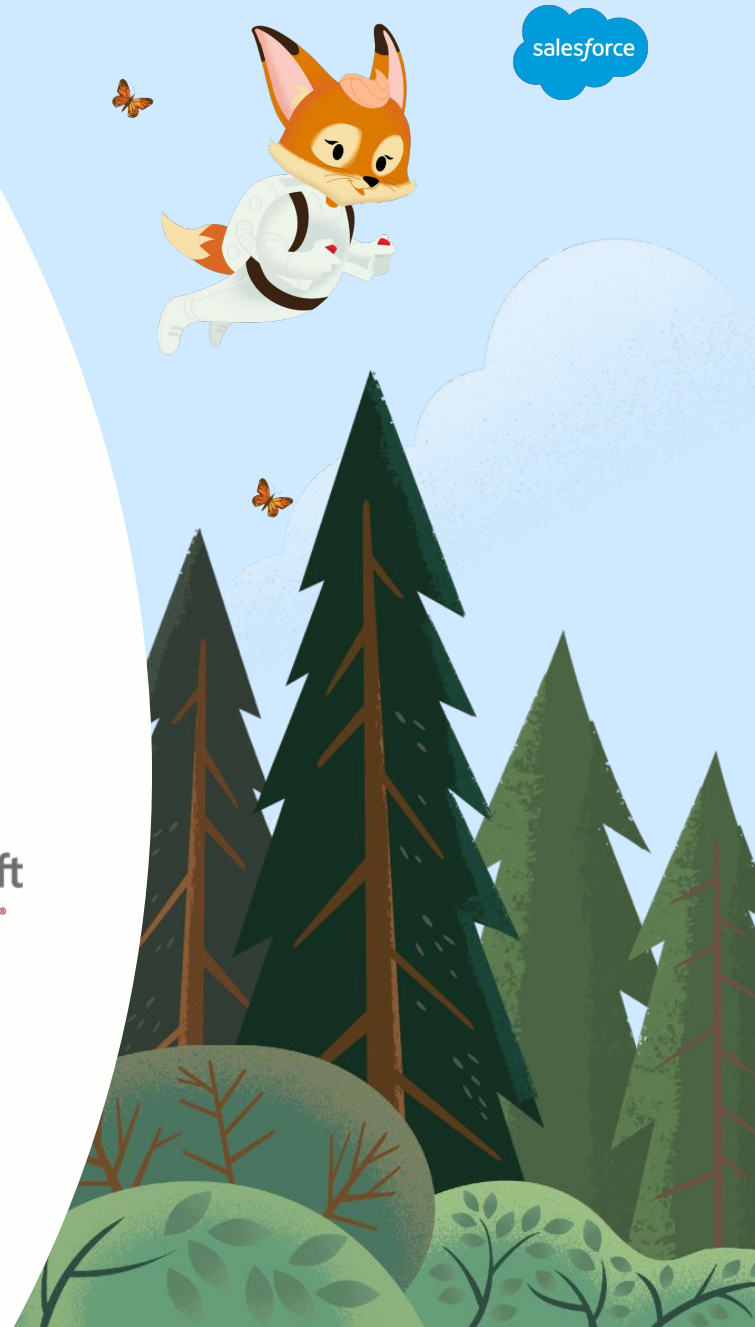
Core Values.
Our North Star.



Salesforce: #1CRM

Ranked #1 for CRM Applications based on IDC 2021 Revenue Market Share Worldwide.





Source: IDC, Worldwide Semiannual Software Tracker, April 2022. CRM market includes the following IDC-defined functional markets: Sales Force Productivity and Management, Marketing Campaign Management, Customer Service, Contact Center, Advertising, and Digital Commerce Applications.

Customer Success, Together

T-Mobile | **93%** fewer clicks in sales process

ADT | **-80%** in person service visits

-25% IT costs

-27% support costs

+28% marketing ROI

+29% revenue

+29% faster time to insight

+30% faster collaboration

World's Largest Enterprise Apps Company

Leader in Philanthropy

Top 100 Companies that Care

6 years in a row

People

Leader in Innovation

#1 Most Innovative Companies

Forbes

Leader in Culture

#1 Best Workplaces

Japan, Argentina, France
Spain, Germany, the UK
& the Netherlands

Great Place To Work.

*High end of FY23 revenue guide of $30.9B to $31.0B

Business is the Greatest Platform for Change

1% Equity

$575M

all-time giving

1% Time

7.2M

volunteer hours

1% Product

50K

nonprofits

Net zero

100% renewable energy

Announcing

$25M

to education

#dfgives

$1.87B

in FY22

Adopt a public school

pledge1percent.org

Join **17K** companies

Source: Annual Product Donation Social Values reviewed by EY, Reported in Stakeholder Impact Report.

Real-Time Customer 360 for Every Industry

Industries

Nonprofit	Communications	Media	Energy & Utilities	Travel & Hospitality	Public Sector
Retail	Manufacturing	Education	Consumer Goods	Healthcare & Life Sciences	Financial Services

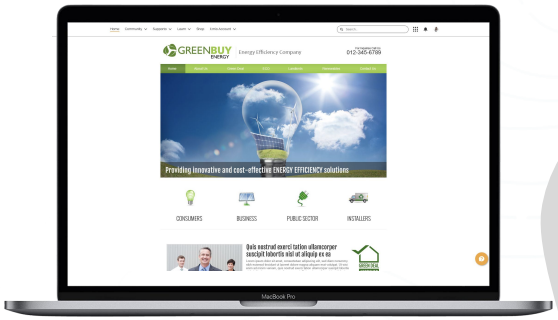
Platform

Real-Time	Streams	Segments	Activations
Intelligent	Personalization	Bots	Predictions
Automated	Workflow	RPA	Integration
Hyperforce	Compliance	Data Residency	Privacy

Salesforce in action!

Customer Connected Experience

Giorgio



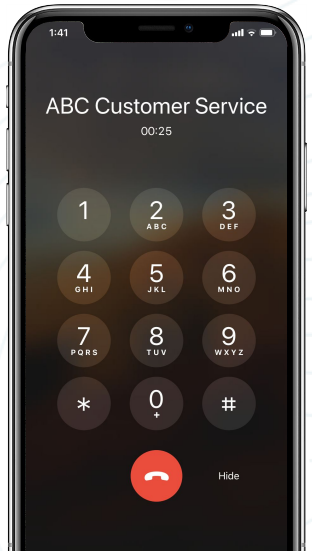
Blackout!

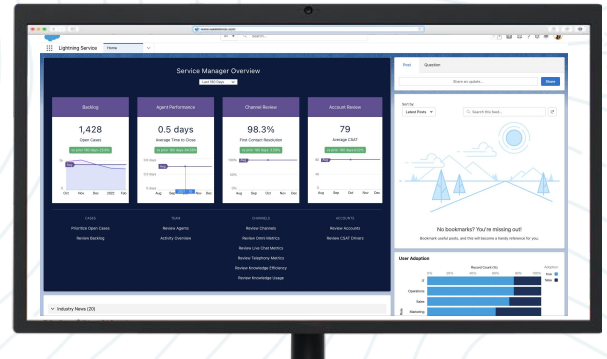
Chat Support

Call to solve the issue

Send the receipt

Confirm and survey





TRAIL KEY

- Interaction
- Journey

Be a Trailblazer!

Trailblazers Are Ready for the Future

/treyl-bley-zer/ noun

(1) a pioneer; an innovator; a lifelong learner; a mover and shaker.

(2) a leader who leaves a path for others to follow.

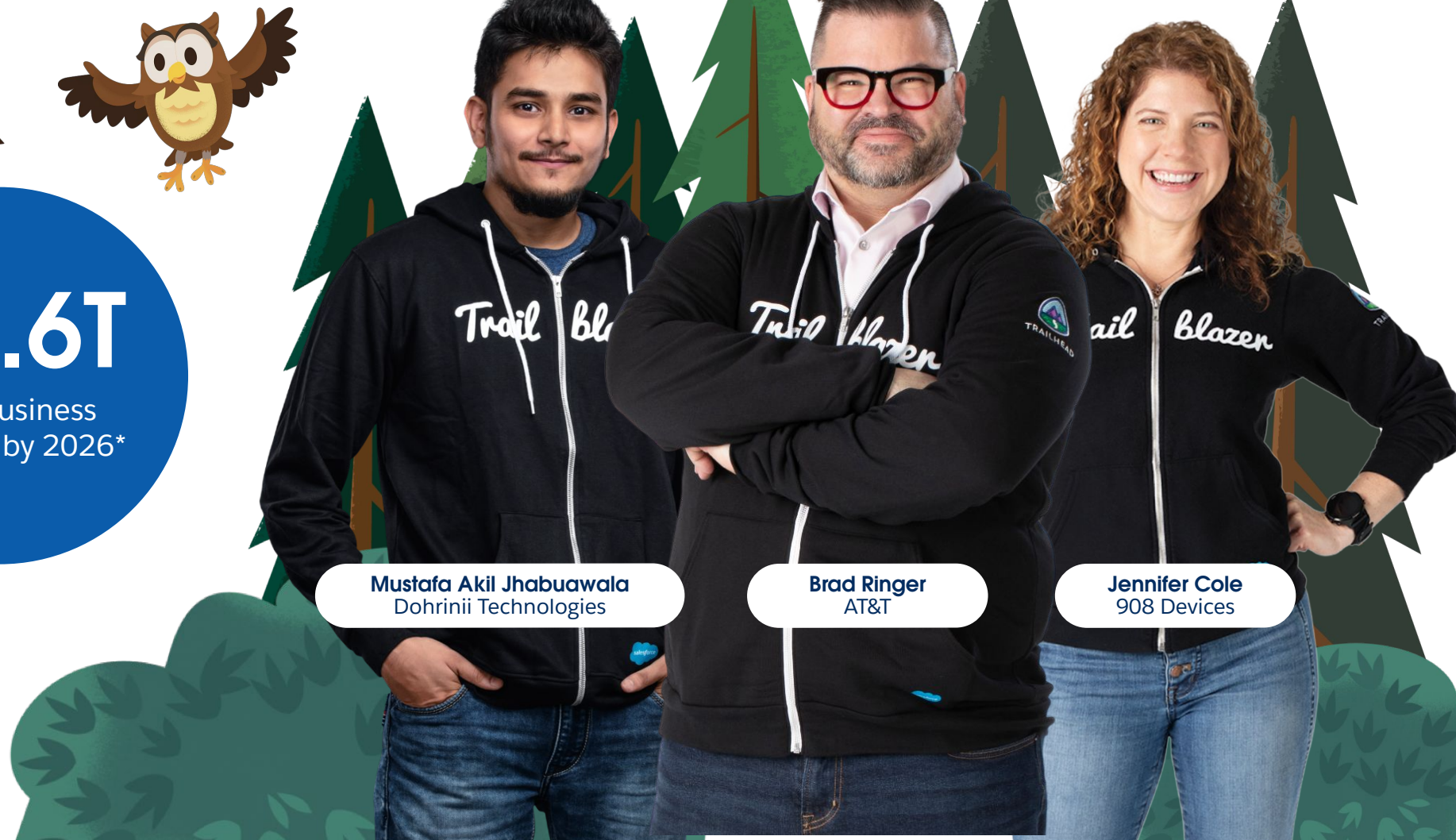
(3) most importantly, a person who builds a better world for others.

It’s a Trailblazer Economy

9.3M
new Salesforce economy jobs

IDC

$1.6T
new business revenue by 2026*



Source: IDC White Paper, sponsored by Salesforce, “The Salesforce Economic Impact,” doc #US48214821, September 20, 2021.

Salesforce non è solo un business.
It’s an Economy of Trust.

Nuovi posti di lavoro in Italia

93.3K* Nel settore economico di Salesforce entro il 2026

Impatto Economico in Italia

$34Mld* Nuovo fatturato indotto entro il 2026

IDC

+4.1K
Certificati

+32K
Trailblazers

Source: IDC White Paper, sponsored by Salesforce, “The Salesforce Economic Impact,” doc #US48214821, September 20, 2021."

Be a Trailblazer in the Salesforce Ecosystem

Trailhead

Trailblazer Community

Be a Trailblazer in the Salesforce Ecosystem

Trailhead

Trailblazer Community

The Way We Learn and Connect Has Changed

Community-Driven
Learning together

Online & Mobile
Optimized to learn anywhere

Gamified
Interactive design

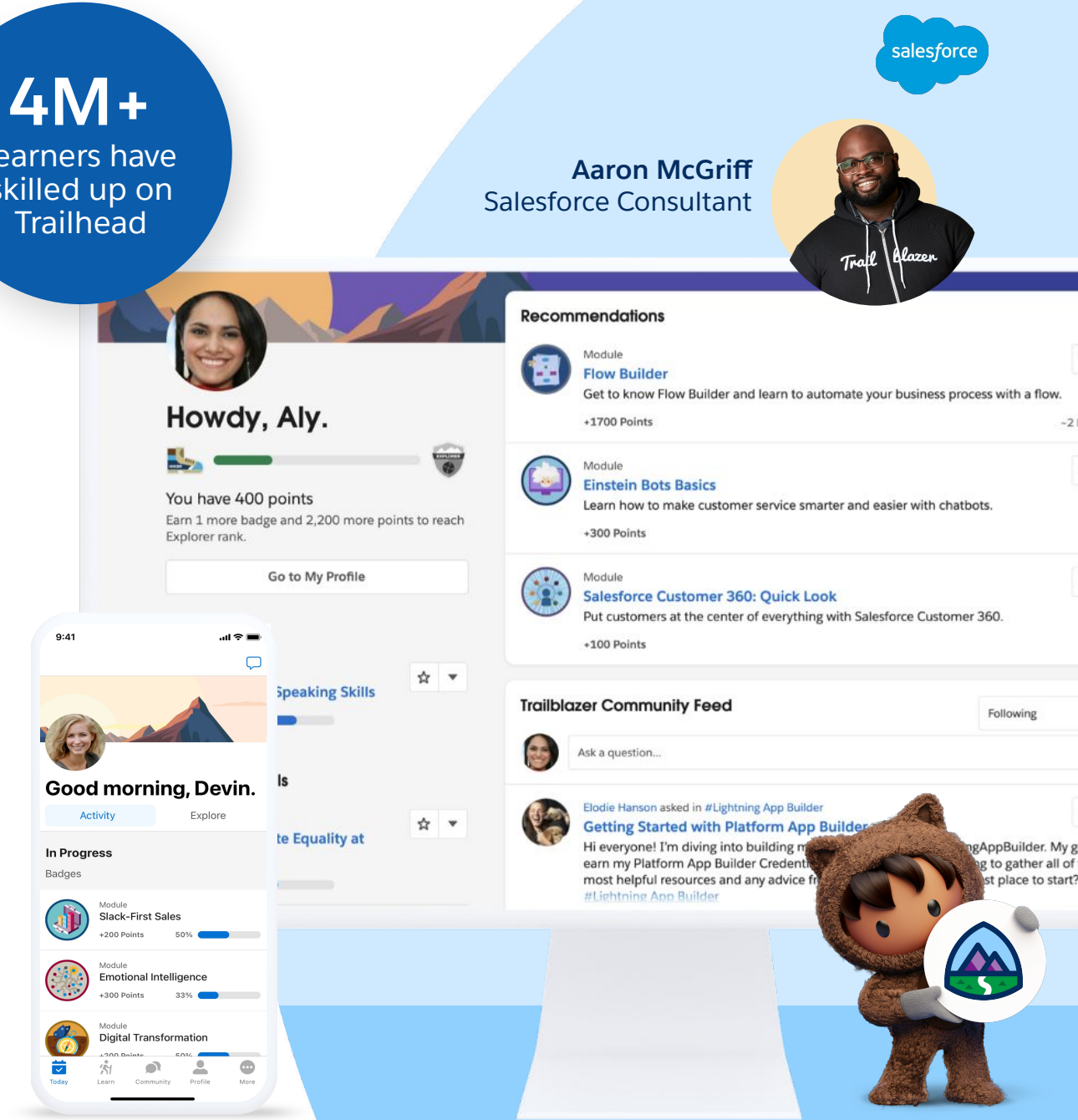
Trailblazer-First
Focused on experience

Personalized
For roles and levels

Trailhead

Skill up for the future

4M+
learners have skilled up on Trailhead



Learn In-Demand Skills

Learn the skills companies need to drive success from anywhere either on-demand or from Trailhead Academy experts.

Earn Resume-Worthy Credentials

Prove your expertise with skill-based badges and role-based credentials that lead to top jobs in the Salesforce Ecosystem.

Connect to a Global Community

Connect with the Trailblazer Community, a network of millions of people who help each other along the journey of learning and succeeding with Salesforce.

https://trailhead.salesforce.com

Source: Trailhead

Trailhead Skills Span the Salesforce Ecosystem

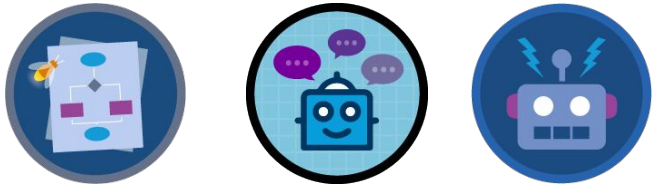
People

Virtual Collaboration
Public Speaking Skills
Emotional Intelligence
Equality Ally Strategies
Storytelling & Communication

Salesforce

Salesforce Platform
Salesforce Customer 360
CRM
Sales Cloud
Service Cloud

Technologies



Flow Builder
Einstein Bots
Process Automation
Digital Transformation
Artificial Intelligence

Get Hands on & Prove Your Skills

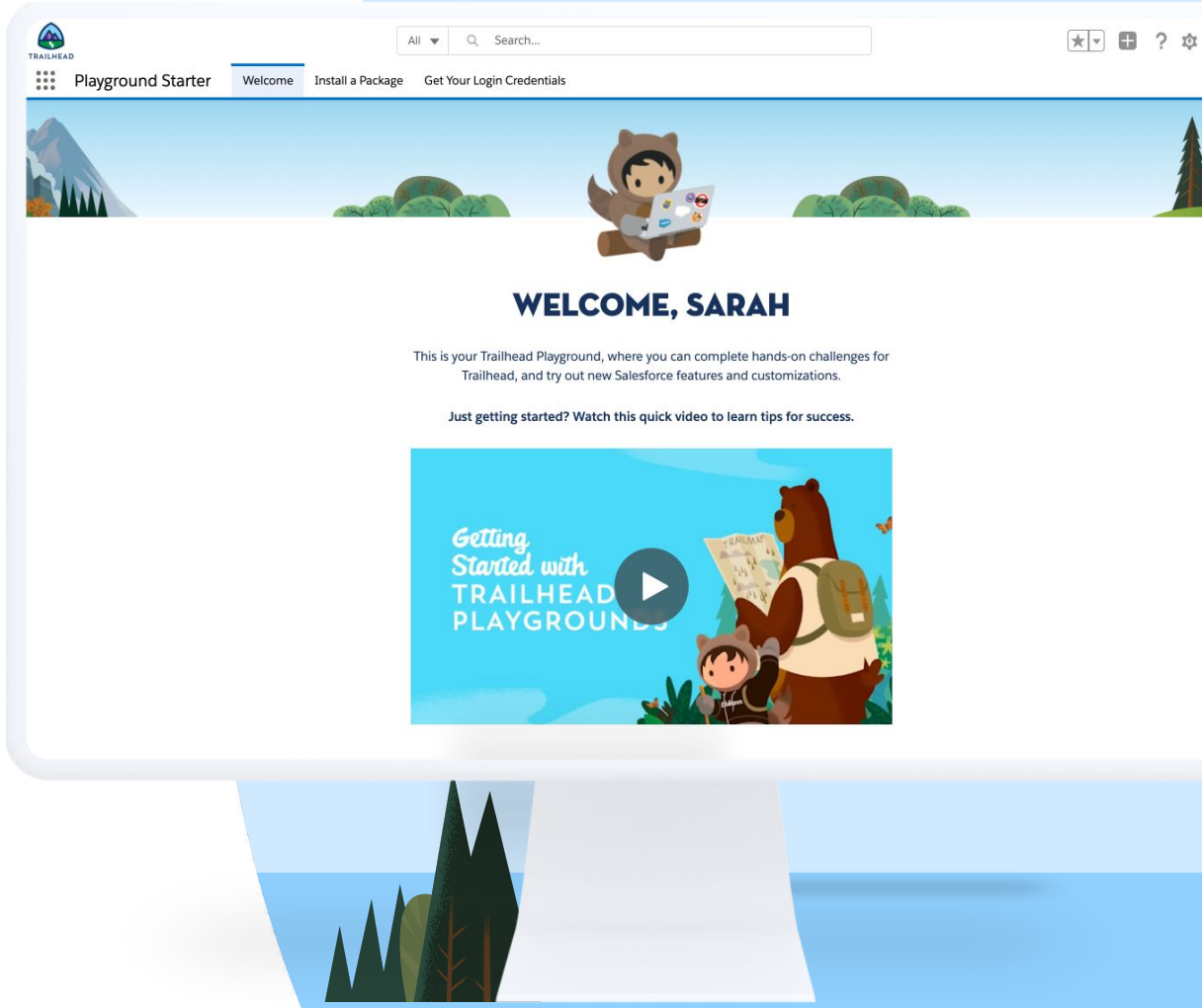
Trailhead's secret sauce

Trailhead Playground

Your own, free Salesforce Developer environment

Learn by Doing

The Trailhead Playground provides hands-on challenges to learn new features and test customizations



Build a Successful Career in the Salesforce Ecosystem

Career paths empower anyone to find their entry point and succeed in tech

Marketer Career

Salesforce Architect

Salesforce Consultant

Service Career

Sales Career

Salesforce Developer

Salesforce Administrator

Salesforce Designer

Business Analyst

Data Analyst

Earn Globally-Recognized Salesforce Credentials

Validate your skills and grow your resume

Superbadges

Skills-based credentials

Apply your Salesforce skills to **hands-on, real-world business problems.**

Prove your expertise in specific roles and take the **next step towards getting certified**.

Certifications

Role-based credentials

Prove your hands-on experience with Salesforce to get a **competitive edge that leads to new opportunities.**

Be a Trailblazer in the Salesforce Ecosystem

Trailhead

Trailblazer Community

The Trailblazer Community Today

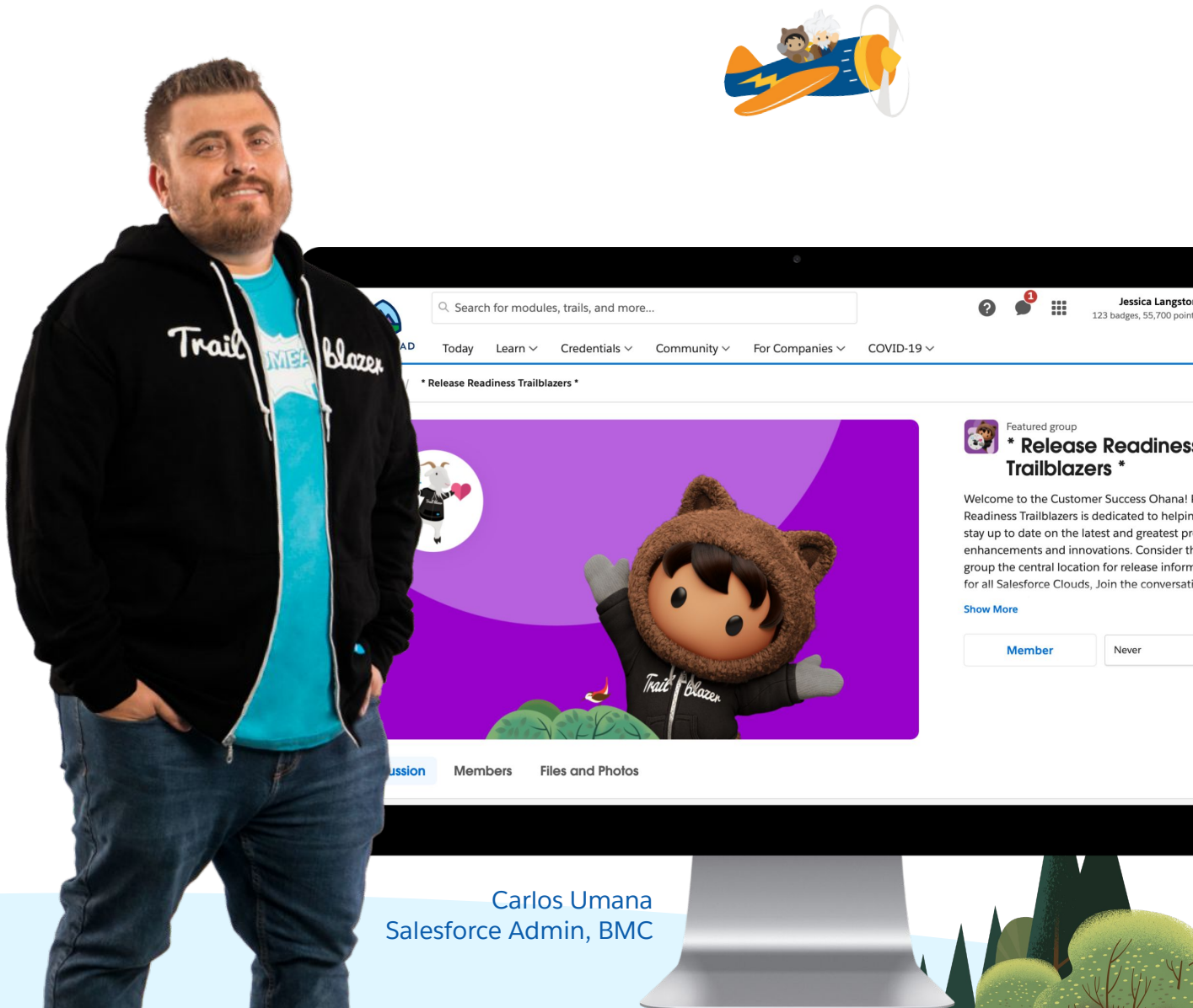
4,000 Questions Answered
Questions posted monthly to the community, 90% peer-driven responses.

1,000+ Active Groups
Join or start discussions with peers and Salesforce employees

20+ Customer Success Groups
Salesforce-led groups help customers get support and drive adoption

Diverse Topics
From getting started, to writing complex code, to connecting at Salesforce events

https://trailblazers.salesforce.com



Carlos Umana
Salesforce Admin, BMC

salesforce+

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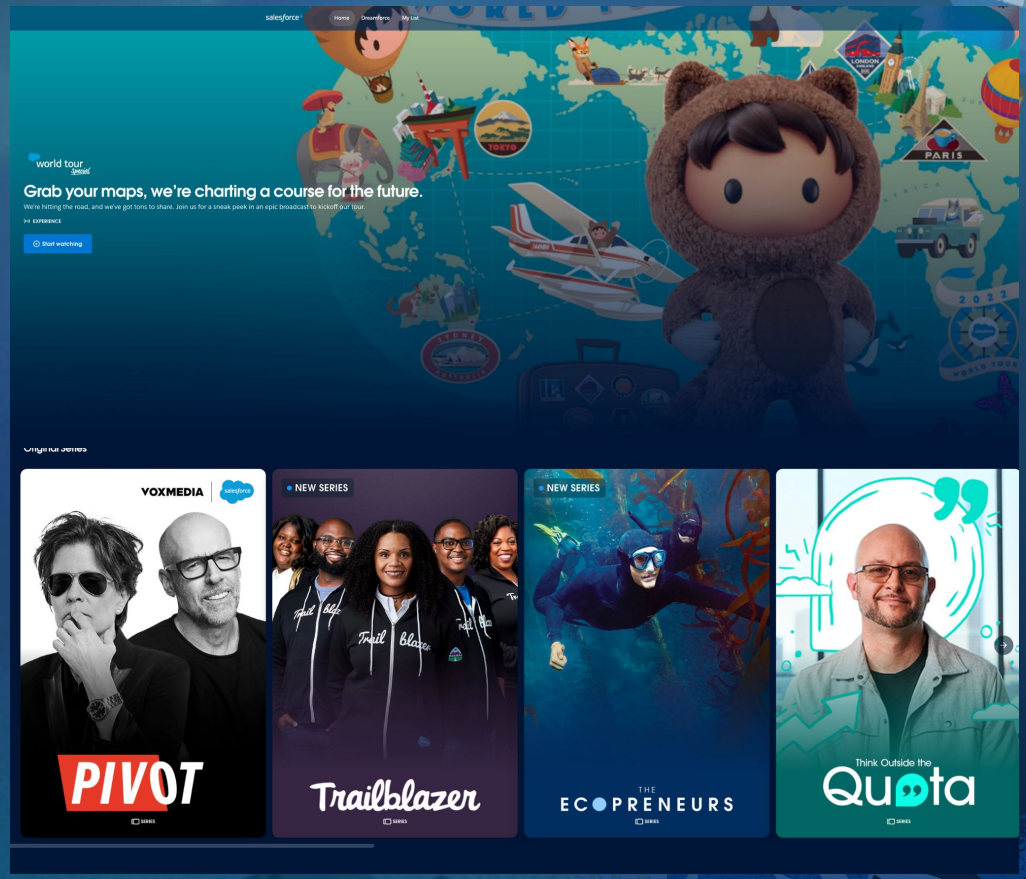
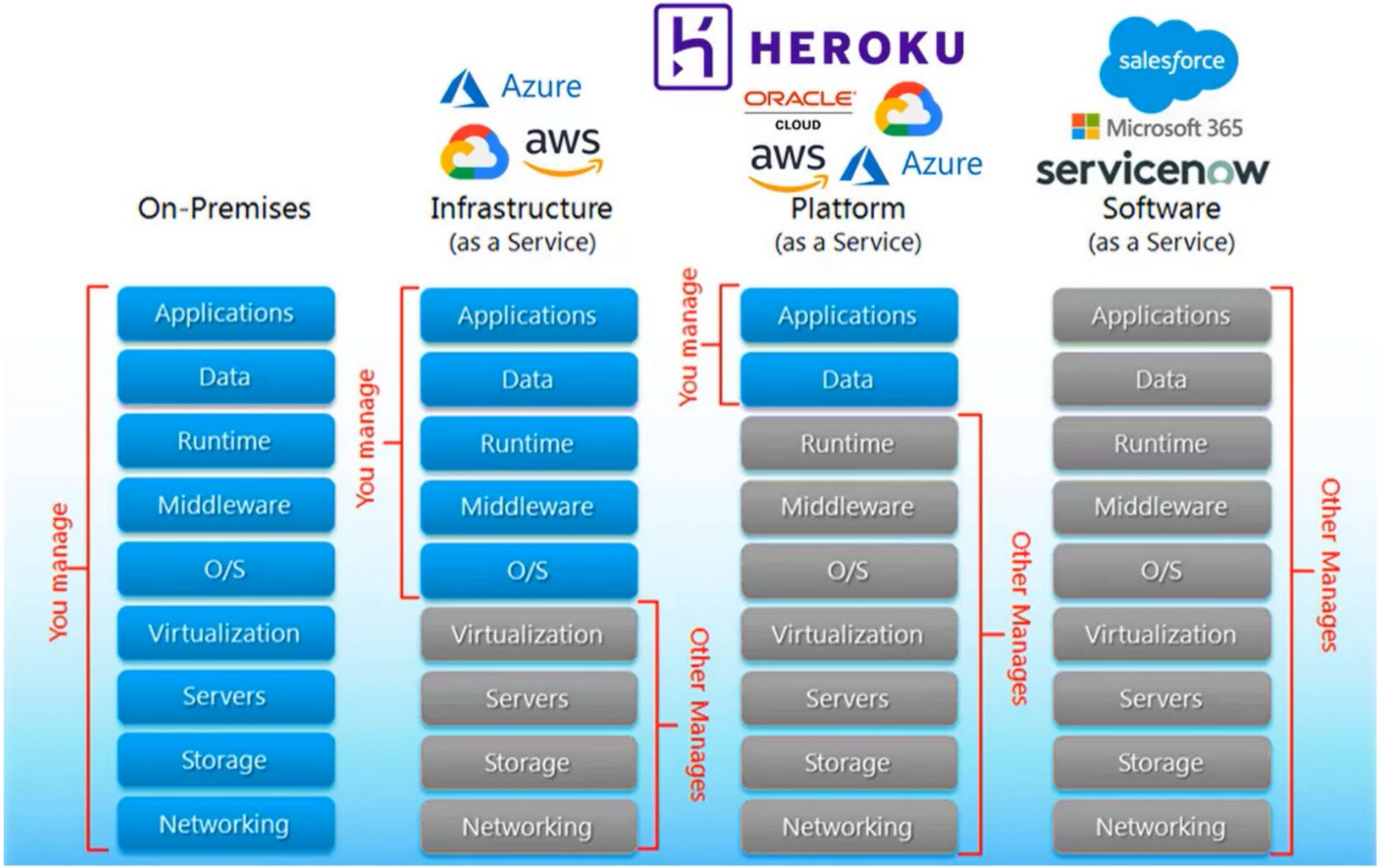


https://www.salesforce.com/plus/

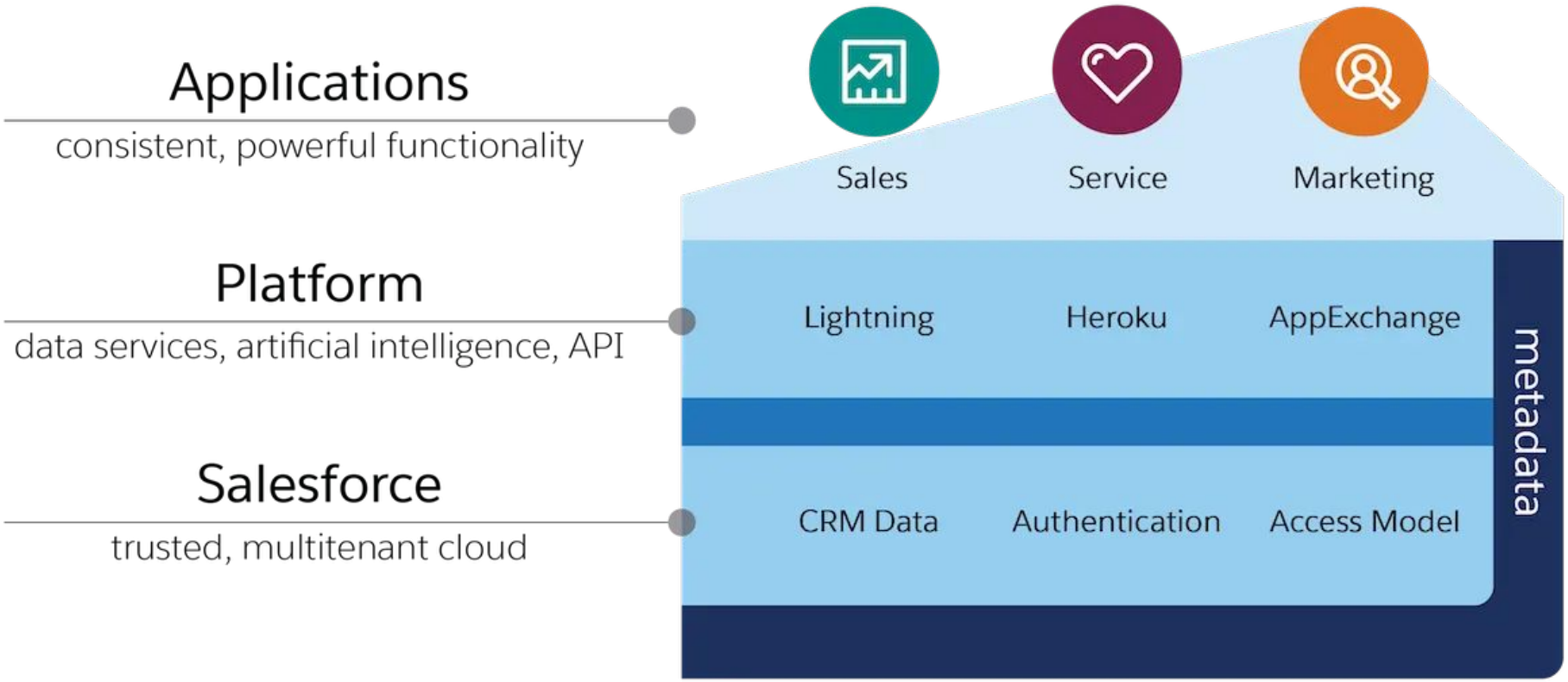
The Salesforce Platform

Under the hood

Cloud Models: What Do You Manage?



Salesforce Architecture



Salesforce Platform

Real-Time Flow Automation

Real-Time Einstein AI

Real-Time
Hyperscale Data Platform

Transactional
Database

Hyperforce

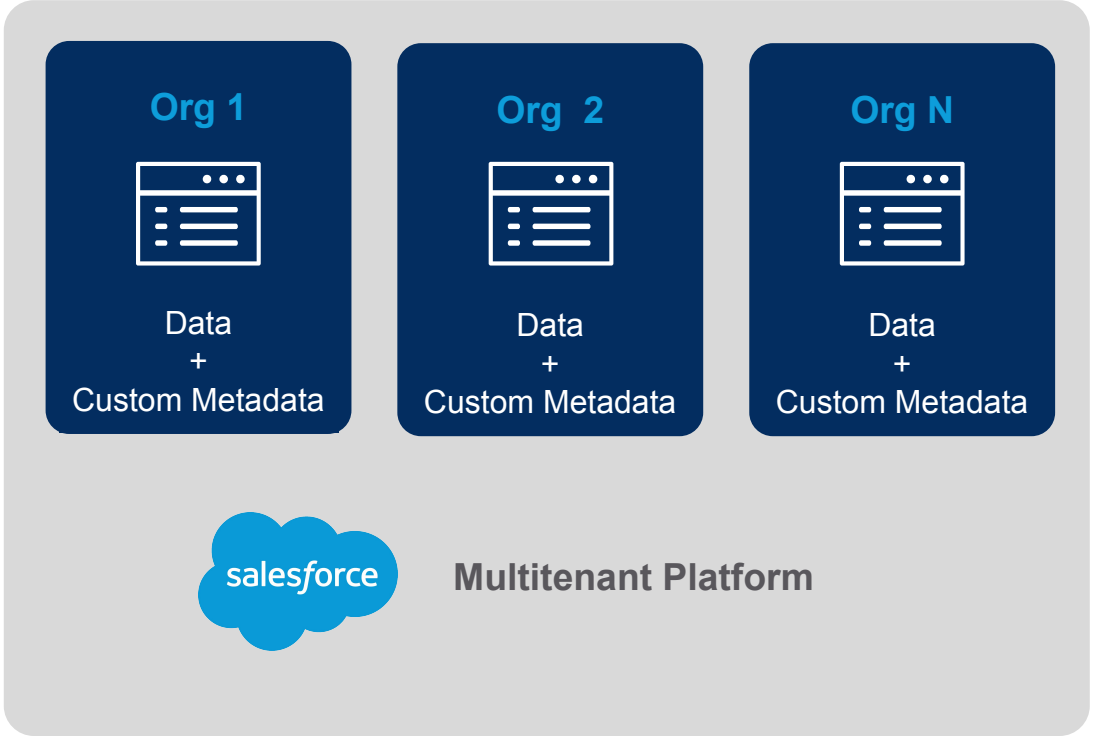
Salesforce Multitenancy… simplified!

What is an Org?

Each Org is

- A provisioned set of resources that **contain data and metadata** supporting one or more applications
- A **distinct entity** (tenant) hosted on a common (multitenant) platform with data and metadata insulated from other tenants

Customers can own one or more Orgs depending on their needs

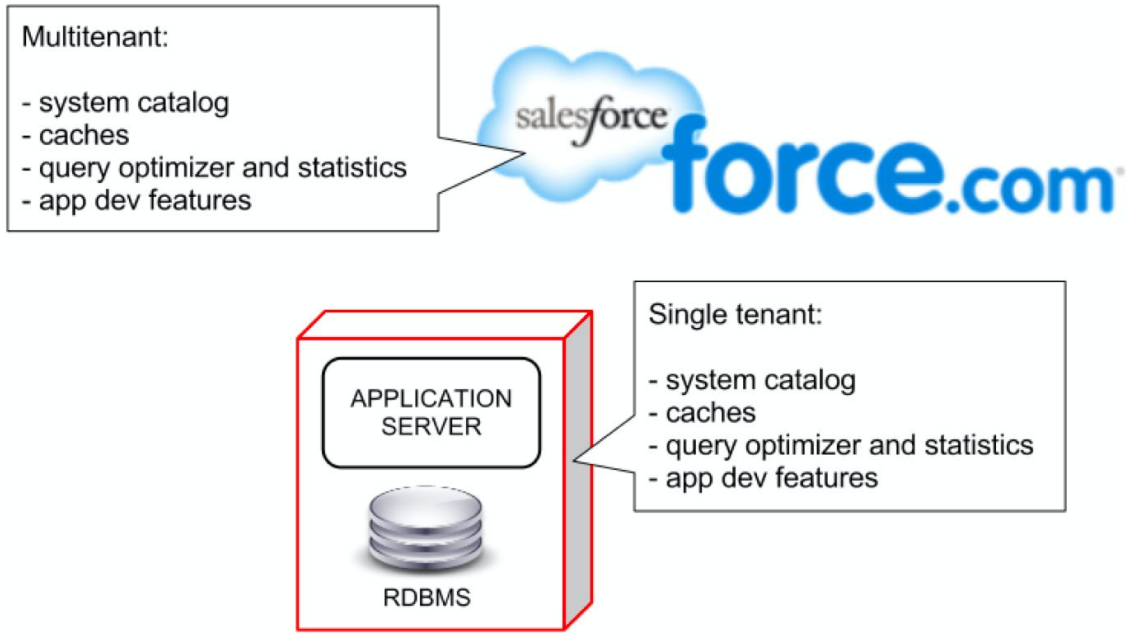


Multitenant Architecture

RDBMS: most of which designed in the ‘70s and ‘80s to support individual organizations' on-premises deployments.

All the core mechanisms in an **RDBMS** (as its system catalog, caching mechanisms, query optimizer, and application development features) are **built to support single-tenant applications** and be run directly on top of a specifically tuned host operating system and raw hardware.

Multitenant cloud database services built with a standard RDBMS are only possible with the help of virtualization, which typically hurts the performance of an RDBMS.



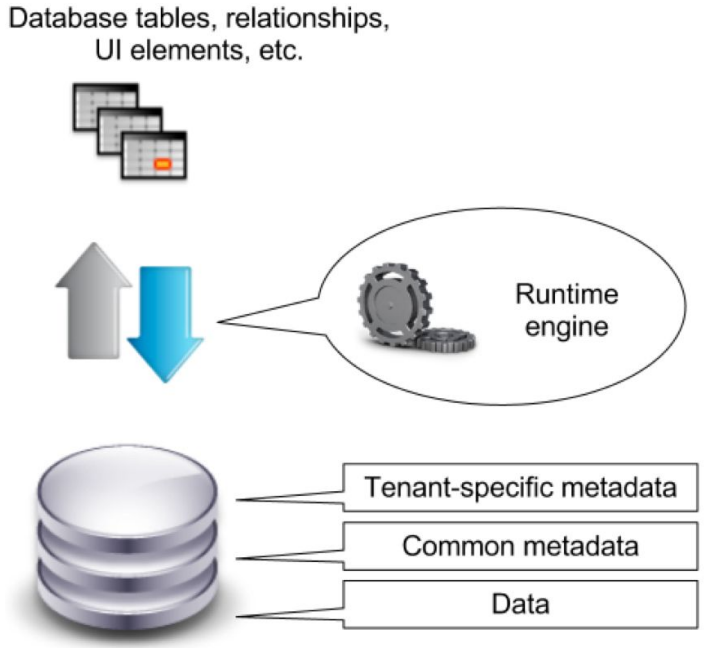
Salesforce Multitenant Approach

In contrast, Salesforce Platform combines **several different persistence technologies**, including a **custom-designed relational database schema**, which are innately designed for clouds and multitenancy–**no virtualization required**.

For these reasons, Salesforce Platform's core technology uses a **runtime engine that materializes all application data from metadata**–data about the data itself.

In Salesforce Platform's well-defined metadata-driven architecture, there is a **clear separation of the compiled runtime database engine (kernel), tenant data, and the metadata that describes each application**.

These distinct boundaries make it possible to **independently update the system kernel and tenant-specific applications and schemas**, with virtually no risk of one affecting the others.



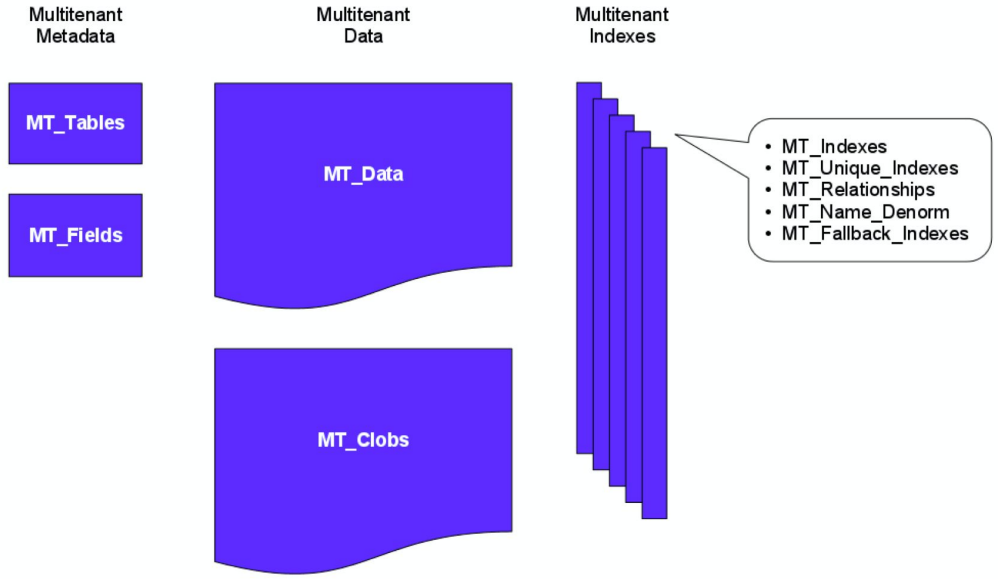
Multitenant Data Model

The Salesforce Platform storage model manages **virtual database structures** using a set of metadata, data, and pivot tables.

When you create application schemas, the ***Universal Data Dictionary*** **(UDD)** keeps track of **metadata concerning the objects, their fields, their relationships, and other object attributes**.

Meanwhile, a few large database tables store the structured and unstructured data for all virtual tables.

A set of related multitenant indexes, implemented as simple pivot tables with denormalized data, make the combined data set extremely functional.



GUID	OrgID	ObjID	...	Value0	...
a01...1	org1	a01	...	Up	...
a01...2	org1	a01	...	Flat	...
a02...1	org1	a02	...	20110129	...
a02...2	org1	a02	...	20110214	...
a03...1	org1	a03	...	41.23	...
a03...2	org1	a03	...	-10.3	...

Resources: The Salesforce Platform Multitenant Architecture, Salesforce Platform Basics

24 Hours in the Life of Salesforce

Consumer Scale

Platform Scale

Employee Scale

175.8B Einstein Predictions

5.31B MuleSoft integration transactions

3.73B Marketing messages sent

6.07B Service & case interactions

567M Commerce page views

31.9M Customer service conversations

2.22M Commerce orders

1.5M Tableau public views

2.35B Slack actions taken

84.5M Reports & dashboards

5.3M Sales opportunities created

Source: Salesforce August 2022

How do we approach a Transformation Project?

What do we consider in a transformation project?

The buyers

(why a transformation project?)

Meet the buyers: who they are...

IT	Marketing	Sales	Service
Balances keeping all of the lights on, **responding to the business's needs**, and **driving innovation** while managing things like **costs and security**	Creates the **customer experience across every brand touchpoint**, driving **brand awareness**, **customer loyalty**, and **sales**	Focuses on “hitting their numbers” by **driving pipeline**, helping reps find new opportunities, and **closing deals**	Owns customer service operations and **customer satisfaction**, including call center **agent productivity, cost management**, and **engaging customers across multiple channels**

...what are their concerns...

The buyers

IT	Marketing	Sales	Service
Security Breaches	Marketing ROI	Repeating Success	Changing Customer Expectations
Governance	Customer Satisfaction	Accurately Forecasting	Meeting Service Levels
Demand Planning	Information Overload	Increasing Performance	Agent Turnover
Shadow IT	Managing Content	Beating Competitors	Legacy Systems
Outages	Cost Reduction	Keeping Up with Tech	Cost Containment
		Accessing Data	Security and Privacy

...what are their goals

The buyers

IT

- Reducing costs and keeping systems current and running.
- Delivering success to each line of business via tools and apps.
- Providing great user experiences for internal and external customers.
- Growing the business into the future by providing innovative solutions.

Marketing

- Acquiring new customers and increasing revenue
- Onboarding new customers using a multi-channel marketing strategy, such as email, mobile, and social.
- Improving customer satisfaction
- Driving ongoing engagement and sales through promotions, campaigns, and loyalty programs.

Sales

- Meeting customer expectations and connecting with them through multiple channels.
- Coaching sales managers to hire the right talent and keep them productive.
- Hitting their numbers every month by staying on top of key metrics.

Service

- Providing personalized service to exceed customer expectations.
- Keeping service agents engaged and empowered to solve customer issues fast.
- Moving service from a cost center to a growth center.
- Adapting technology to the needs of their business and customers.

Goals, Actors, Devices, Location

Who will use the platform? Internal Users...

… and External Users

Where will they connect from?

Office

Home

Mobility

What devices will they use?

Desktops, laptops, tablets, mobile phones, but also...

Org Strategy

Just One Org? Multiple Orgs?

What to consider for an Org Strategy?

Culture

Collaboration

Level of Autonomy

Governance Model

Business

Sharing Processes & Data

Flexibility & Adaptability

Internal Organization

Time to Value

Technical

Security

Governor Limits

Architecture

Support

End-users Training

Support Model

Environments

Top Drivers to choose a Single Org...

… and Top Drivers to choose Multiple Orgs

System Landscape

As Is, Through the journey, To Be

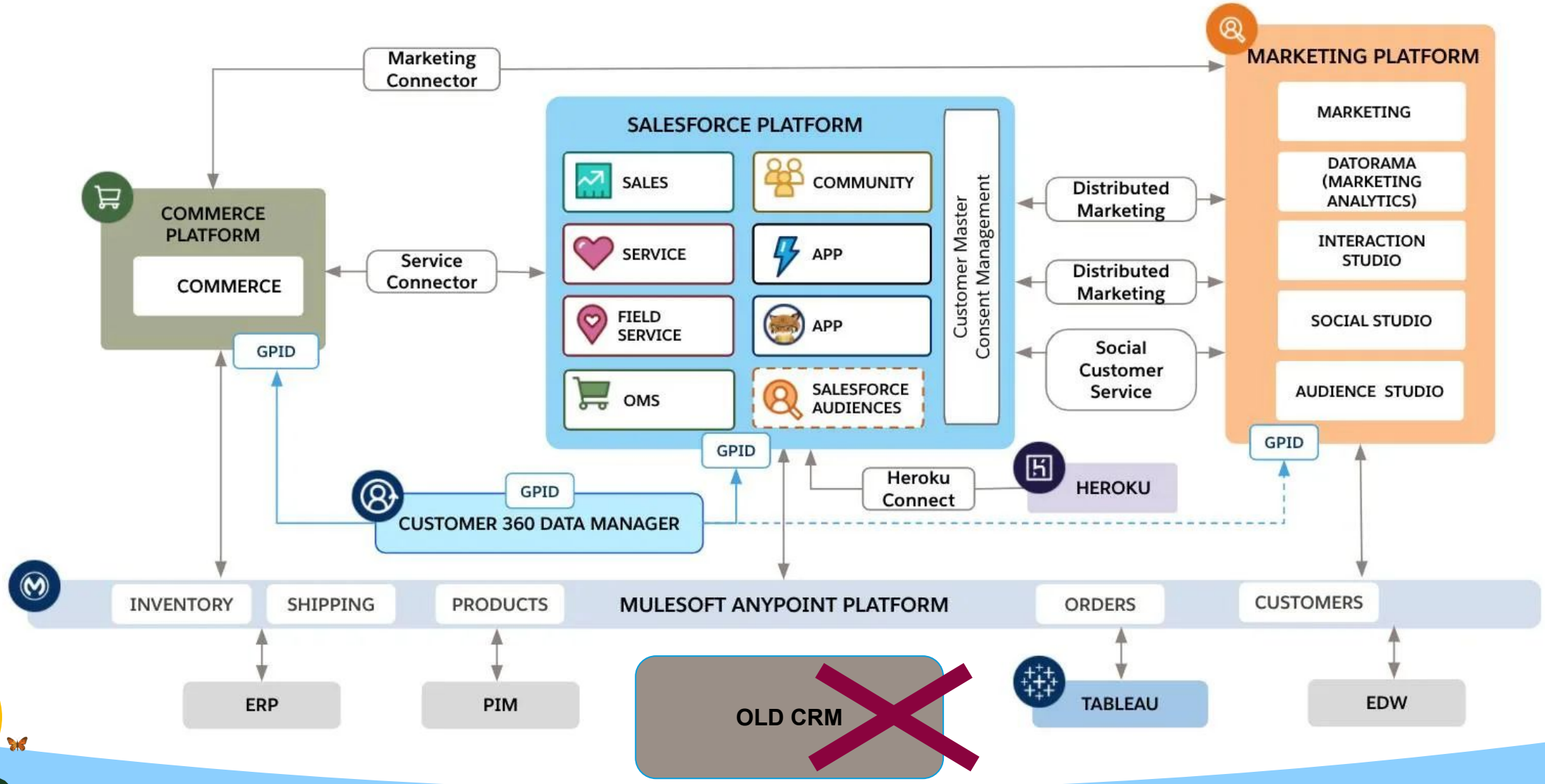
Which systems does a CRM usually interact with?

- Enterprise Resource Planning (ERP)
- Data Warehouse (DWH)
- Provisioning & Delivery
- Billing
- Marketing
- e-Commerce
- Identity Providers, SSO
- External Platforms (e.g. Payment Gateways, Credit Check...)
- Integration Platforms (ESB, ETL)

Constraints? Decisions to take?

- What happens to platforms planned to be replaced?
- Is a data migration necessary? What happens to in-flight data?
- Will there be a “Big Bang” or a “Phased” roll-out?
- Will new and old systems coexist for a specific time interval?
- Are there rigid target dates? E.g. imposed by Regulatory Agencies.
- Are there still developer competences on the oldest systems to be integrated?
- Is the customer willing to invest on evolution of old systems?

Level 1: The Big Picture



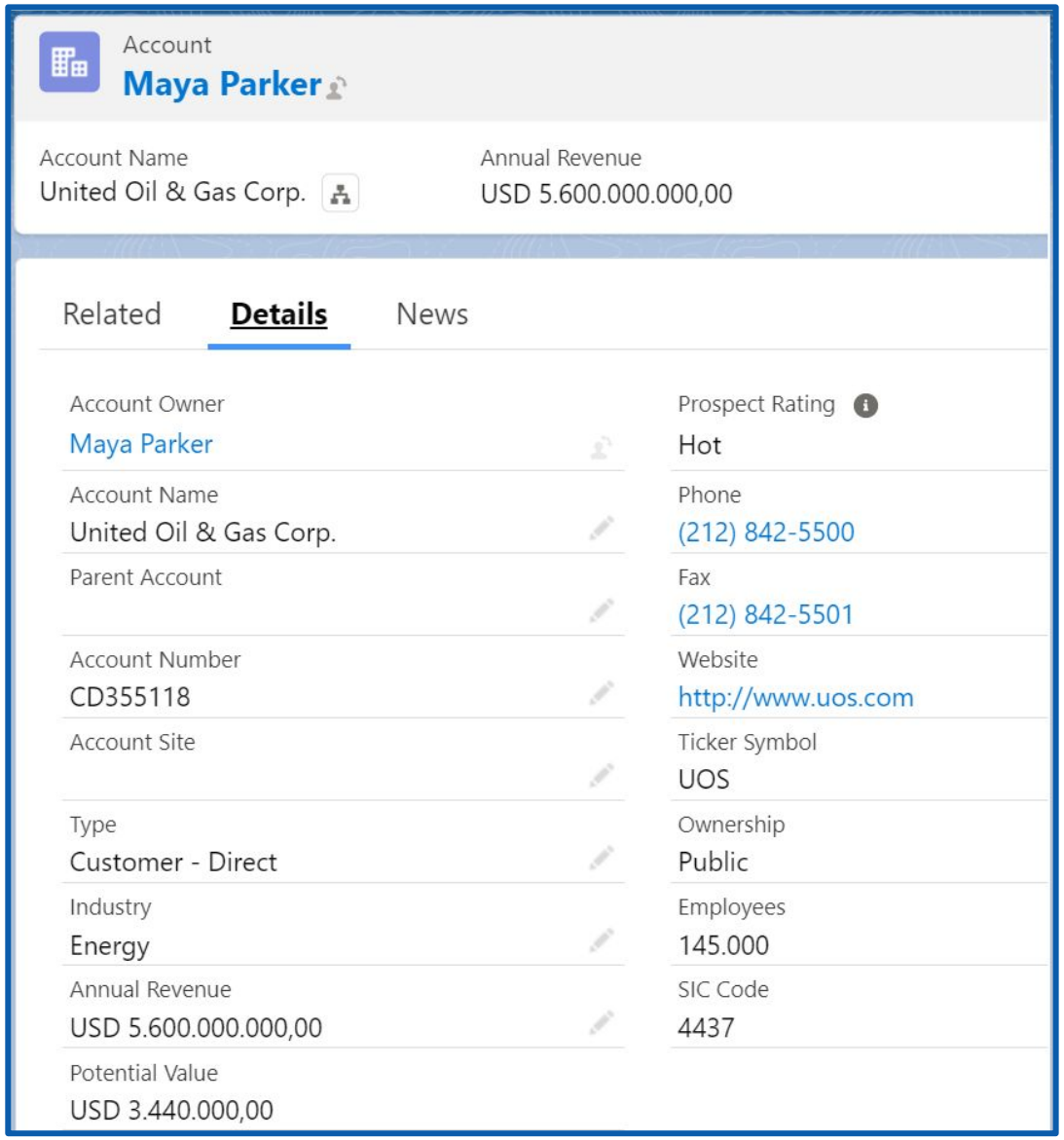
Data Model & Data Architecture

Data Model: What is it?

What is an object in Salesforce?

In Salesforce, when we talk about the data model, we're talking about the **collection of objects and fields in an app**.

We think about database **tables as objects**, we think about columns as fields, and rows as records. So instead of an account spreadsheet or table, we have an **Account object** with fields and a bunch of identically structured records.

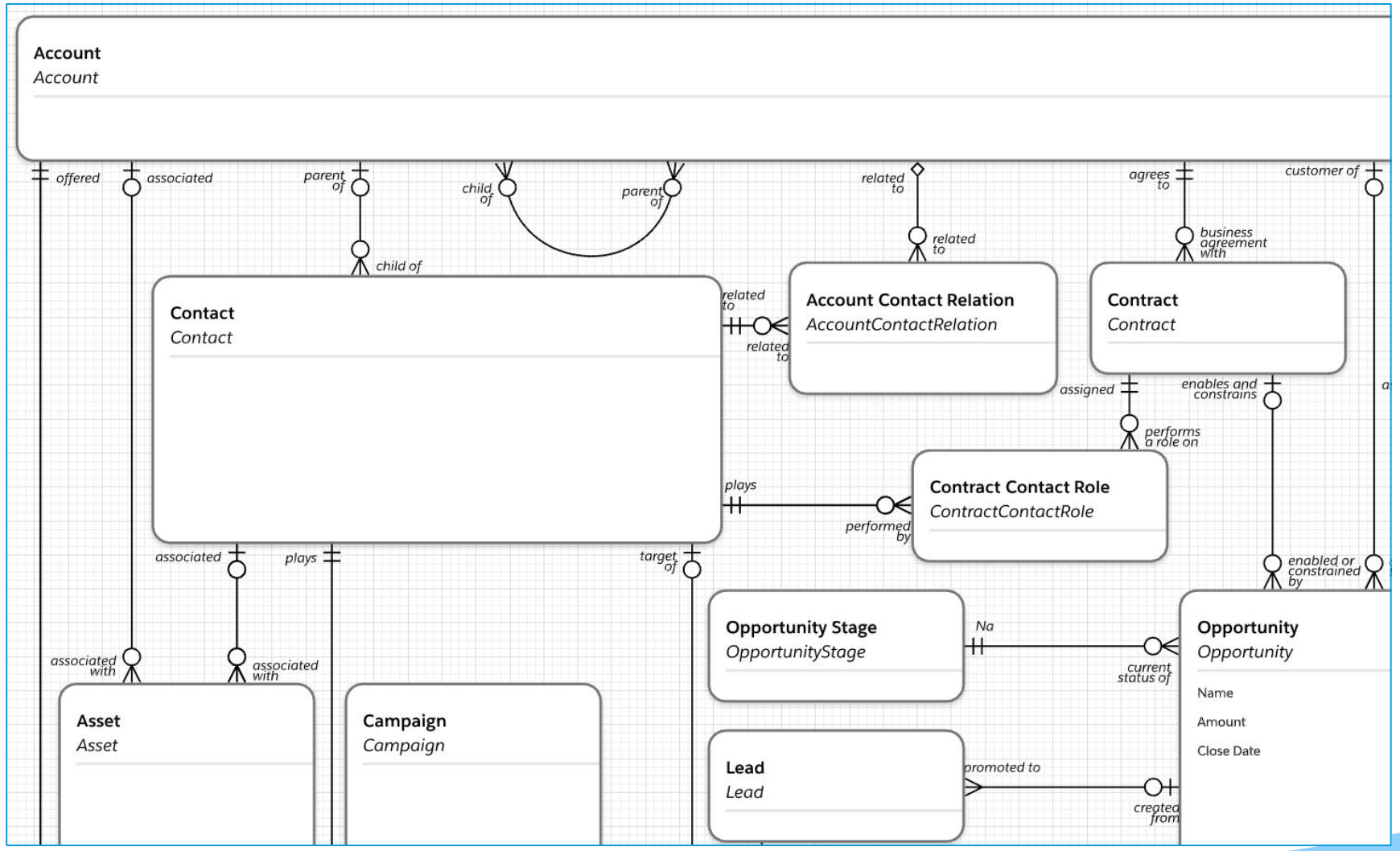


Data Model: What is it?

A data model is more or less what it sounds like. It's a way to model **what database tables look like in a way that makes sense to humans**.

A data model typically includes:

- **Standard Objects**
- **Custom Objects**
- **Relationships among objects**
- **Custom Fields**



Data Model: How do we design it?

What does customer need to do?

- Collect and analyze business requirements to design the business process that represents customer use case.

Analyze

Can I use out-of-the-box business processes supported by Salesforce?

- Map customer business process as closely to the out-of-the-box business process supported by Salesforce.

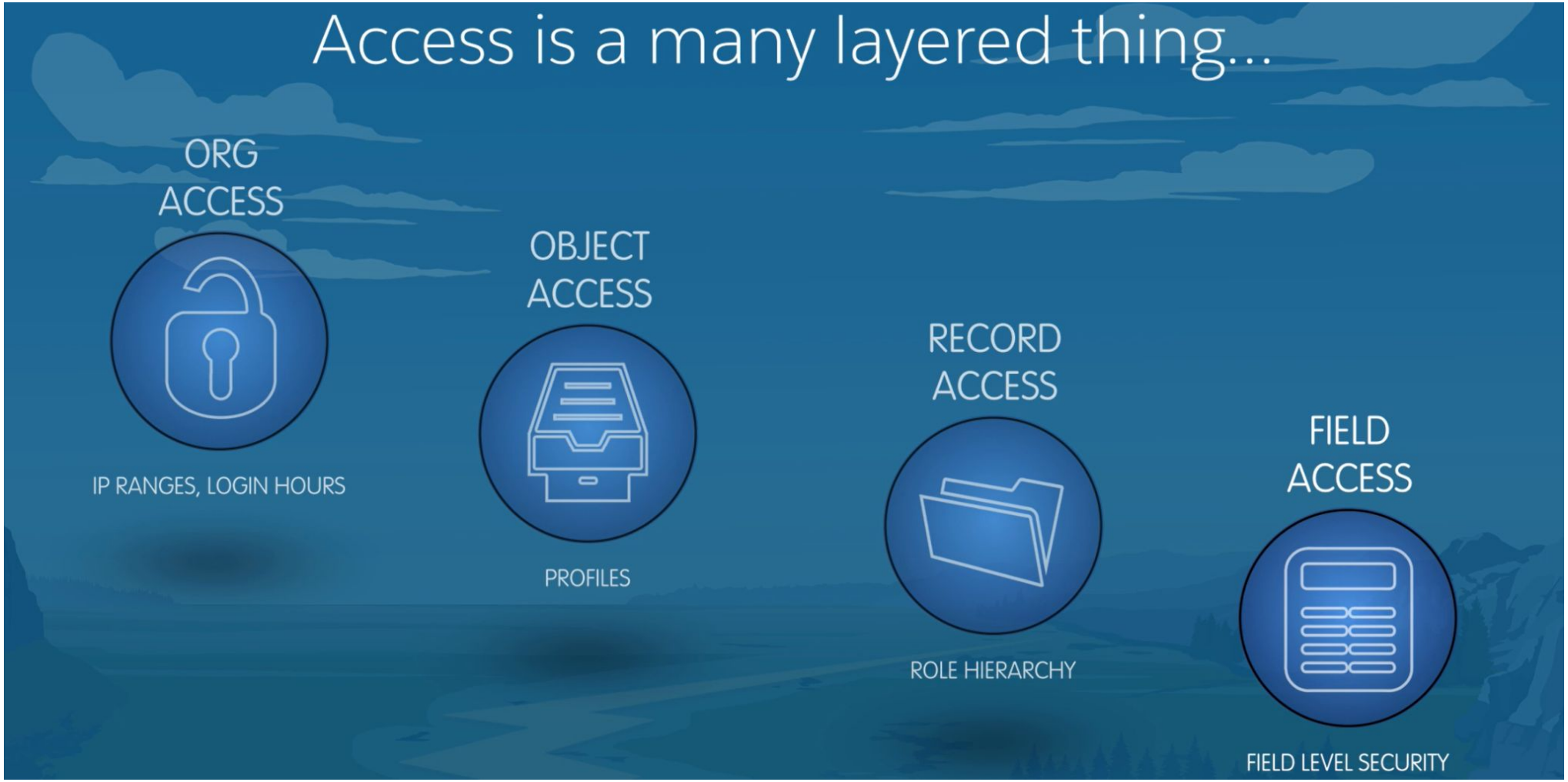
Map

Do I need to store more data?

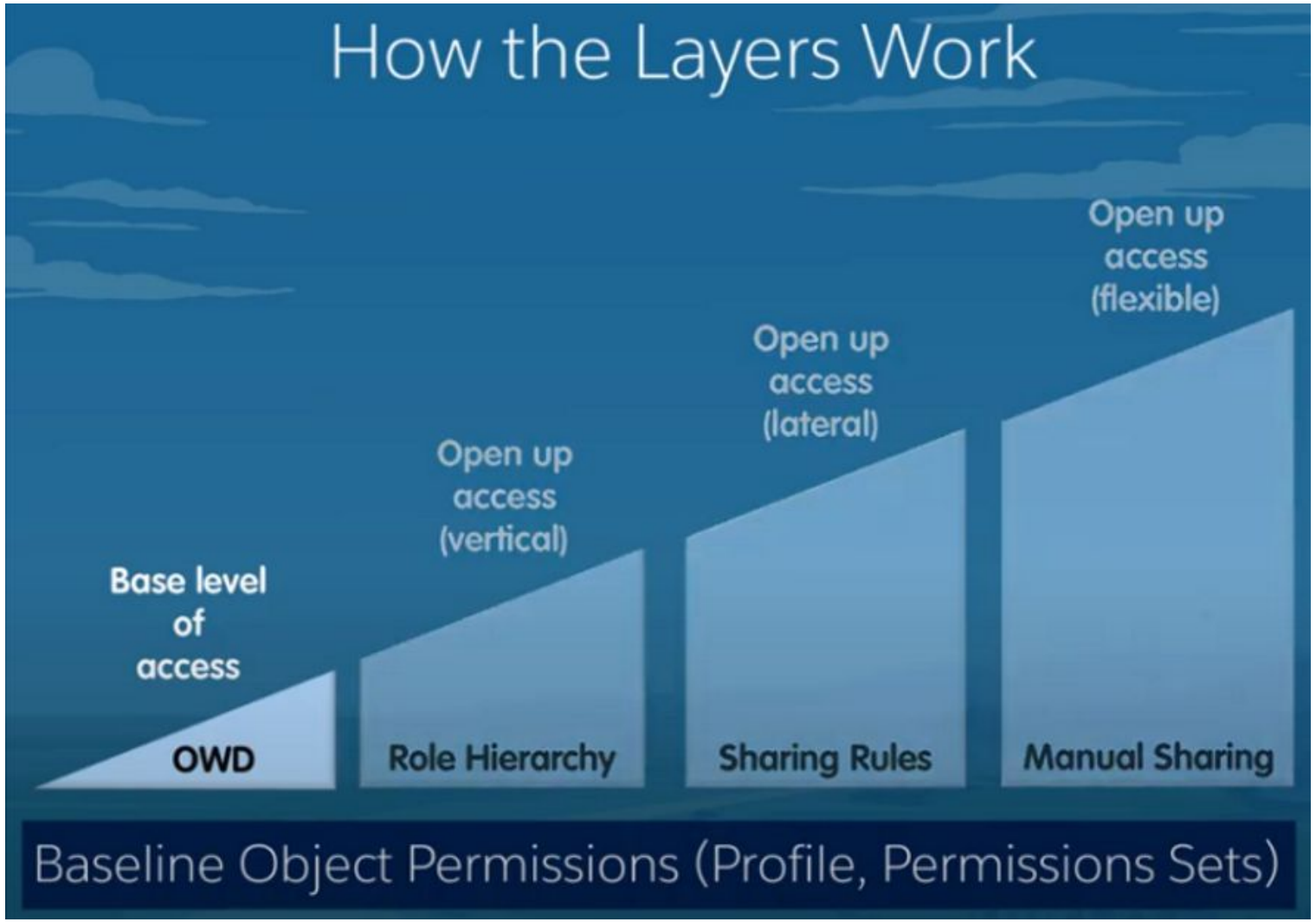
- Create custom fields & custom objects.
- Add relationships between objects following business requirements.

Customize

Data Visibility & Security: Who sees what?



Data Visibility & Security: Records Sharing

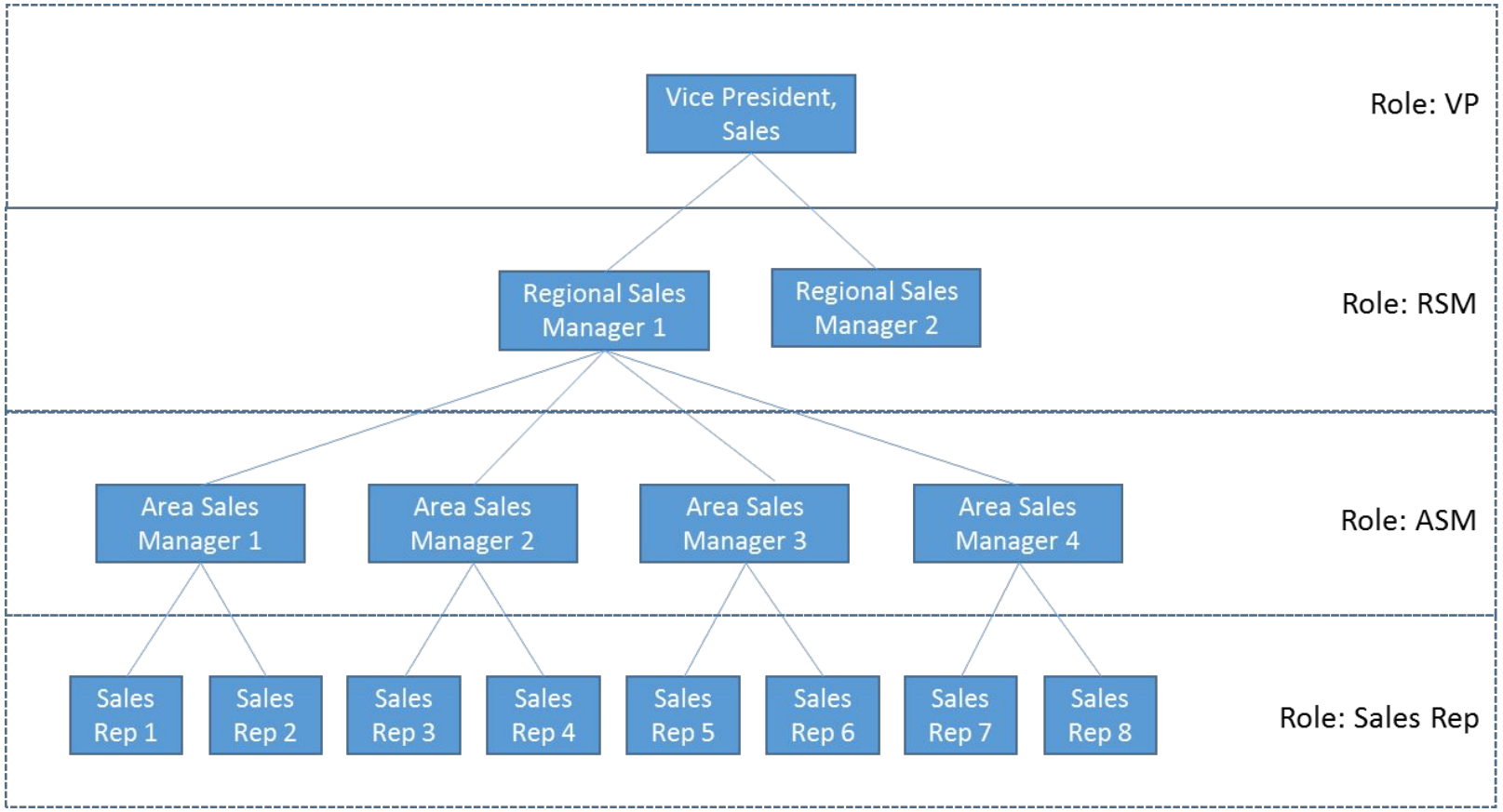


You can allow particular users to view an object, but then restrict the individual object records they're allowed to see.

You can manage record-level access in different ways

Data Visibility & Security: Records Sharing

Role Hierarchy

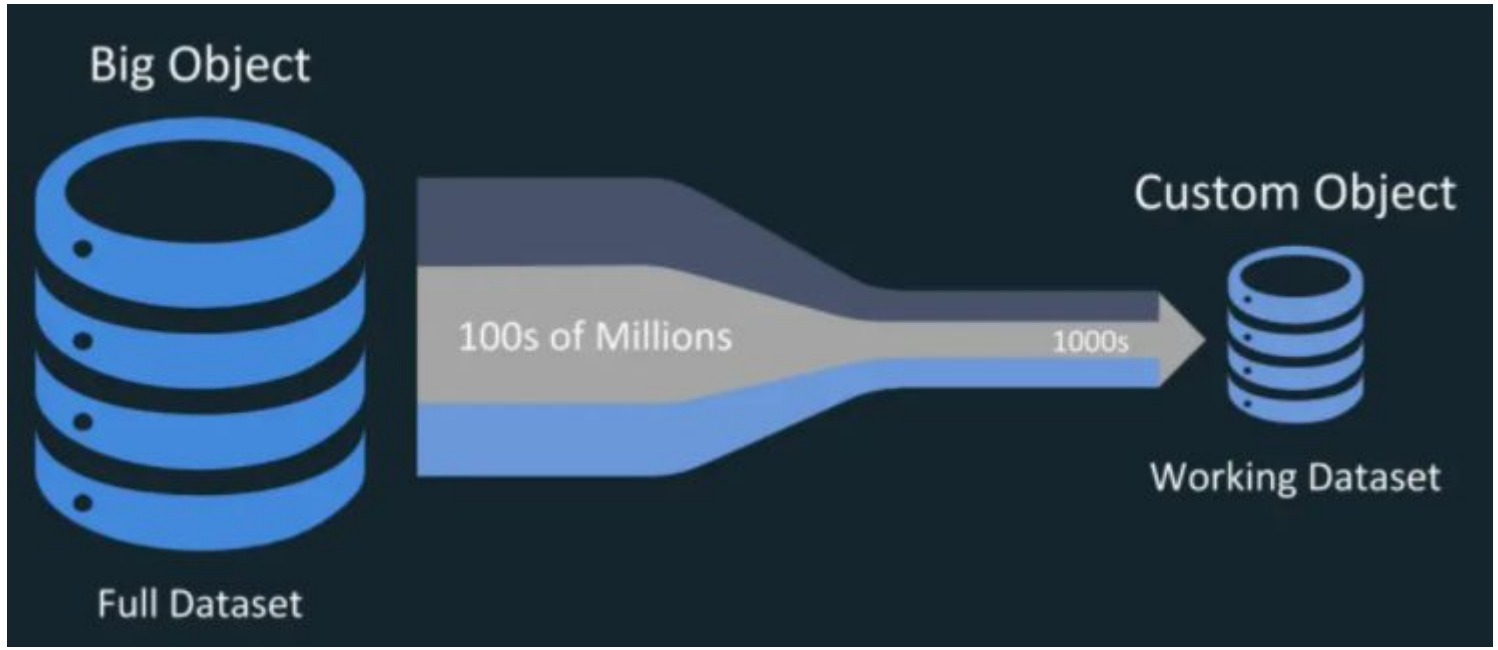


The role hierarchy **automatically grants** record-level permissions.

Strategies for Big Data Architecture

Hello, Salesforce Big Objects

As the name suggests, **Big Objects** store and manage a massive amount of data on the Salesforce platform. Salesforce recommends it for **anything over 20 million rows, into the billions**. Big Objects utilize a non-relational database to store data.



Analyze big data with declarative **Tableau CRM UI** instead of writing code to perform aggregate functions. Big Objects can be the source object in a dataflow.

CRM Data Strategy

An effective **CRM data management strategy** is founded on a solid understanding of customer business processes, users behavior and technology.

Consider these 5 steps when building your Salesforce Data Management Strategy:

Integration

Integration patterns

Remote Process Invocation Request Reply

Salesforce invokes a process on a remote system, waits for completion of that process, and then tracks state based on the response from the remote system.

Remote Process Invocation Fire and Forget

Salesforce invokes a process in a remote system but doesn't wait for completion of the process. Instead, the remote process receives and acknowledges the request and then hands off control back to Salesforce.

Batch data Synchronization

Data stored in Lightning Platform is created or refreshed to reflect updates from an external system, and when changes from Lightning Platform are sent to an external system. Updates in either direction are done in a batch manner.

Remote call in

Data stored in Lightning Platform is created, retrieved, updated, or deleted by a remote system.

UI Update Based on Data Changes

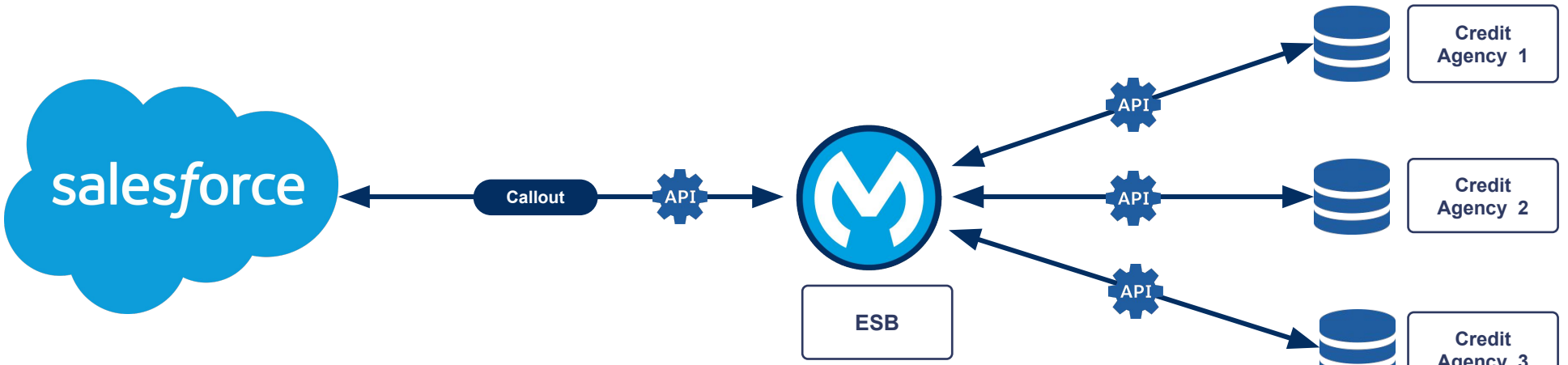
The Salesforce user interface must be automatically updated as a result of changes to Salesforce data.

Data Virtualization

Salesforce accesses external data in real time. This removes the need to persist data in Salesforce and then reconcile the data between Salesforce and the external system.

Synchronous Interaction

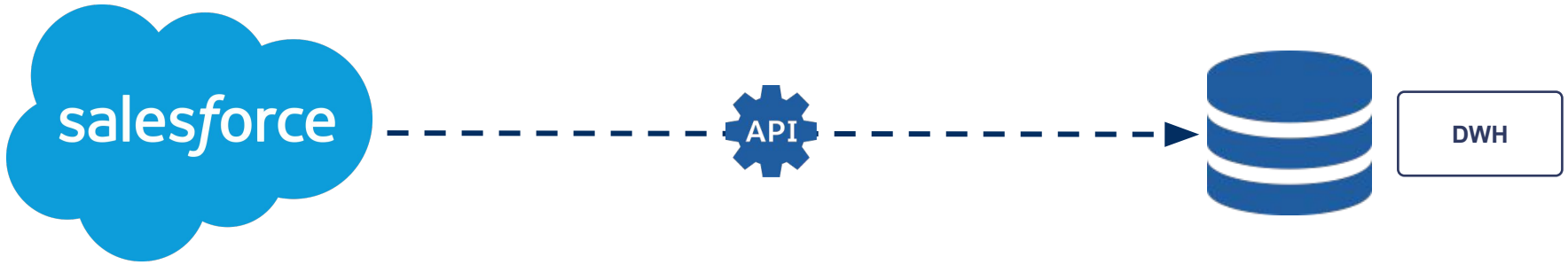
Example: credit check with external agencies/providers



Remote Process Invocation Request and Reply

Asynchronous Interaction

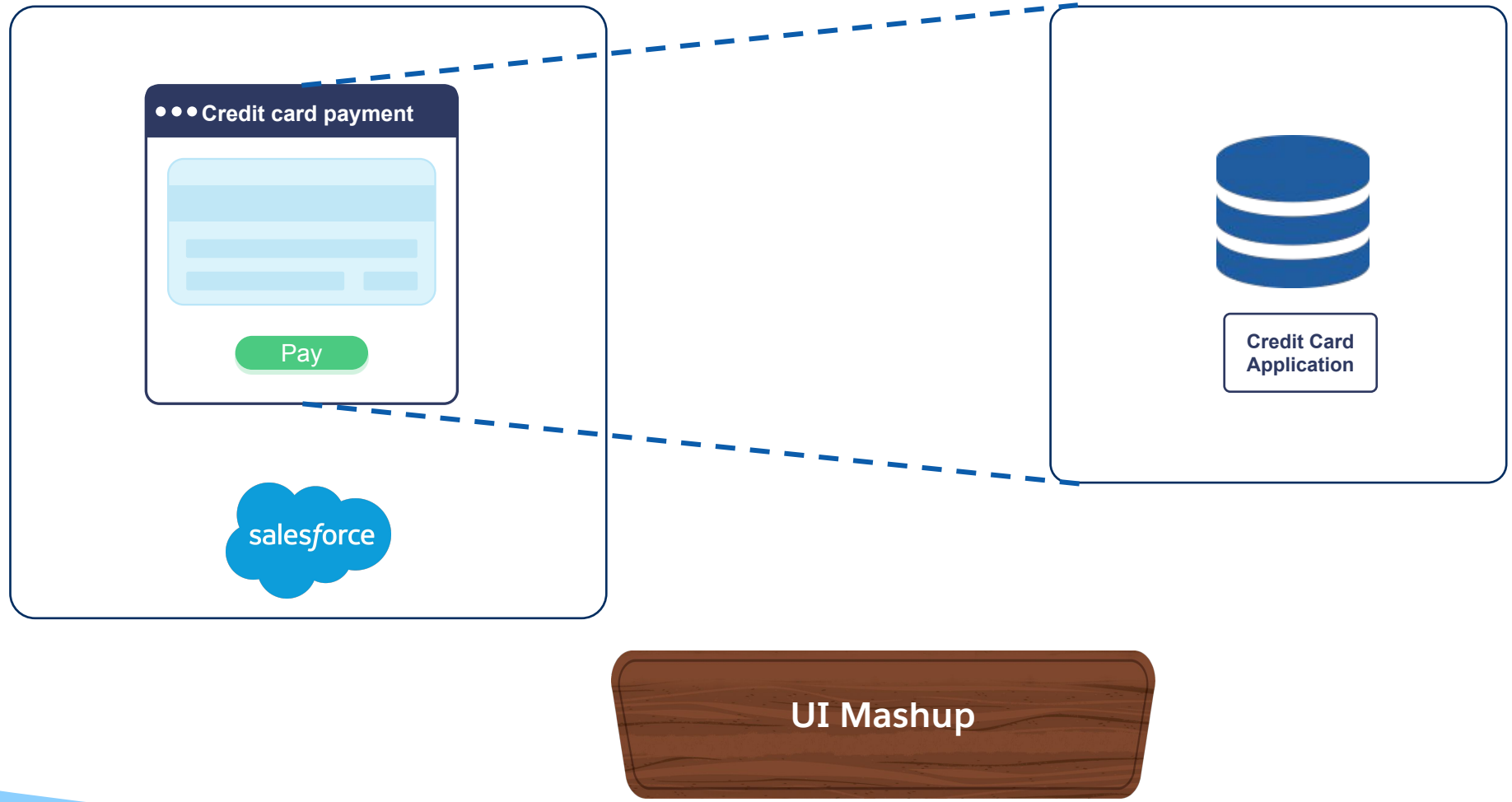
Example: align other systems (for example, ERP, DWH)



Remote Process Invocation
Fire & Forget

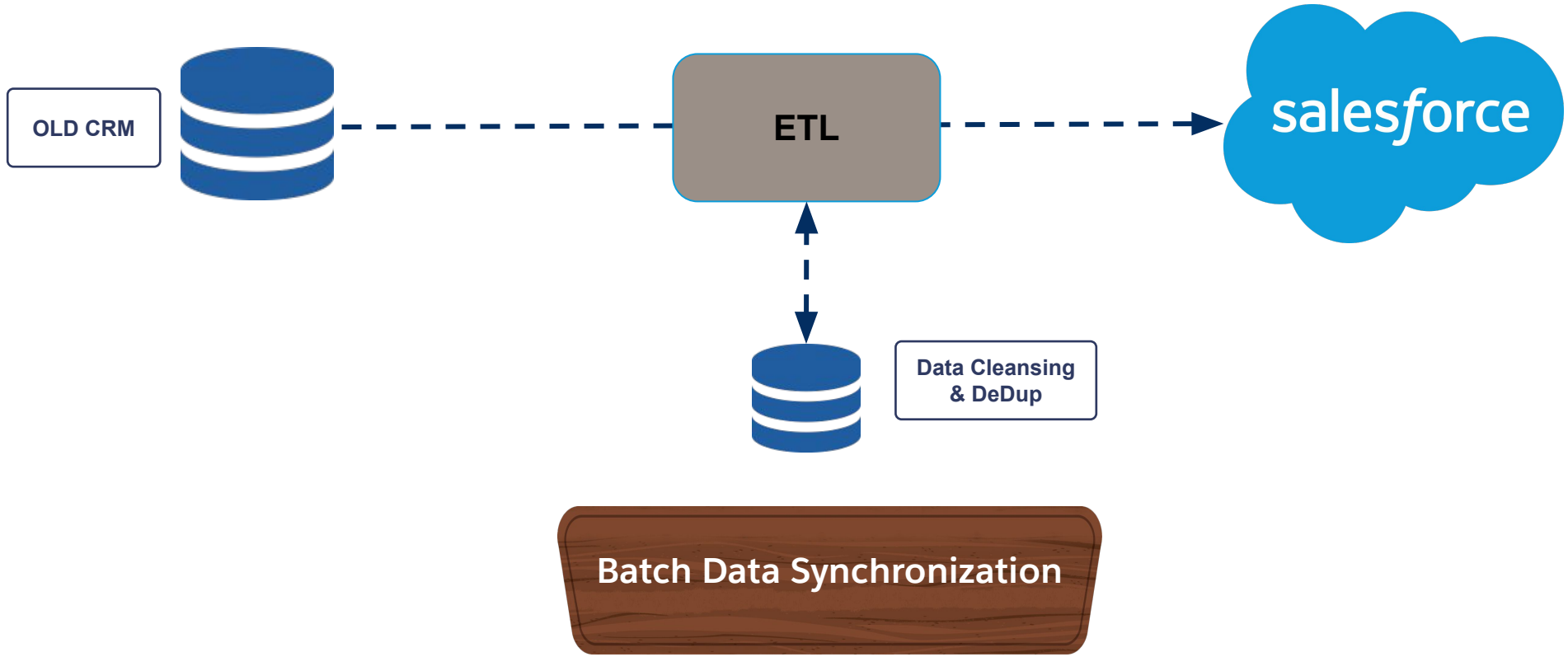
Embedded GUI Interaction

Example: Maps, Credit Card Mgmt Applications

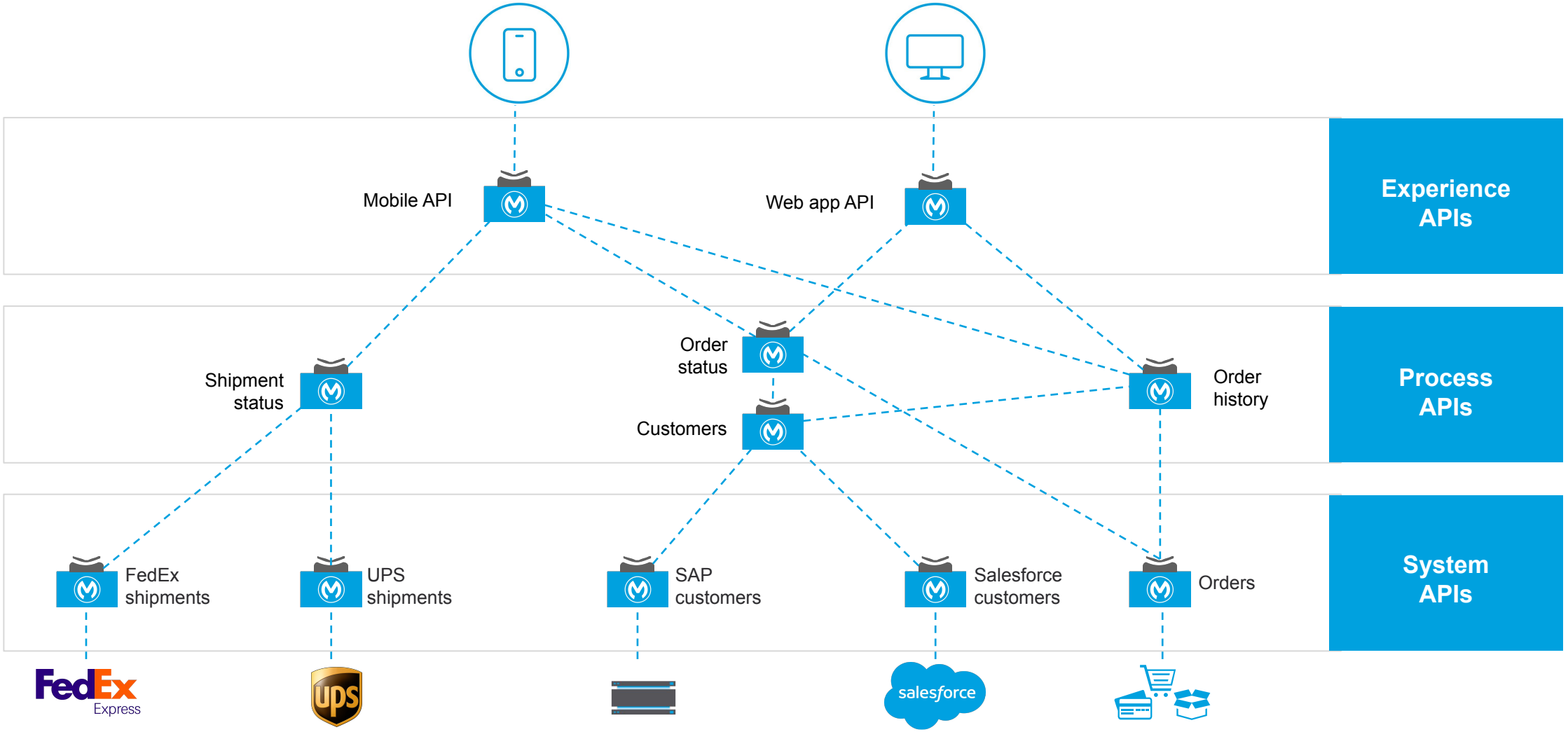


Batch Alignment

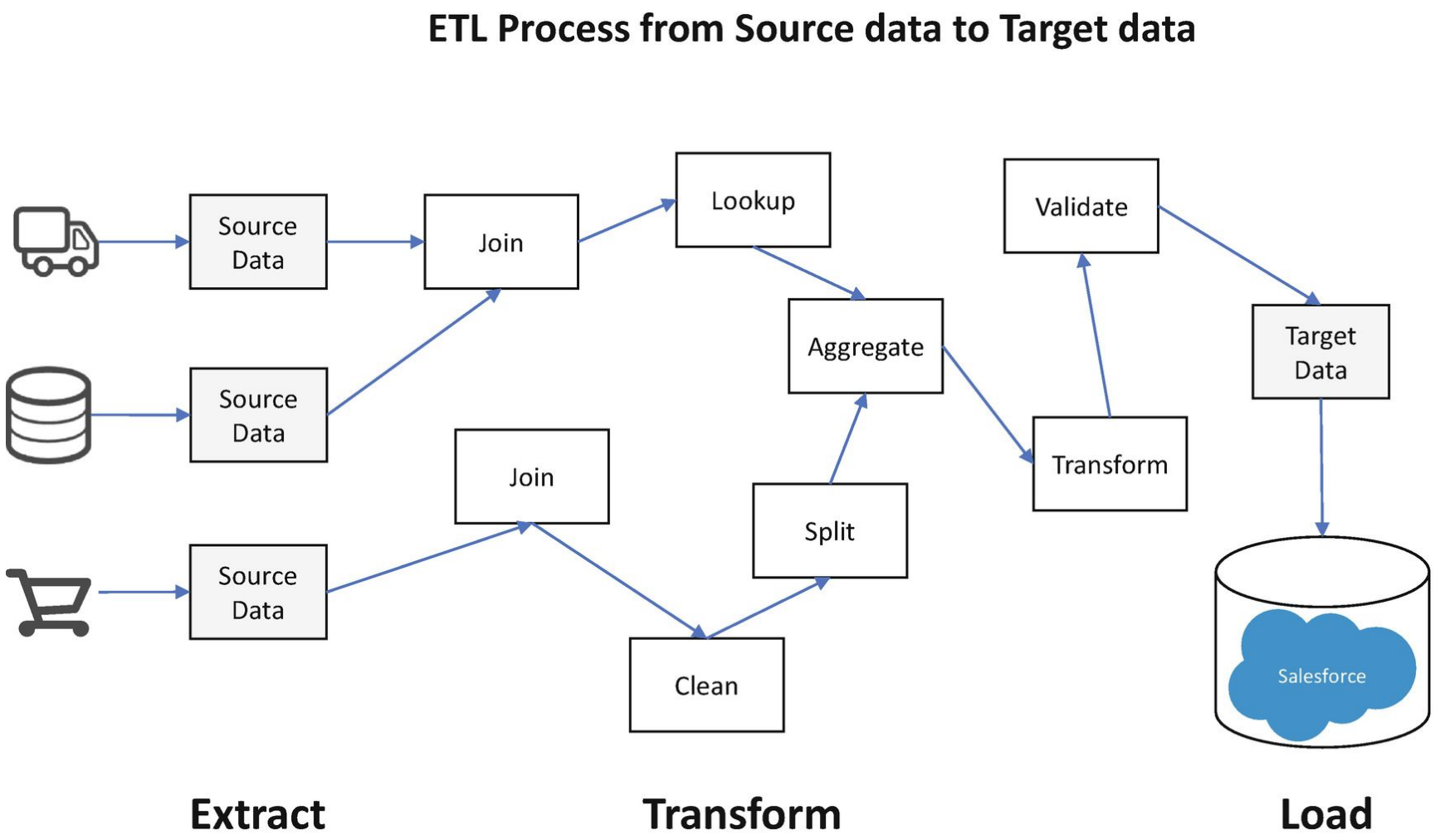
Example: Massive data alignment, Data migration



Mulesoft ESB Api-led approach



ETL process approach



Identity Management

Authentication - Authorization - Accounting

The key concepts of the “Identity Management”

Identification

A User presents his/her access **Credentials**

In a **Real Life** similar to presenting your plane ticket at the airport

In **Digital Life** typing your Username/Pwd into a system

Authentication

The process of confirming/verifying those **Credentials** are true and valid

In **Real Life** when the airport staff verify your ticket and make sure is valid (sometimes asking for second factor)

In **Digital Life** usually we don’t see but in the back-end either a username/pwd verification occurs (or a SAML request to **Identity Provider**)

Authorization

The process of determining what can an **authenticated** user access and do in the system

In **Real Life** is similar in going to security check where they make sure you can access restricted areas

In **Digital Life** is still behind the scene, but once the user is authenticated the system (usually the **Service Provider**) enforces what **resources** has access to and what can the user do with those resources

Accounting

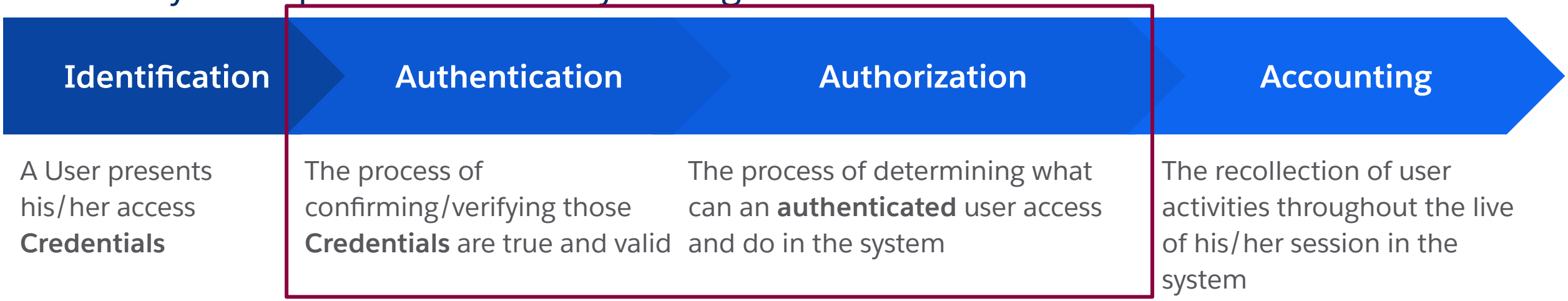
The recollection of user activities throughout the live of his/her session in the system

In **Real Life**, boarding the plane, when the ticket gets scan again

In **Digital Life** all the reports that summarize what the user where doing (Login History, Audit Log, etc.)

Authentication - Authorization - Accounting

The key concepts of the “Identity Management”



Identity of a digital user is the collection of digital information that truthfully allow you to know **WHO** the user is and **WHAT** he/she can access in the system

What is Single Sign On (SSO)?

Single sign-on (SSO) is an **authentication** scheme that allows a user to log in with a single ID and password to any of several related, yet independent, software systems.

Benefits

Reduce admin costs (password maintenance, forgot pwd on many system)
Leverage existing investment (many companies use LDAP to manage user identities)
Increase user adoption and productivity (user provisioning and just one login credentials)
Increase security (centrally managed user deprovisioning)

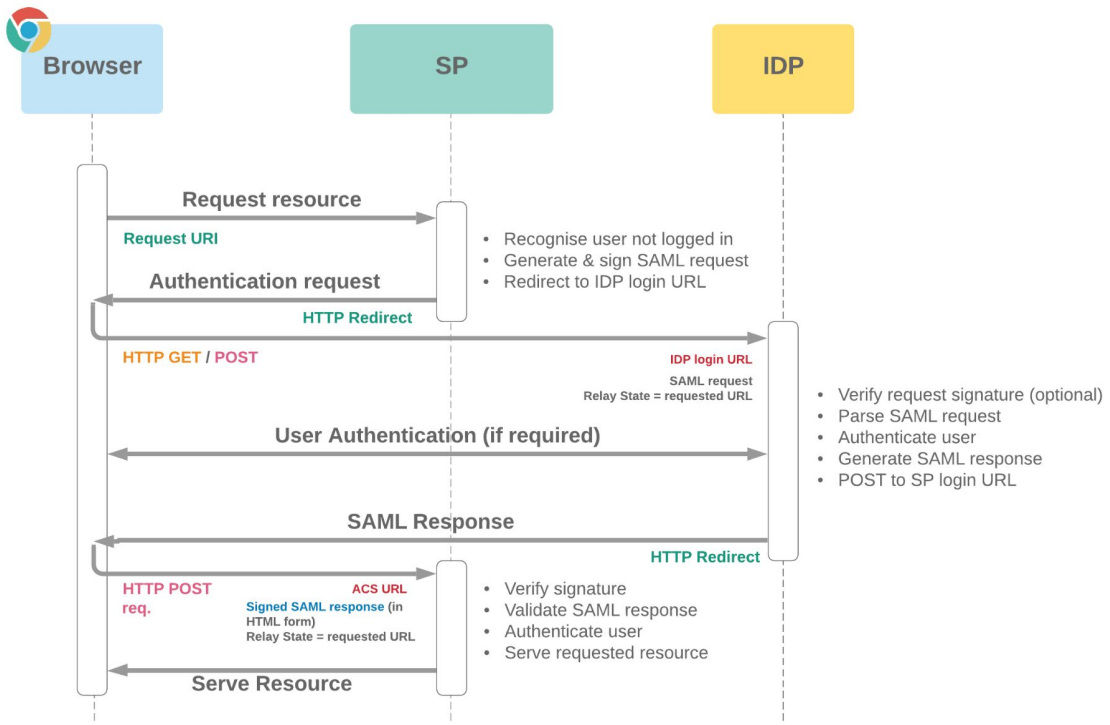
SSO & Salesforce

Federated Authentication (using SAML)
Delegated Authentication
Authentication providers

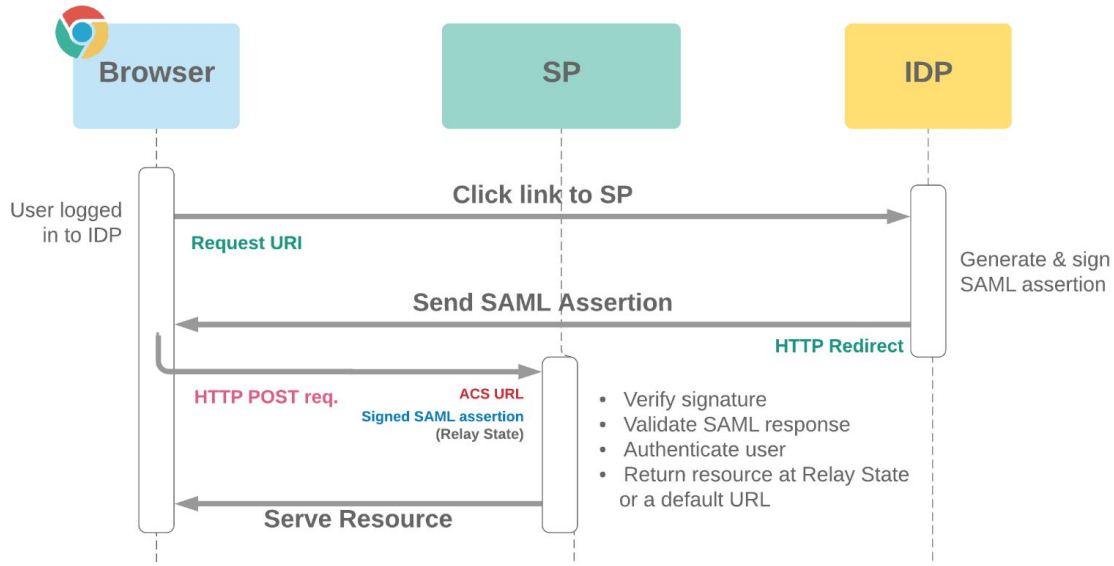
Authentication is done by an external Identity Provider (IdP) system and Salesforce is the Service Provider (SP)

SSO SAML Flow - SP & IdP Initiated

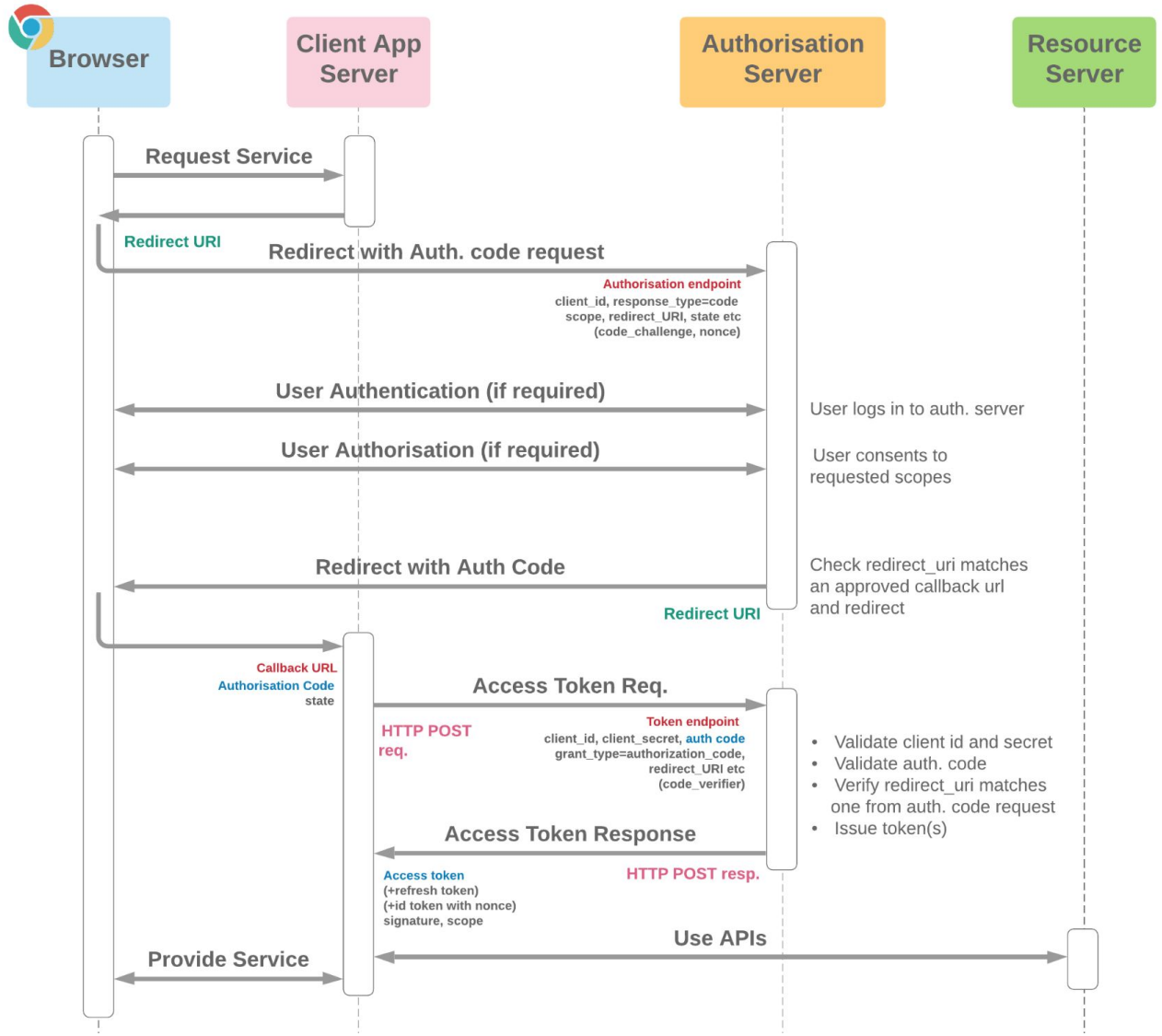
SSO - SP Initiated



SSO - IdP Initiated



Authorization Flows - OAuth 2.0



Oauth 2.0 Flows

There are several Oauth flow depending on the use case and device in place. These are just some of them:

OAuth 2.0 **Web Server Flow** for **Web App Integration** (Authorization Code Grant): used for Web Application Servers able to protect the connected app's identity

OAuth 2.0 **User-Agent** Flow for **Desktop or Mobile App Integration** (Implicit Grant): used for Mobile App or Web App that doesn't have a backend

OAuth 2.0 **JWT Bearer Flow** for **Server-to-Server Integration**: where instead there are no Web App on Browser

OAuth 2.0 **Device Flow** for **IoT Integration**: pps that run on devices with limited input or display capabilities, such as Smart TVs, appliances, and other IoT devices

OAuth 2.0 **Refresh Token Flow** for **Renewed Sessions**; renews access tokens issued by the OAuth 2.0 web server flow or the OAuth 2.0 user-agent flow.

OAuth 2.0 **SAML Bearer Assertion Flow** for Previously Authorized Apps: leverage a SAML Assertion to get an Access_Token

Multi Factor Authentication (MFA)

MFA is an effective way to increase protection for user accounts against common threats like phishing attacks, credential stuffing, and account takeovers

Such as a username and password, or pin number

Such as a one-time passcode from a hardware device or mobile app

Such as fingerprint or face scanning technology

Because MFA requires you to submit multiple forms of authentication to prove your identity, your account is less likely to be compromised or breached

Salesforce is enforcing this additional layer of security on all his products by February 2022

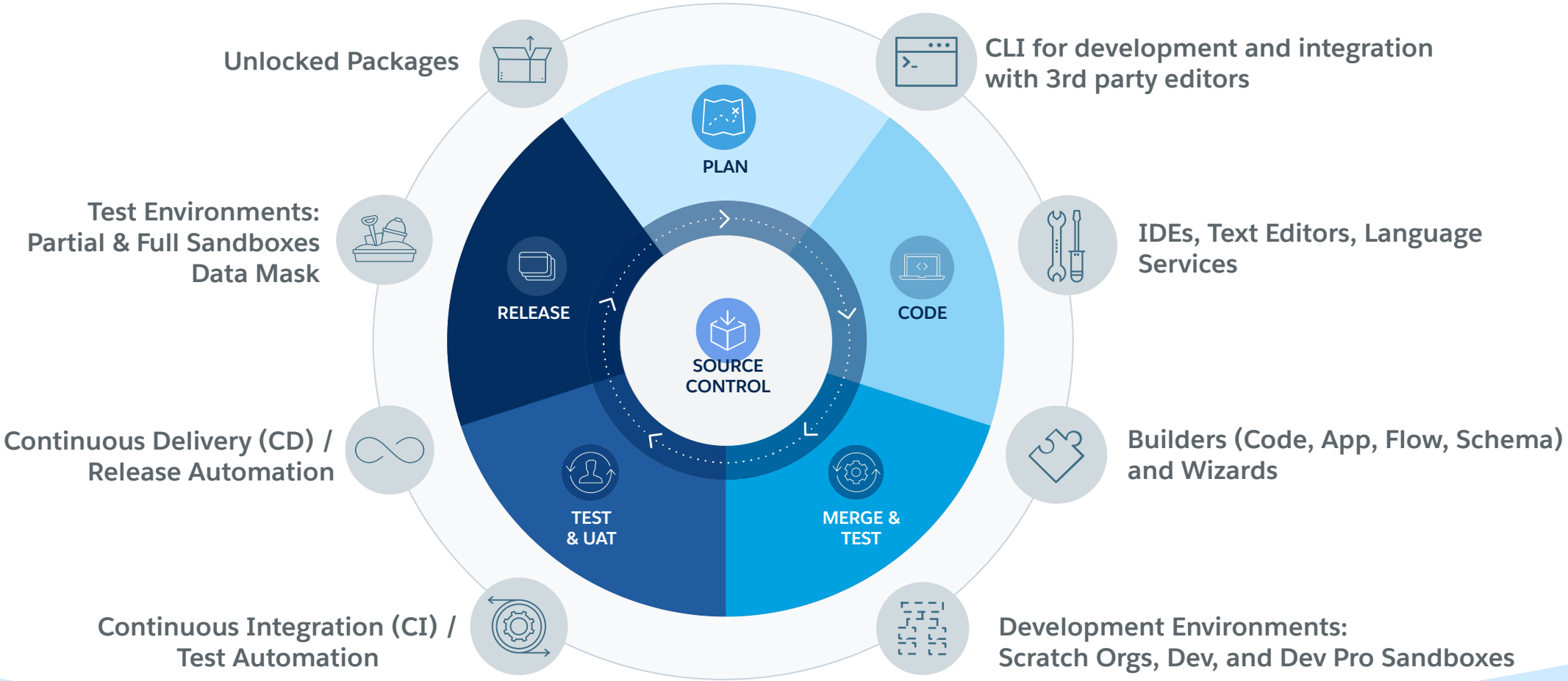
Development Lifecycle

How do we develop in Salesforce?

From No-Code to Code

Modern Application Lifecycle Management (ALM)

The fast, efficient, and trusted path to build on Salesforce



Development Models

Customizing Core Applications:
Sales, Service, etc

Org (Unpackaged) Development

- Declarative (UI)
- Programmatic (CLI)

Creating Custom Platform
Applications for your Org(s)

Package Development

- Programmatic (CLI)

Environments? Sandboxes!

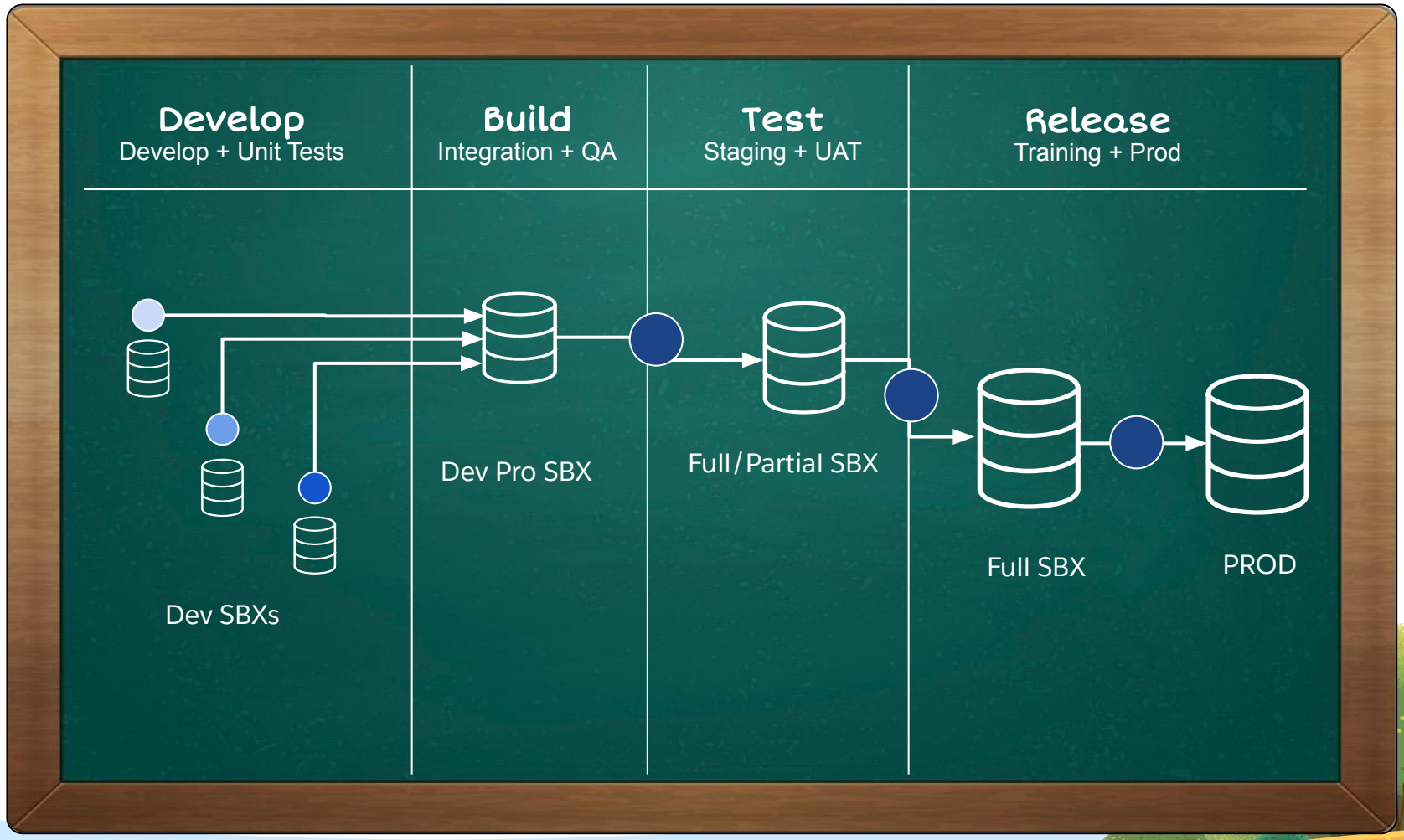
SANDBOX TYPE	REFRESH INTERVAL	STORAGE LIMIT	WHAT'S COPIED	TEMPLATES
Developer	1 day	Data storage: 200 MB File storage: 200 MB	Metadata only	Not available
Developer Pro	1 day	Data storage: 1 GB File storage: 1 GB	Metadata only	Not available
Partial Copy	5 days	Data storage: 5 GB File storage: Same as your production org	Metadata and sample data	Required
Full	29 days	Same as your production org	Metadata and all data	Available

Declarative Org (Unpackaged) Development Model

Promote org changes in Setup using Change Sets

Code is promoted through **Outbound** and **Inbound Change Sets**

Change set promotions via Setup UI



Change Sets Limits

Convenient for small orgs, but poorly suited to the needs of larger implementations

Collaboration is hard

No conflict detection

No ability to merge changes in the same metadata

Lack of traceability

Why was this change performed? By Who? When?

Time consuming

Components have to be added manually

Does not play well with Continuous Integration

- An architect trying to scale with change sets -

What is Source Control & Git?

An open-source distributed source code management system for the practice of tracking and managing changes to code

Source control (or version control) is the practice of tracking and managing changes to code. Source control management (SCM) systems provide a running history of code development and help to resolve conflicts when merging contributions from multiple sources.

Git is a distributed, open-source version control system (VCS) that enables you to store code, track revision history, merge code changes, and revert to earlier code version when needed. Git allows you to create a copy of your repository known as a **branch**.

Using this branch, you can then work on your code independently from the stable version of your codebase. Once you are ready with your changes, you can store them as a set of differences, known as a commit. You can pull in commits from other contributors to your repository, push your commits to others, and merge your commits back into the main version of the repository.

To learn more about Git, go here.

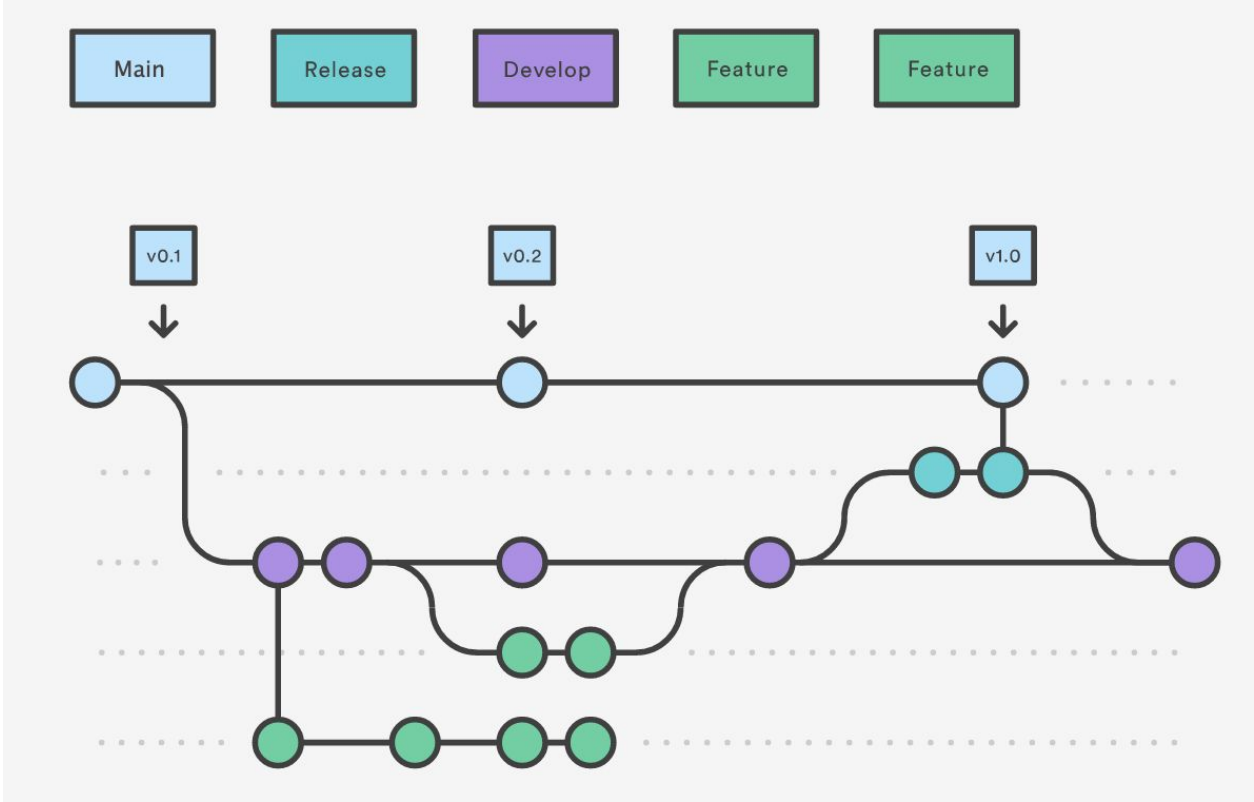
Gitflow Workflow

A robust framework for managing small and large projects

Gitflow Workflow is a Git workflow design that was first published and made popular by Vincent Driessen at nvie. The Gitflow Workflow defines a strict branching model designed around the project release. This provides a robust framework for managing larger projects.

Gitflow is ideally suited for projects that have a **scheduled release cycle**. This workflow doesn't add any new concepts or commands beyond what's required for the Feature Branch Workflow. Instead, it **assigns very specific roles to different branches** and defines how and when they should interact. In addition to feature branches, it uses individual branches for preparing, maintaining, and recording releases.

Of course, you also get to leverage all the benefits of the Feature Branch Workflow: pull requests, isolated experiments, and more efficient collaboration



Package Development Model

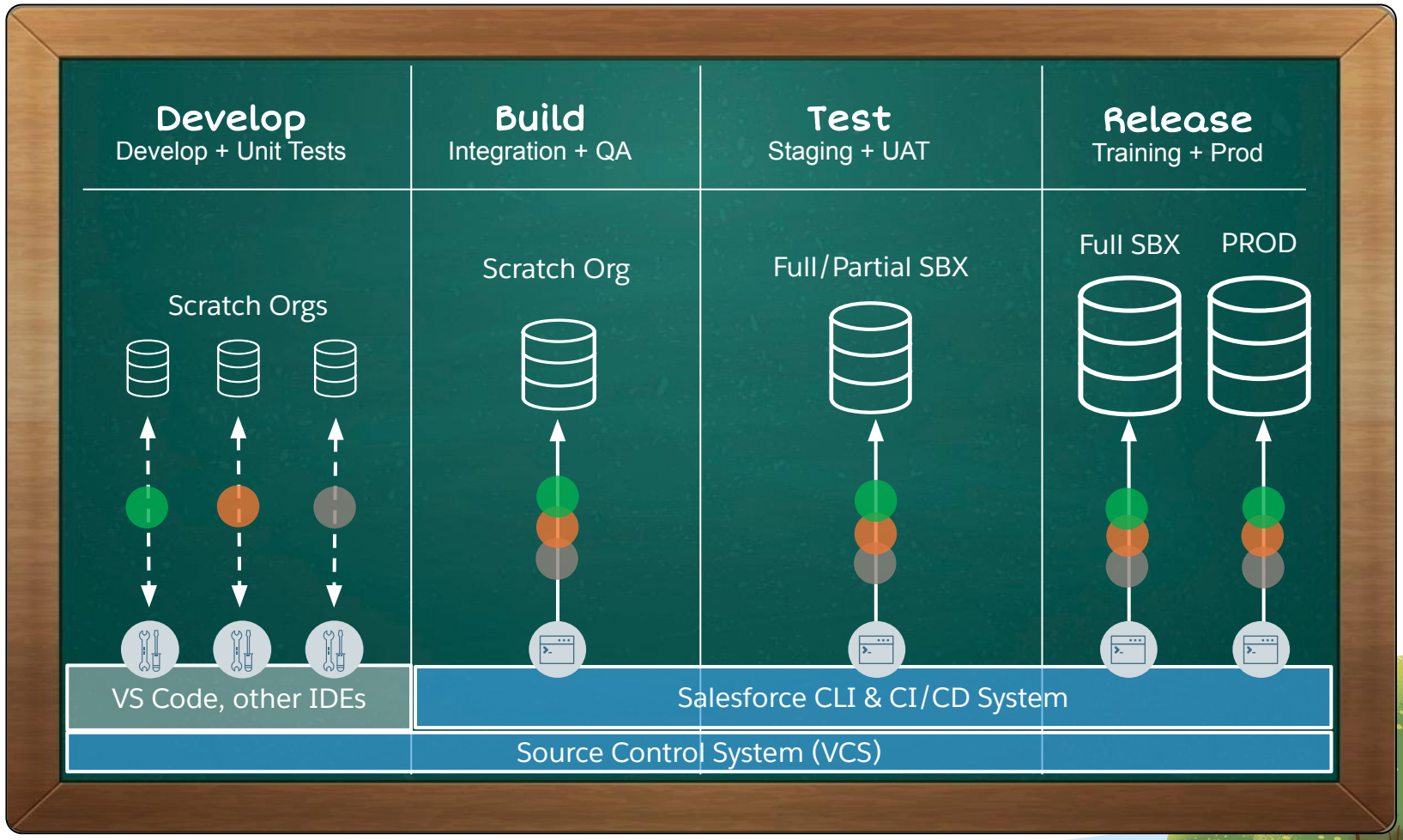
Create complete modules utilizing our IDE, CLI, and Source Control

Changes are tracked in source control. Updates are released with new package versions

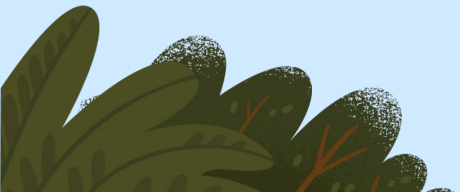
source:push | source:pull

package:install

each circle represents separate packages



Governance



Governance

What is IT Governance

Ensure that the **project meets its objectives, success criteria, and success metrics** by controlling and **managing changes to scope, schedule, and budget** throughout the project lifecycle

Enable all stakeholders to influence the project's direction in order to **maximize its ultimate value**

Establish a **clear and agreed structure to monitor and manage** the fundamental elements of the project

Helps avoid customer escalations, scope creep, delivery of a solution that does not meet the expected business outcomes, and warranty work

Think of Governance like the sheriff ensuring things don't go astray like the wild, wild West of your business processes.

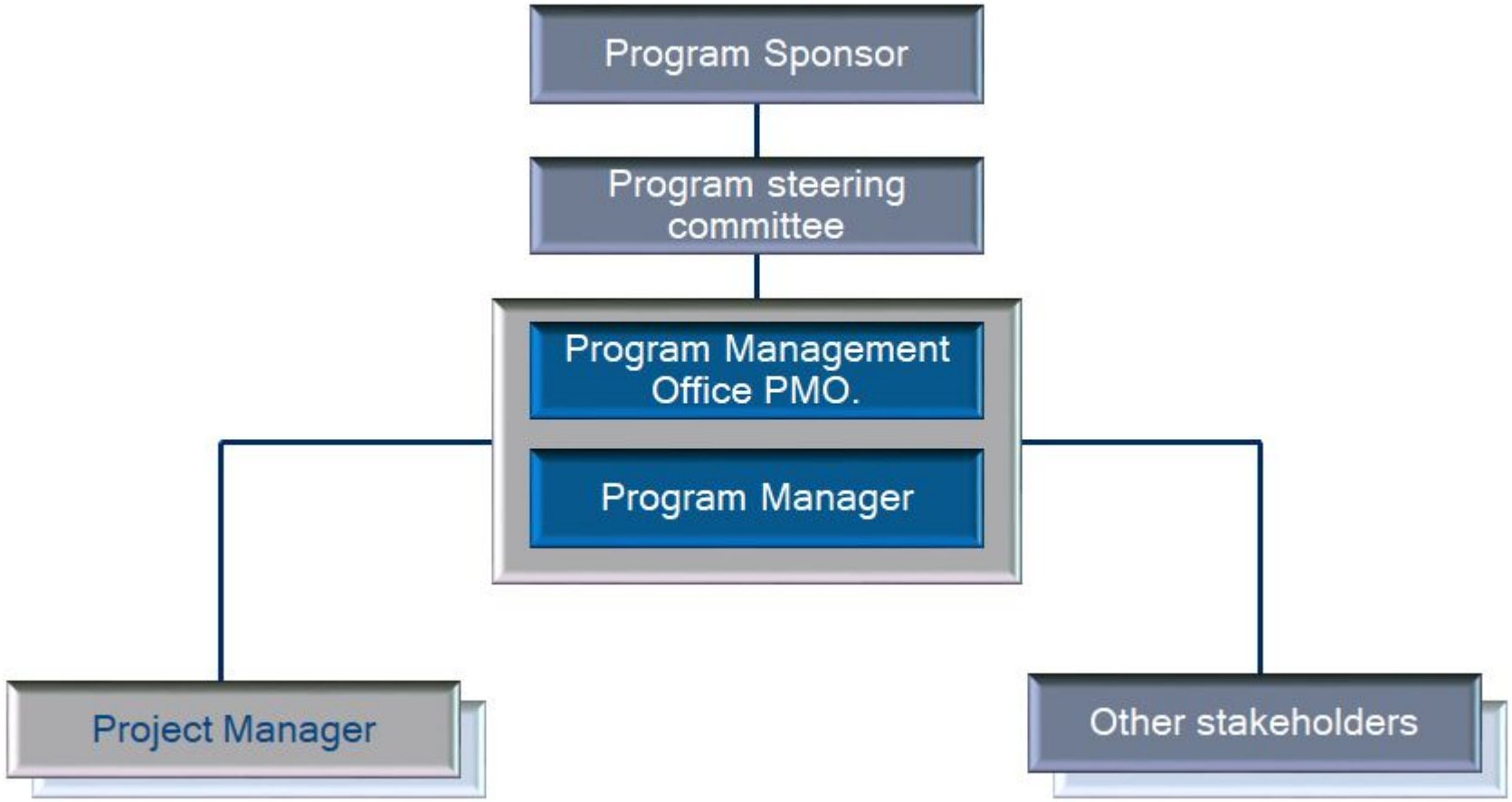
Governance

What are the Overall Benefits of Governance?

*Governance helps companys **create optimal value from IT** by maintaining a balance between realising benefits and optimising risk levels and resource use.*

Governance

Main program governance roles



Governance

Create RASIC (Responsibility Matrix)

When establishing roles and responsibilities on a project or business activity, developing a **RASIC matrix** is a useful way to ensure that roles and responsibilities related to key activities and deliverables are understood and agreed upon.

A RASIC matrix is a grid showing **key activities and deliverables mapped against roles assigned to work on the project**.

RASIC is an acronym, which stands for "**Responsible**", "**Accountable**", "**Supporting**", "**Informed**" and "**Consulted**." These designations are defined as follows:

Responsible

- The “doer”
- The chokable throat
- Only one “R” per row

Accountable

- Buck stops here
- Veto power
- Only one “A” per row

Supports

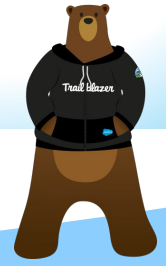
- Helps the “R”
- A secondary “doer”
- Can have 0,1, or many “S” per row

Informed

- Needs to know of important decisions made or tasks completed
- One way communication
- Can have 0,1, or many “I” per row

Consulted

- Provides input and considerations into key decisions before they are made
- Two way communication
- Kept in the loop
- Can have 0,1, or many “C” per row



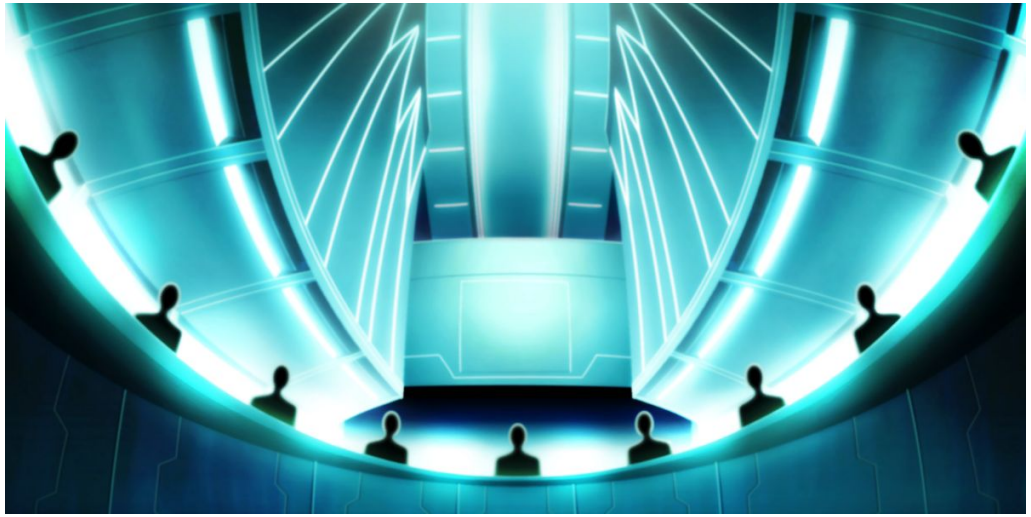
Governance

What does a RASIC look like?

	SDM	EM	PM	SBA	BA	TA	Dev	Data	UX	UI	Creative Director	QA Lead	QA Tester	Change Mgmt / Training	**Client - Project Sponsor**	**Client - Product Owner**
Planning																
Logistics for Week 1	C	A	R													
Project Initiation Document (Kickoff Deck)	C	A	R													
Facilitate Kickoff Meeting	C	A	R													
Pre-BPR Questionnaire	C	A	S	R		S			S							
Methodology Primer		A	R													S
RACI/RASIC		A	R	S		S					S					S
Work Breakdown Structure		A	R	S		S					S				I	S
Comprehensive Project Plan		A	R	C		C					C				I	C
Sprint Plan (Themes and loaded stories)			A	R		S										
Scrum Release Plan			R	S		S										
Org Procurement			C	C		C										A
Comprehensive QA Plan			A	C		C			C			R				
Governance Plan		A	R													

Committees

Meeting Attendees and Purpose



- **Executive Steering Committee:** Involve your key vendors and review and update the vision and strategy where necessary; address any showstoppers.
- **Stakeholders:** Ensure that you've aligned everyone's goals.
- **Day-to-day Project Management:** They are responsible for the day to day management of the project(s).
- **Change Control Board:** Agree on major enhancements that are based on business goals. Discuss end-user feedback. They own the backlog for each release.
- **Release Management Board:** Verify that the current release is on schedule and meets quality standards.
- **Architecture Review Board:** Define the project architectural and design standards and offer project team advice on solving complex architectural issues.

Notes: Meetings should occur regularly with each one documented and the notes shared with everyone after every meeting. Confirm and communicate dates.

Architecture Review Board

Definition

The **Architecture Review Board (ARB)** serves as a governance body ensuring IT initiatives align with Ecosystem Architecture and ultimately align with organizational goals, strategies, and objectives.

The ARB's purpose is to **improve the quality of IT products**.

Resources

Be a Trailblazer in the Salesforce Ecosystem

Trailhead

Trailblazer Community

Visit trailblazers.salesforce.com today!

Get Hands-on!

Resources

Get Started With Trailhead for Individual Learner Onboarding

Salesforce Administrator Credential Prepare for Your Salesforce Administrator Certification

Trailblazer-Ranks from Scout to Ranger - Motivate yourself to go even further with Trailblazer Rank

Salesforce Career Path - Discover your career path in the Cloud!

Salesforce Architect Overview - Get all you want to know about Salesforce Architect Certification path


Q&A


salesforce
Thank you

Which KPIs do customers want to improve in Sales?

Revenue Drivers

1. Lead conversion rate
2. Opportunity win rate
3. Lead volume
4. Cross-sell / upsell

Efficiency / Data Accuracy

5. Sales productivity
6. Sales support productivity
7. Reduce uncontacted leads
8. Forecast accuracy*

*Typically qualitative

Which KPIs do customers want to improve in Service?

Efficiency

1. Service rep productivity
2. Case deflection
3. First contact resolution
4. New agent ramp time*

Revenue Drivers

5. Cross-sell / upsell
6. Customer retention
7. Purchase frequency

*Typically qualitative

Which KPIs do customers want to improve in Field Service?

Efficiency / Data Accuracy

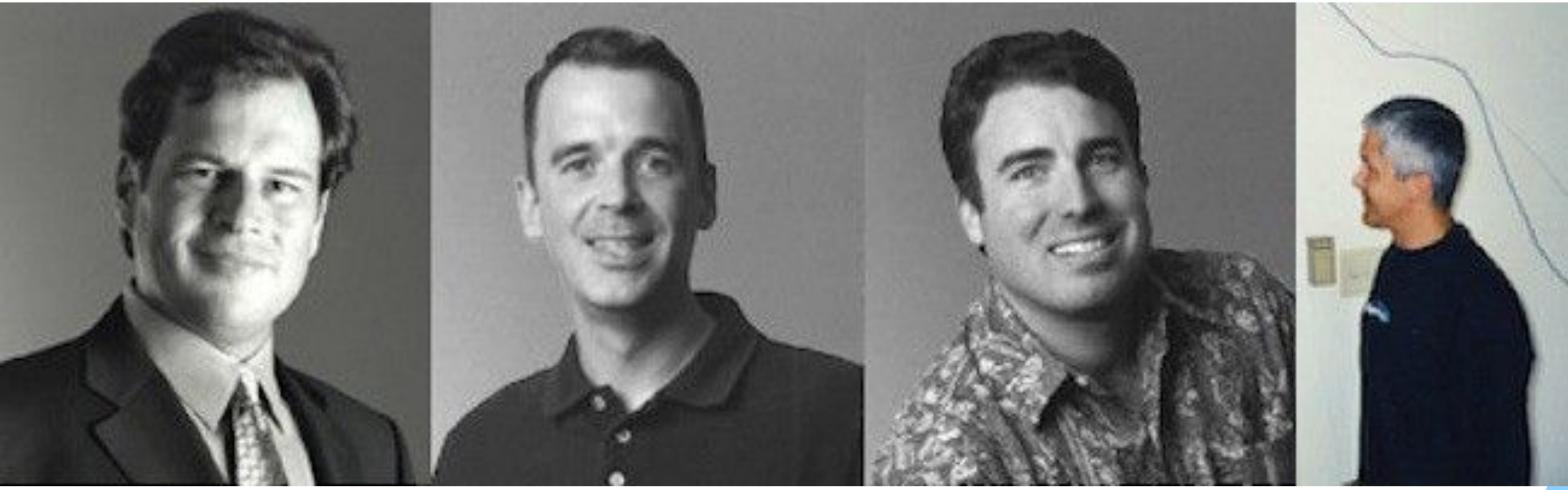
1. Field tech capacity
2. Internal productivity
3. Reduce job cost / margin improvement
4. First time fix rate*

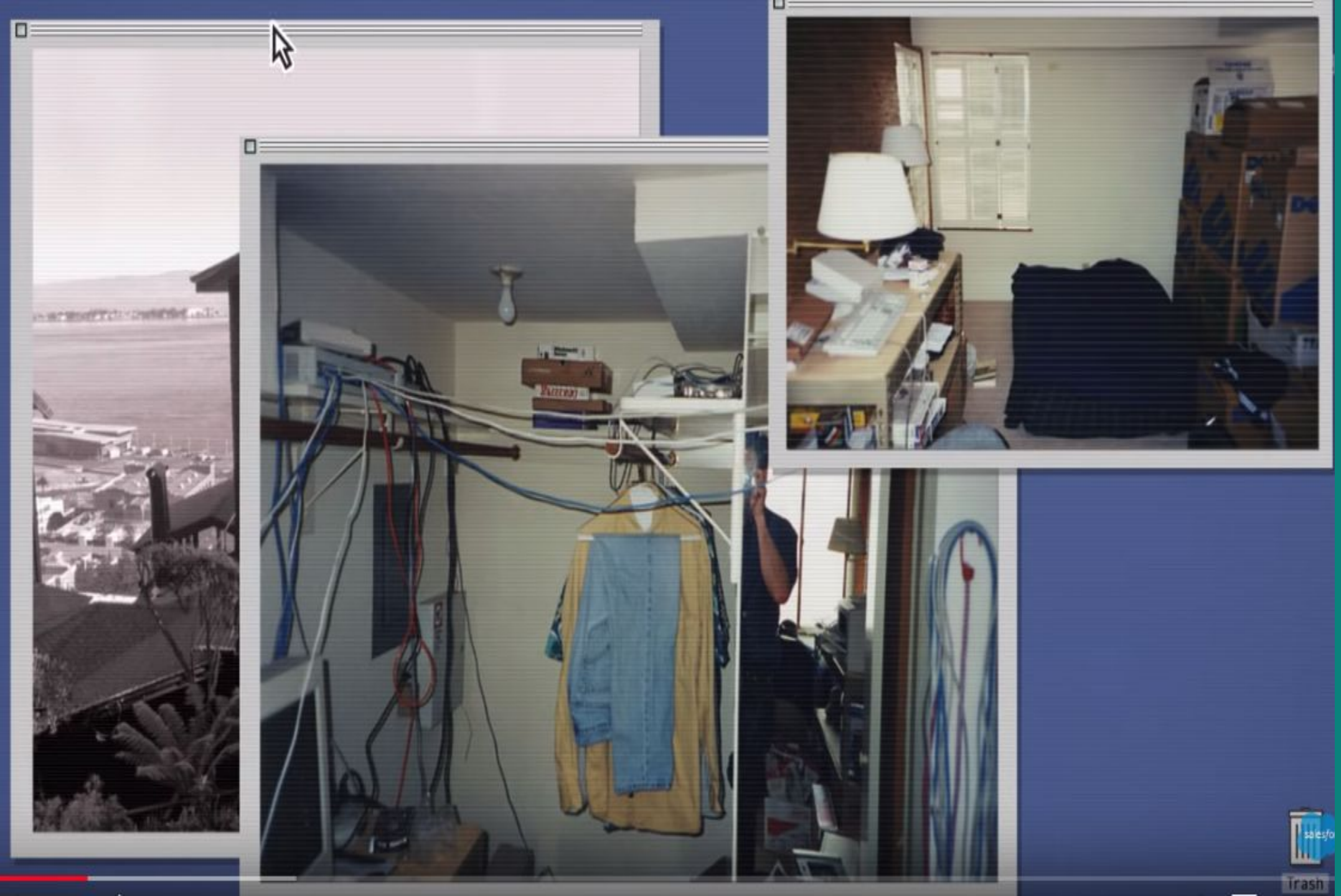
Revenue Drivers

5. Cross-sell / upsell
6. CSAT / customer retention
7. Warranty attachment rate
8. Revenue / cost leakage*

*Typically qualitative

Everything starts in San Francisco, year 1999...





1999

2021

Challenging the Status Quo

A new Technology Model

A new Business Model

YAHOO!

Google!

Search 1,326,920,000 web pages

Google Search

amazon.com

The Customer Success Gap

Your Company

75%
of companies think they are customer-centric

Economic crisis

Environmental crisis

Workforce crisis

Your Customers

30%
of customers actually agree

Source: Capgemini: Dealing with the disconnect between customer expectation and business reality, 2020.

Most Brands Struggle to Create a Single Source of Truth

Duplicates
Unintentional

~78%
Guest Orders

Legacy Loyalty Data
Gold member

Service Profiles
00800 753 3333
Samantha Smith

Samantha Smith
s.smith.58221@gmail.com

Different phone numbers

Guest Checkout
Samantha Smith,
sam@mystyle.com,
+44 800-753-2333

Commerce Profile
Sam Smith
s.smith.58221@gmail.com
(0) 800-753-2333

Multiple Emails

In-Store POS Data
SKU 8wr7013

Marketing Profiles
sam@mystyle.com

s.smith.58221@gmail.com

~75%
No Name

Known & Unknown Data

BI Tools/Data Science
High LTV

Community Profile
StylishSam

Social Handle Only

With Today's Digital-First Customer, Every Moment Counts

84% of customers say that being treated like a person, not a number, is very important to winning their business

34% of companies treat customers as unique individuals

Sources: "State of the Connected Customer" & "State of Marketing", Salesforce Research

Salesforce Marketing Cloud Overview

DANILO

The Salesforce Customer 360 Platform

Salesforce Customer 360

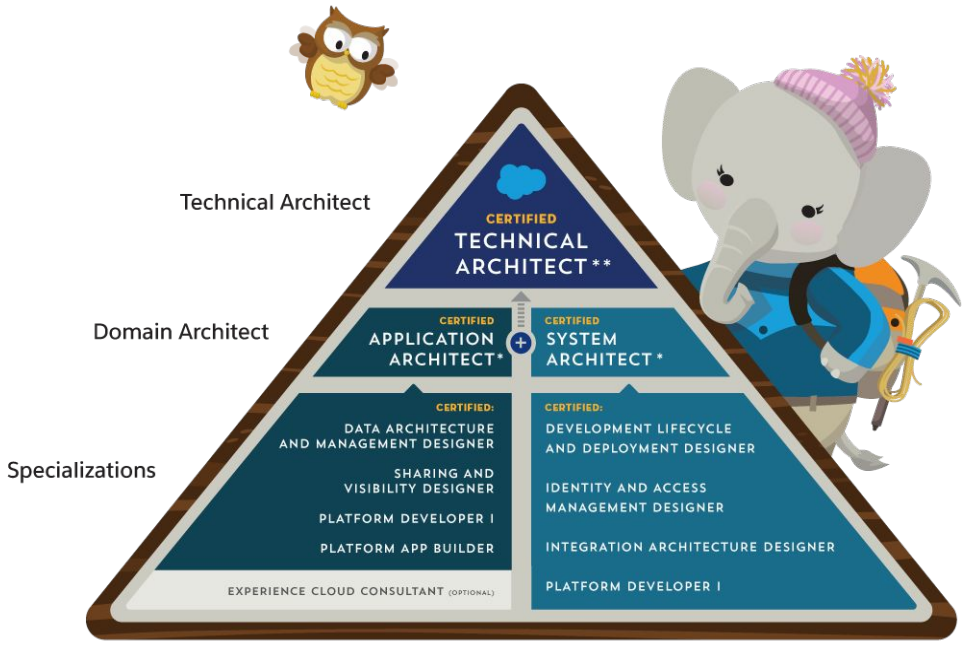
Real-Time	Streams	Segments	Activations
Intelligent	Personalization	Bots	Predictions
Automated	Workflow	RPA	Integration
Hyperforce	Compliance	Data Residency	Privacy

Some of the Italian Customers

Blaze your Trail in your Career

Salesforce Certified Architect Journeys

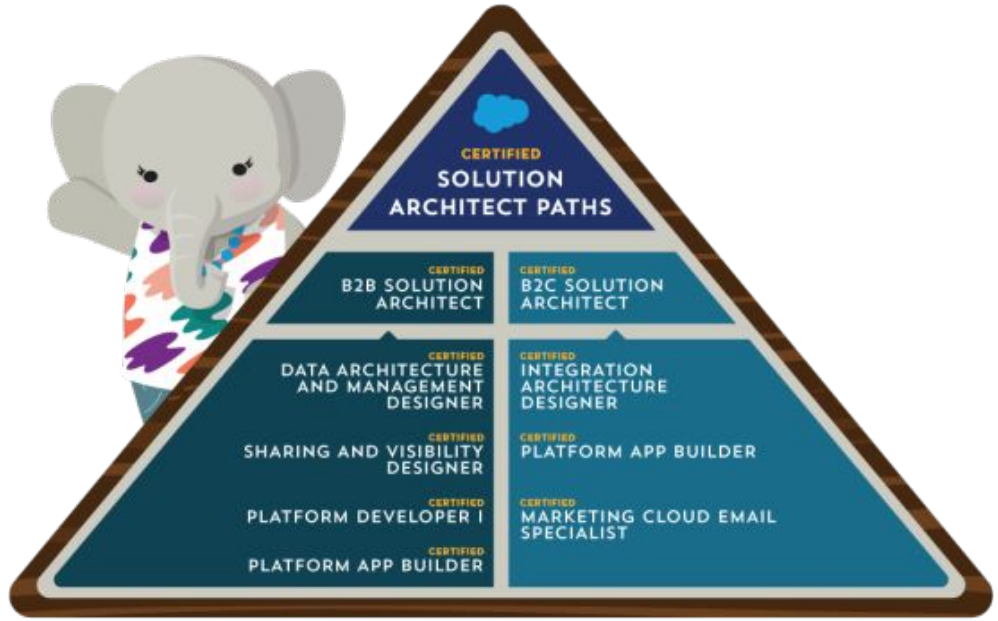
Technical Architect



Related Certification: Certified Administrator (optional)

* Credential earned upon completion of exams within the specializations tier, no additional exam requirements.
** Credential earned upon successful completion of the Domain Architect tier and Review Board.

Solution Architect



***Prerequisite certifications can be earned in any order**

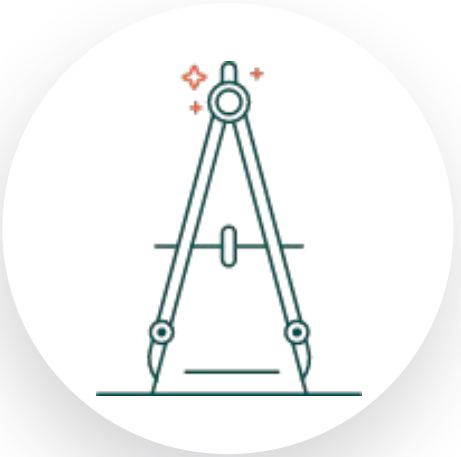
Today's goals

Get to know Salesforce

What do we do? Why?
Technology advantage

Professional opportunity

One of the most in demand skills in the IT industry



Transformation Architecture

A sneak peek into Salesforce approach to Technical Architecture

Pizza as a Service

Tradition On-Premises (Legacy)	Infrastructure as a Service (IaaS)	Containers as a Service (CaaS)	Platform as a Service (PaaS)	Function as a Service (FaaS)	Software as a Service (SaaS)	
Conversation	Conversation	Conversation	Conversation	Conversation	Conversation	Configuration
Friends	Friends	Friends	Friends	Friends	Friends	Functions
Beer	Beer	Beer	Beer	Beer	Beer	Scaling
Pizza	Pizza	Pizza	Pizza	Pizza	Pizza	Runtime
Fire	Fire	Fire	Fire	Fire	Fire	OS
Oven	Oven	Oven	Oven	Oven	Oven	Virtualisation
Electric/Gas	Electric/Gas	Electric/Gas	Electric/Gas	Electric/Gas	Electric/Gas	Hardware
Homemade	**Communal Kitchen**	**Bring your own**	**Takeaway**	**Restaurant**	**Party**	

You Manage **Vendor Manages**

Source: Pizza as a Service 2.0 - http://www.paulkerrison.co.uk

How do we design an Architectural Diagram?

Documentation & Implementation Diagram Style

Purpose:

Help viewers understand an implementation or product-related technical detail.

Audience:

Delivery Teams, Technical Stakeholders

What this style **can** show:

- How do we build [x] capability or solution?
- How does [y] product work with [x] products?
- What are the details of [y] product or implementation?
- What work was done to build [x]?

What this style **cannot** show:

- A business capability focused view
- Business value / ROI of products or solutions

How do we design an Architectural Diagram?

Marketing, Strategy & Sales Diagram Style

Purpose:

Help viewers understand concepts or processes, or a vision for a solution.

Audience:

Business & Executive Stakeholders, Technical Influencers

What this style **can** show:

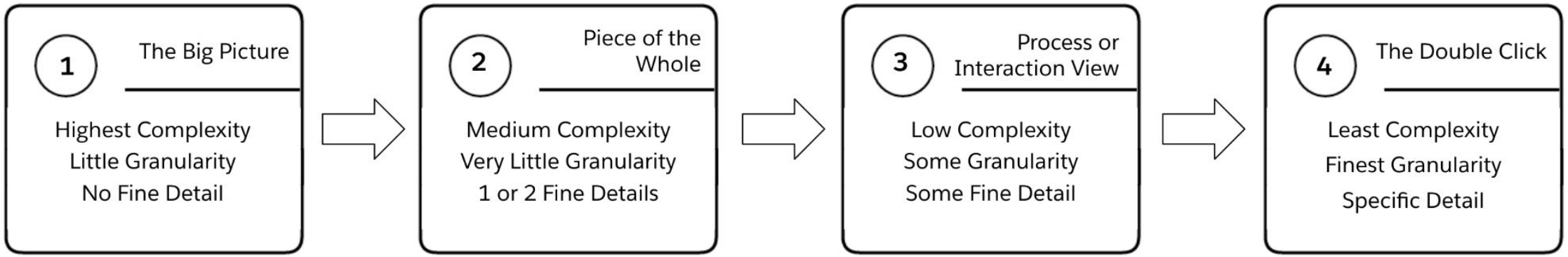
- What is the big picture?
- Why are we doing this?
- Why would we do this?
- What is the business value of products or solutions?

What this style **cannot** show:

- An implementation ready view
- Technical specifications
- Product documentation

How much should I detail the diagram?

Diagram Levels

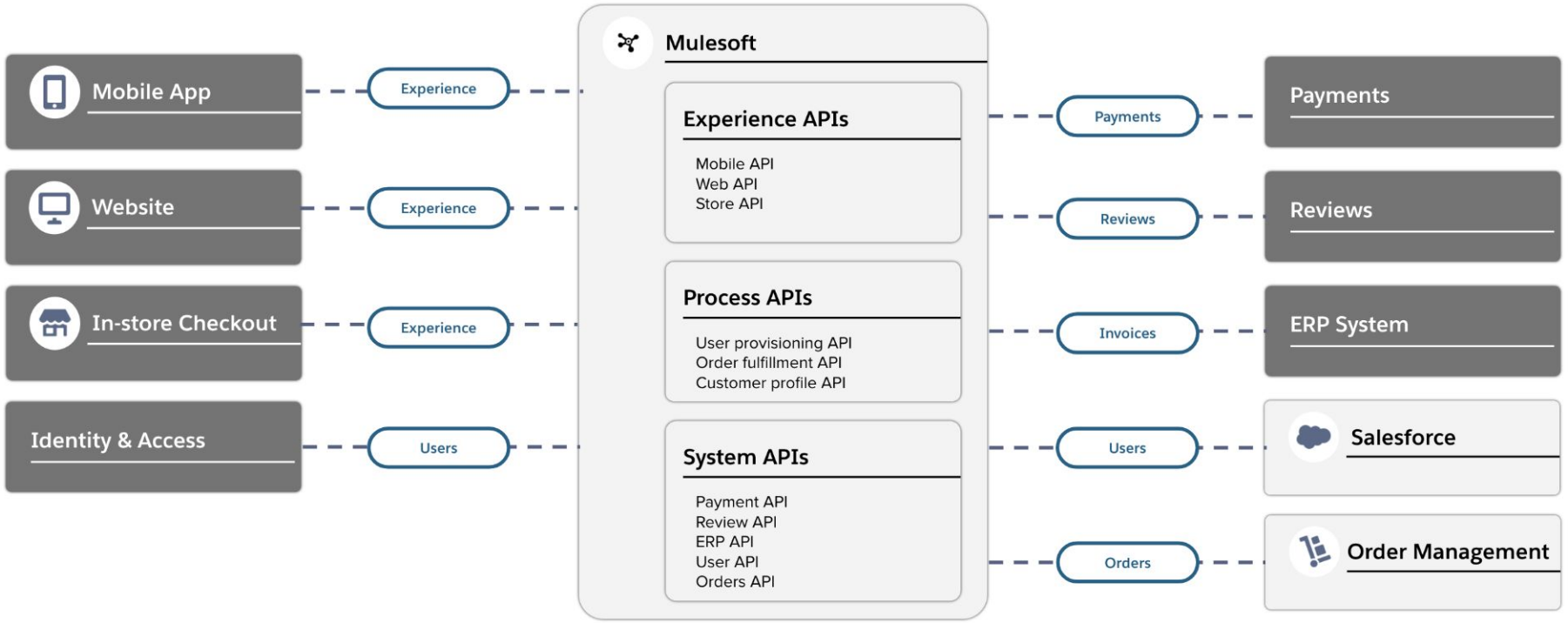


Level 2: Piece of the Whole

Your Logo Here

Integration Layer Diagram

This Level 2 diagram example shows the integration layer with the products and technologies directly involved in this layer. We also see more details about integration behavior and key functionality.

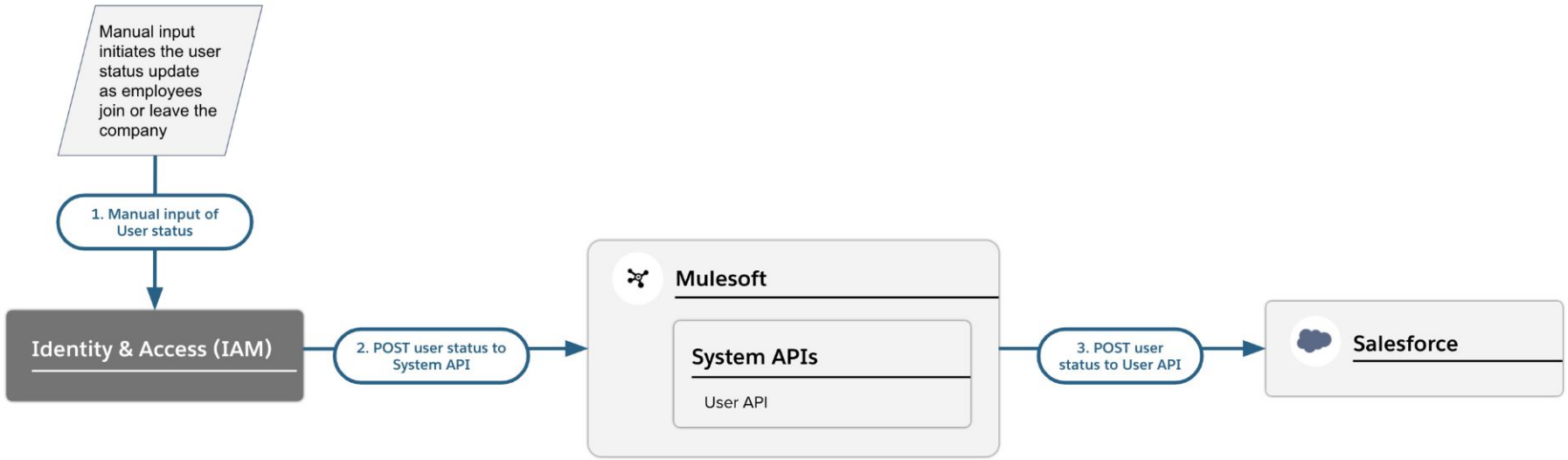


Level 3: Process or Interaction View

Your Logo Here

User Provisioning & Deprovisioning Flow

This Level 3 diagram shows a user provisioning and deprovisioning flow. Only products or technology directly involved in the process appear, along with greater detail about the order of the steps and behavior of the flow.

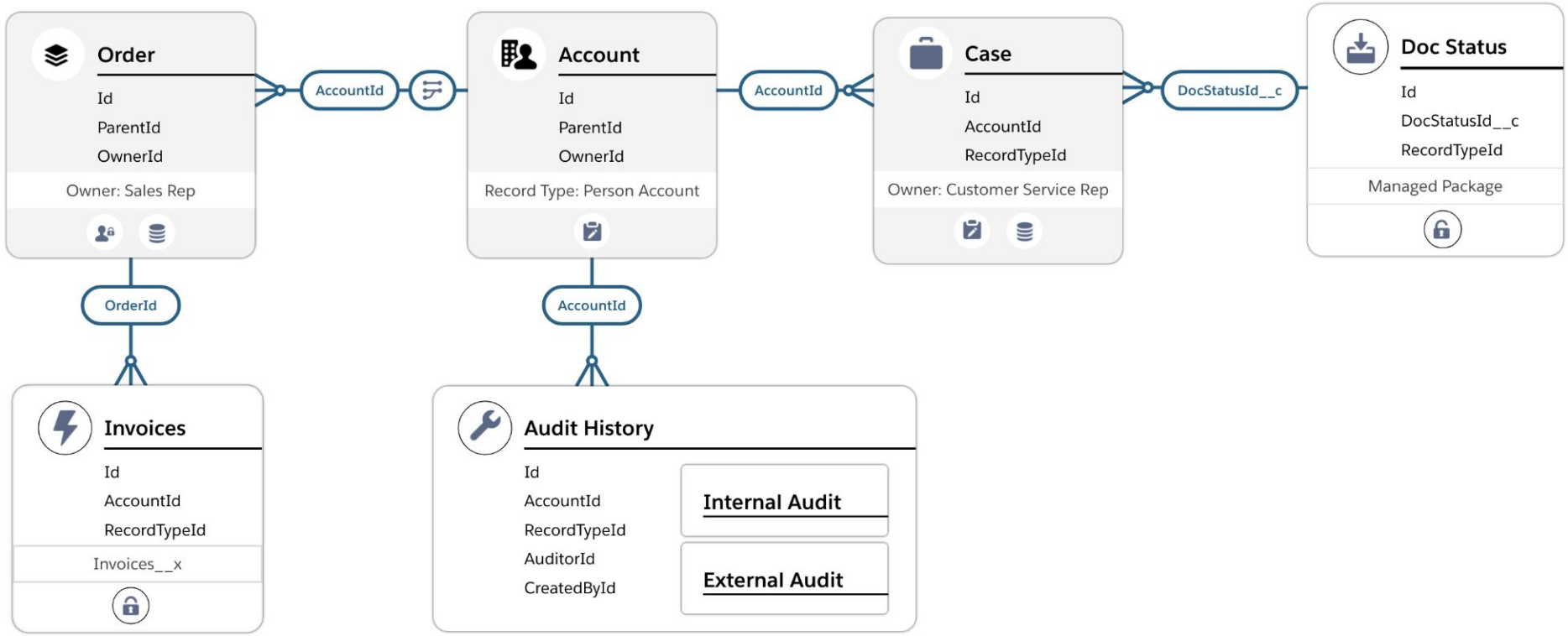


Level 4: The Double Click

Your Logo Here

Data Model

This Level 4 diagram shows part of the data model involved in the solution. Only information that is important for understanding a data model is presented: Salesforce provided defaults, notable limits, relationship details, etc.

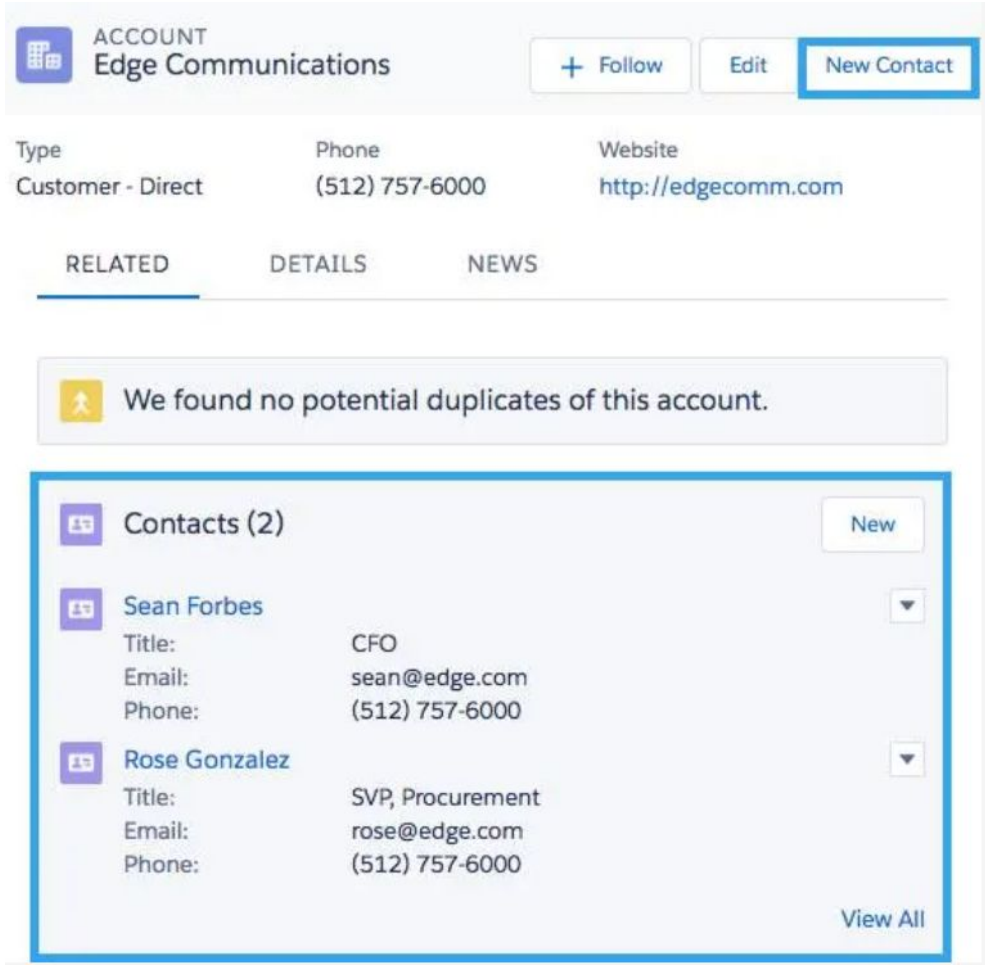


Data Model: What is it?

How can relationships change user experience?

When you look at an account record in Salesforce, you can see that there's a section for contacts on the **Related tab**.

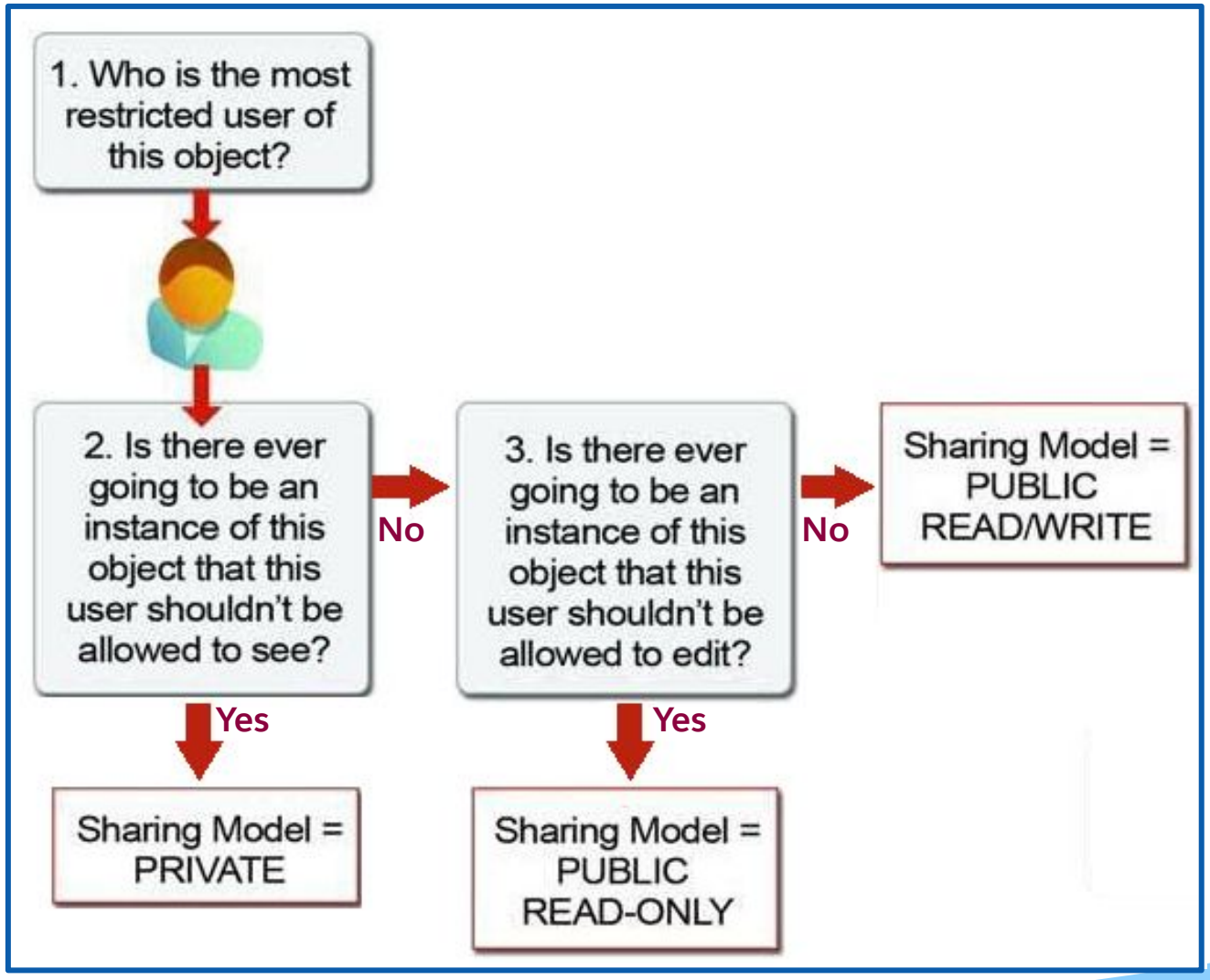
You can also see that there's a button that lets you quickly add a contact to an account.



Data Visibility & Security: How To

How I can determine the org-wide defaults customer needs?

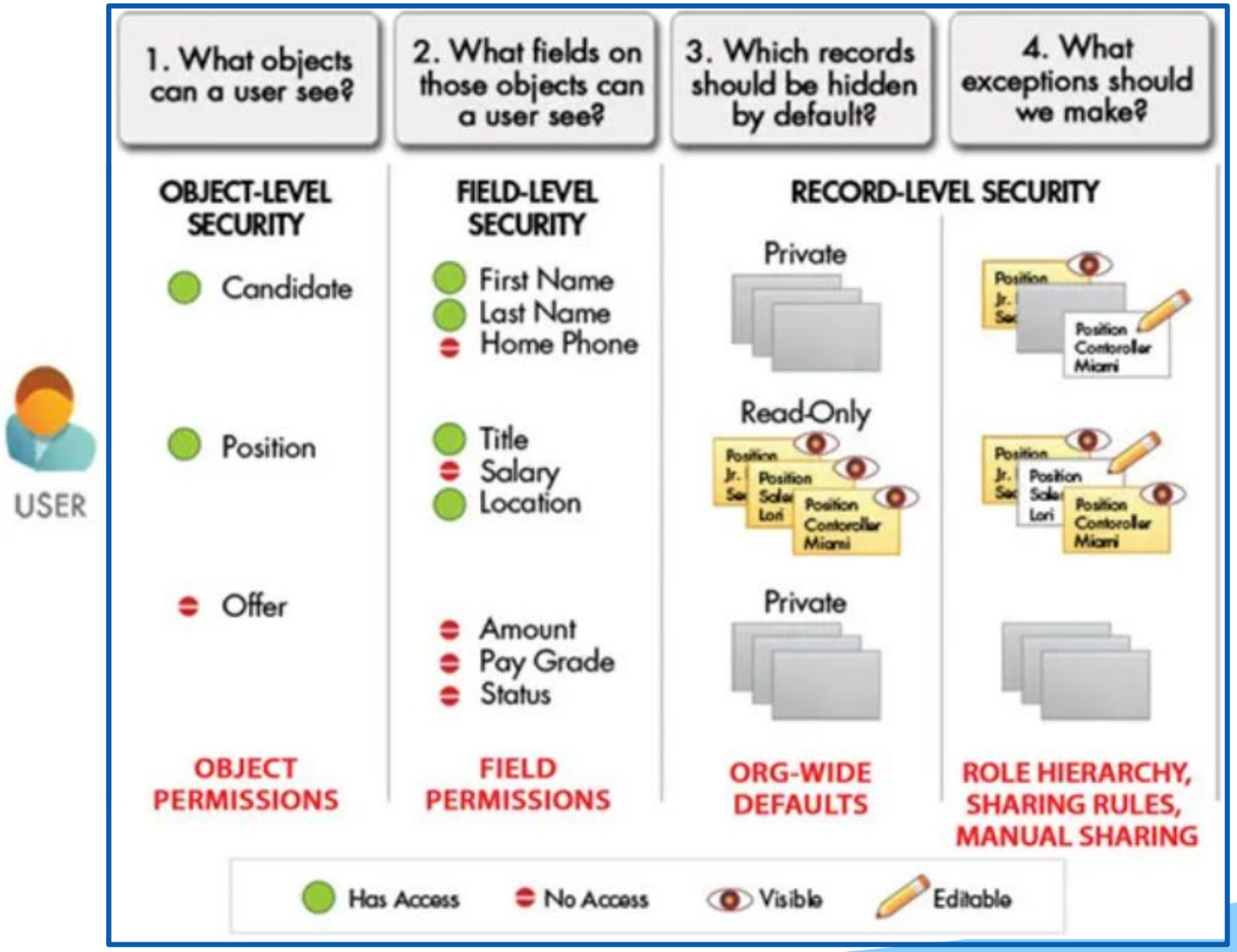
Ask yourself these questions about each object.



Data Visibility & Security: How To

How I can set up my users security model?

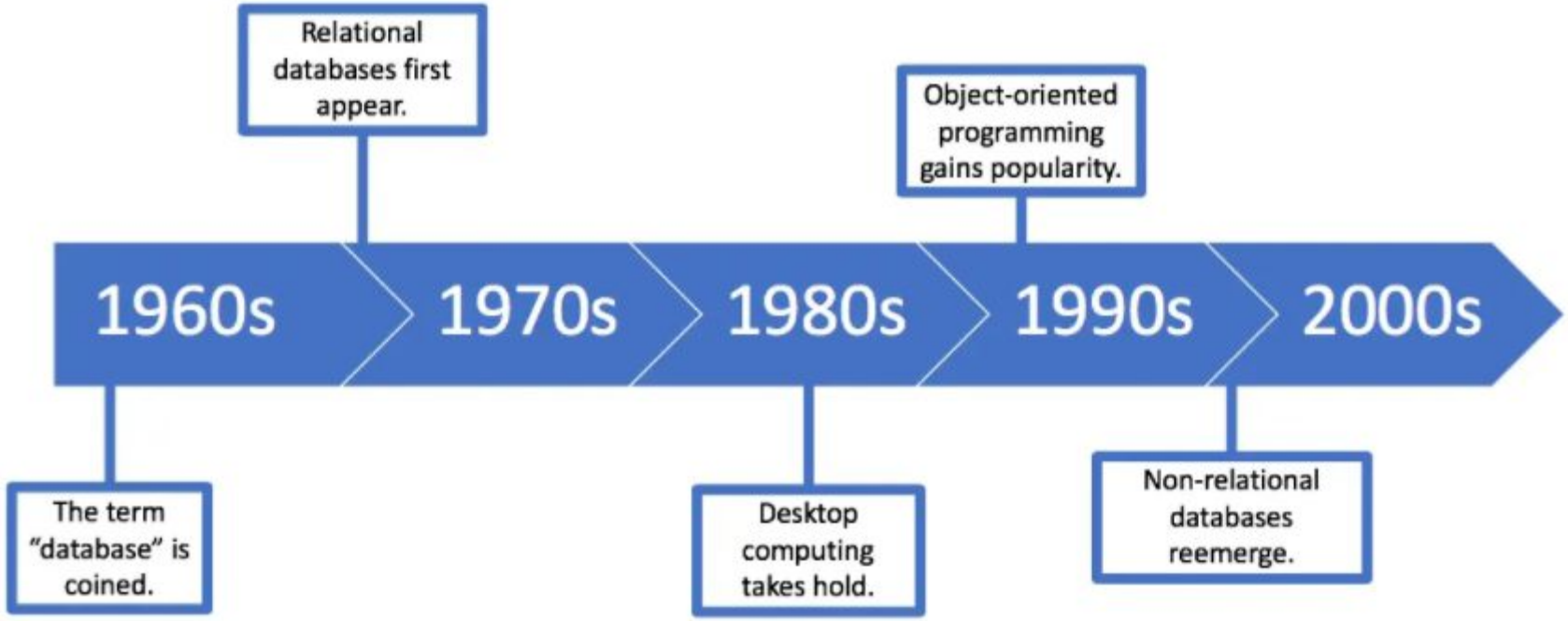
Make a table of the various types of users in your organization.



Strategies for Big Data Architecture

How is all this data organized and accessed?

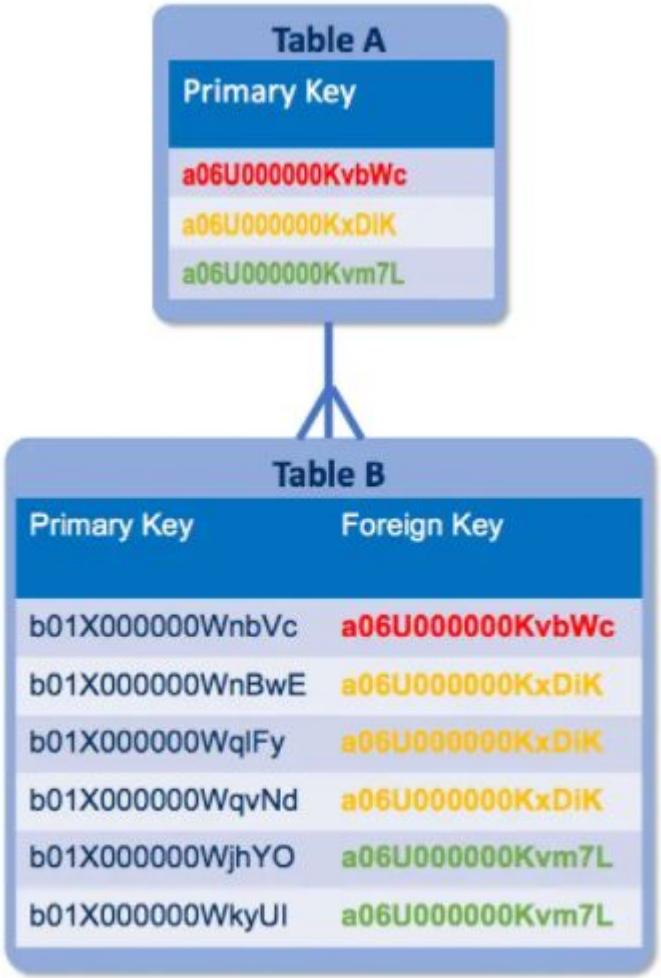
"It's in the cloud." This is something we hear all the time. Of course any images it conjures of vapor and foggy mist are misleading because **the cloud is just a physical data center full of servers.** Salesforce has many of them, all over the world. But how is all this data organized and accessed? Well, **it all depends on the database**.



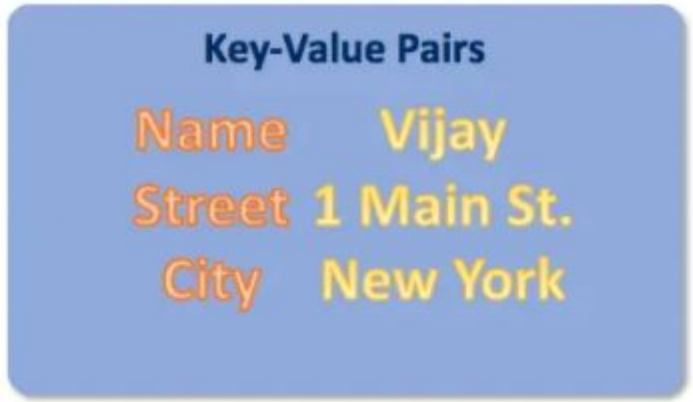
The term "database" emerged in the early **1960s**

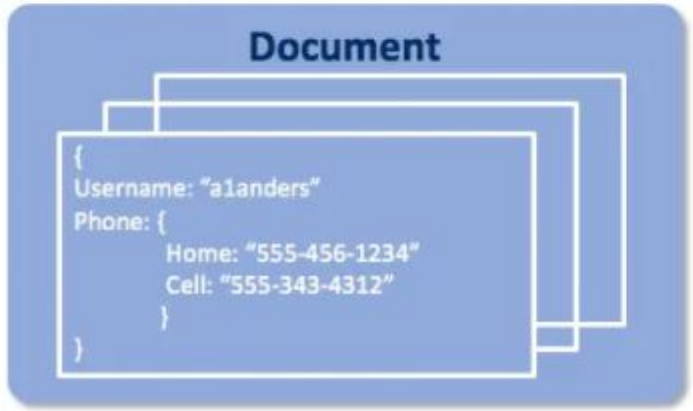
Strategies for Big Data Architecture

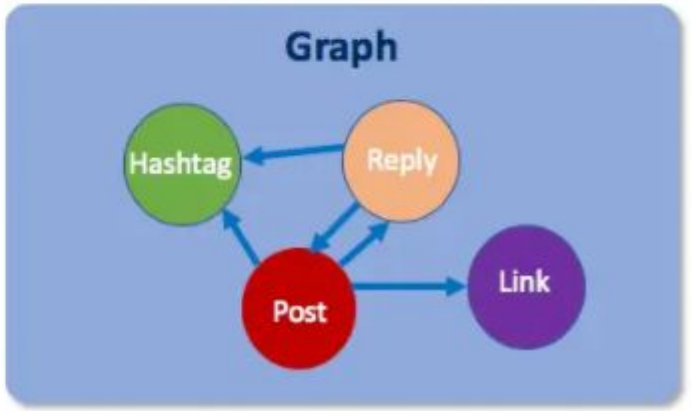
Relational DB



Non-relational Databases





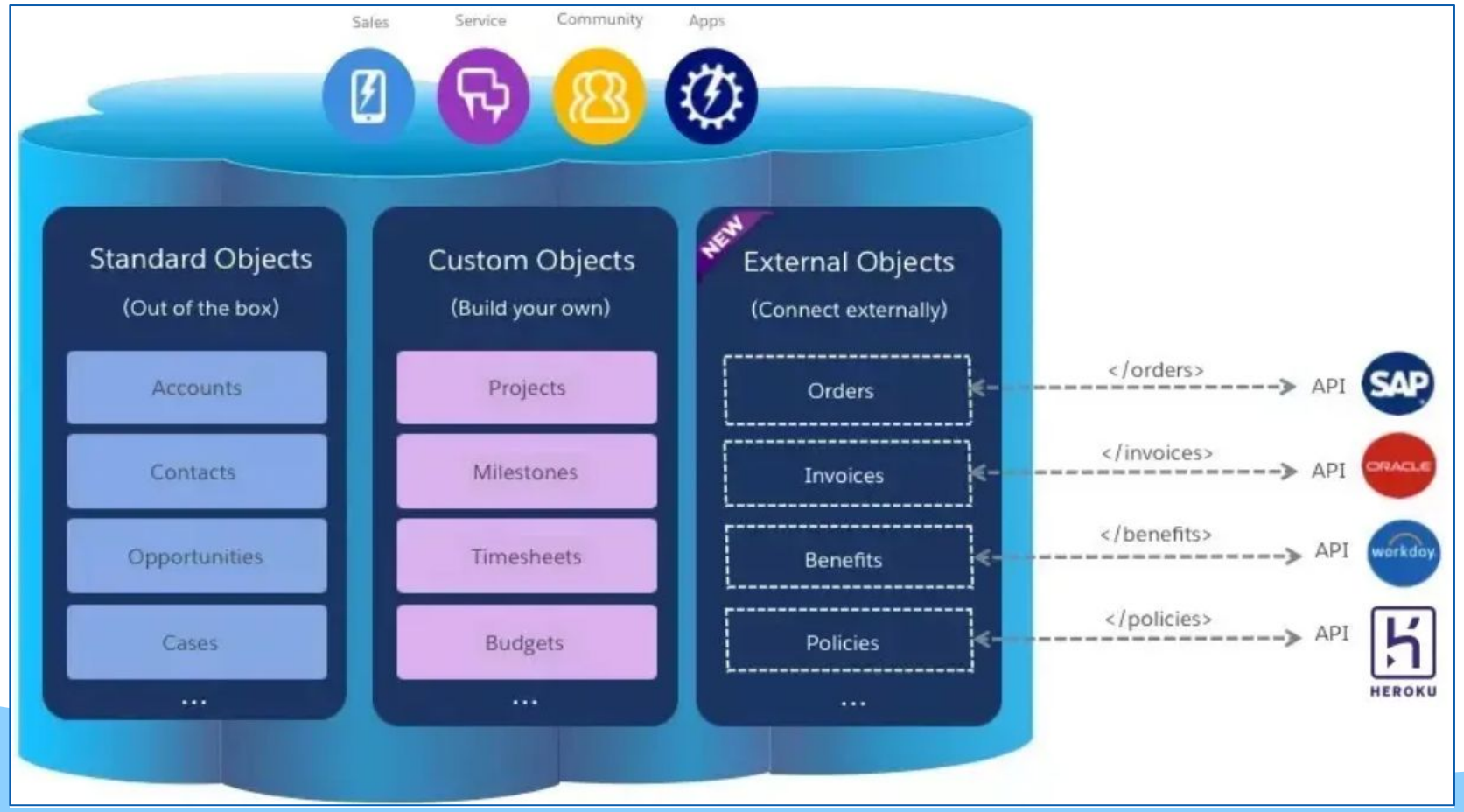


Each type of database suits different business requirements. When it comes to **huge volumes** of information, **non-relational** is the way to go

Strategies for Big Data Architecture

Where the data lives? Which system is the master of data? Hello, External Objects

External objects are similar to custom objects, except that they **map to data that's stored outside your Salesforce org**.

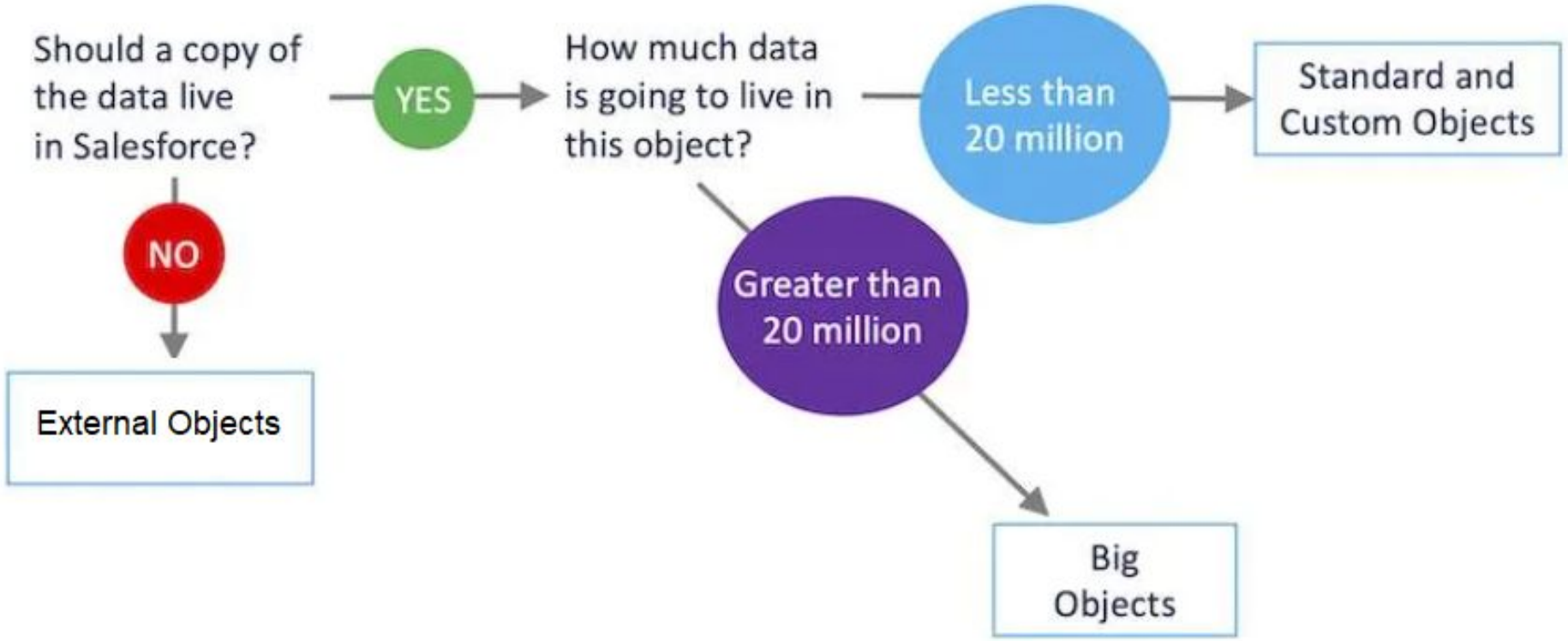


Data are stored in an external data source.

Salesforce Connect uses external data sources to access these external data.

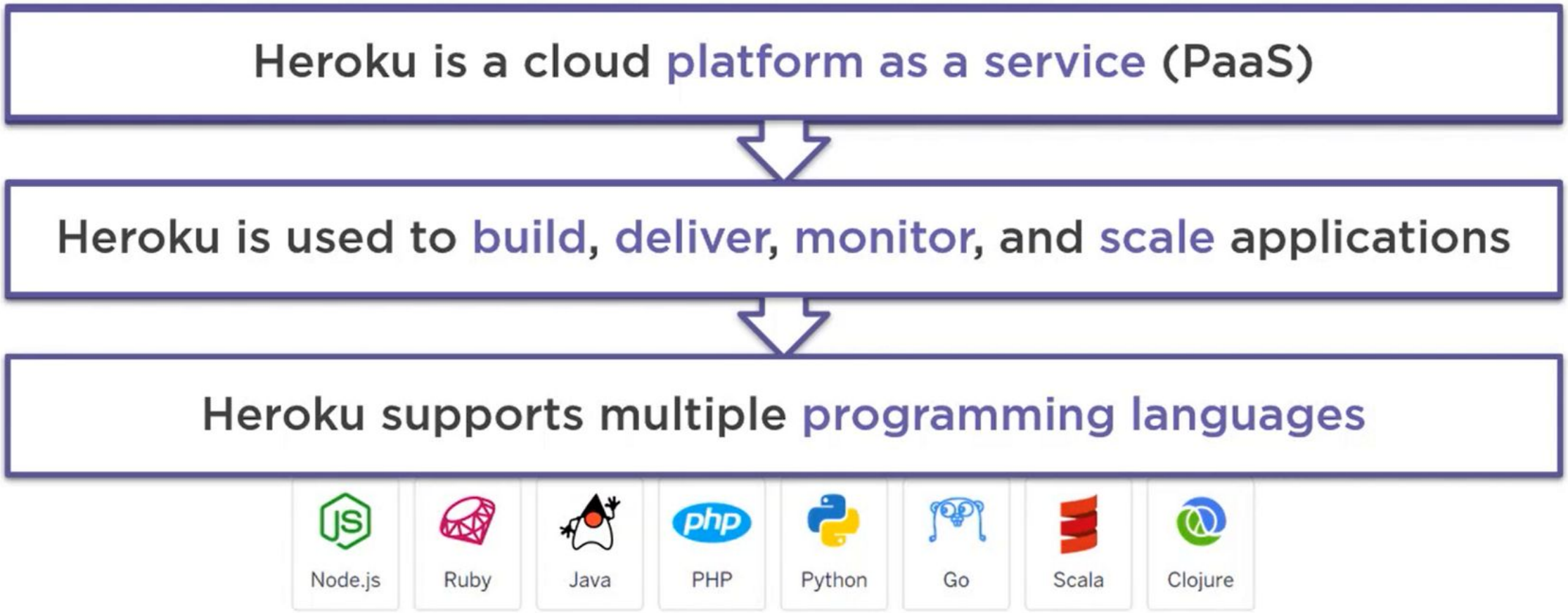
Strategies for Big Data Architecture

Begin by asking a few questions: Should a copy of the data live in Salesforce? How much data are we talking about–over 20 million records? Once you know these things you can start to weed out solutions that don't fit.

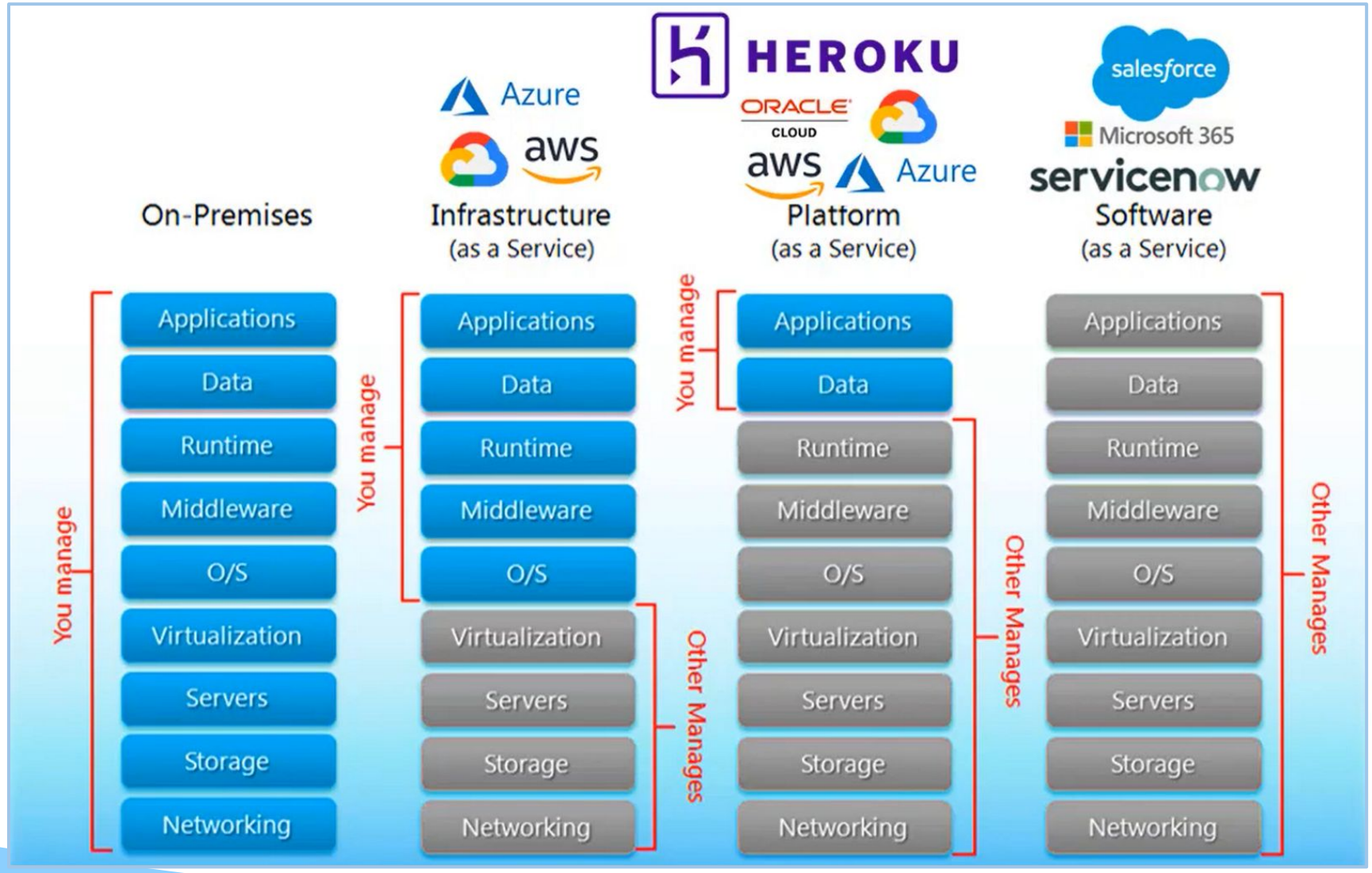


Heroku: Platform as a Service

- What is this Heroku Platform thing?
- What can I do with it?



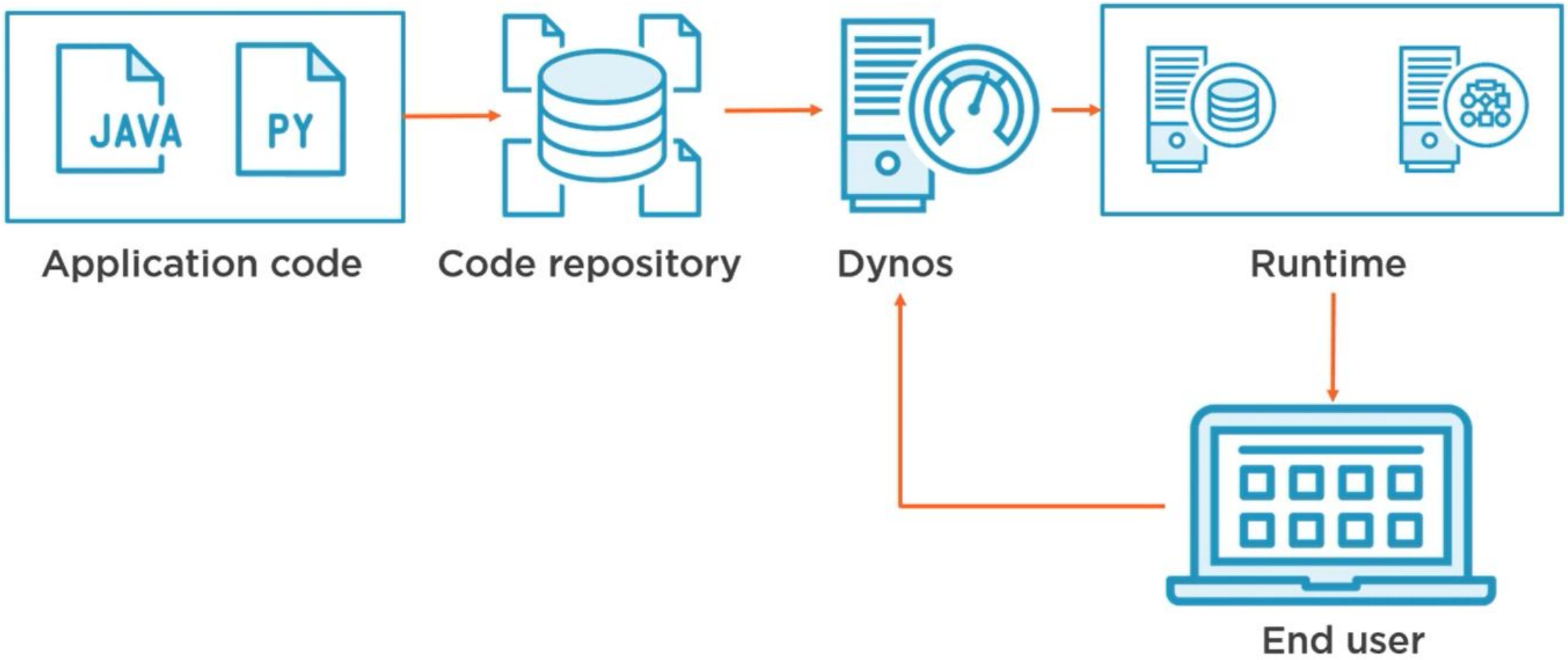
Heroku: Where does it fit in Cloud?



App centric

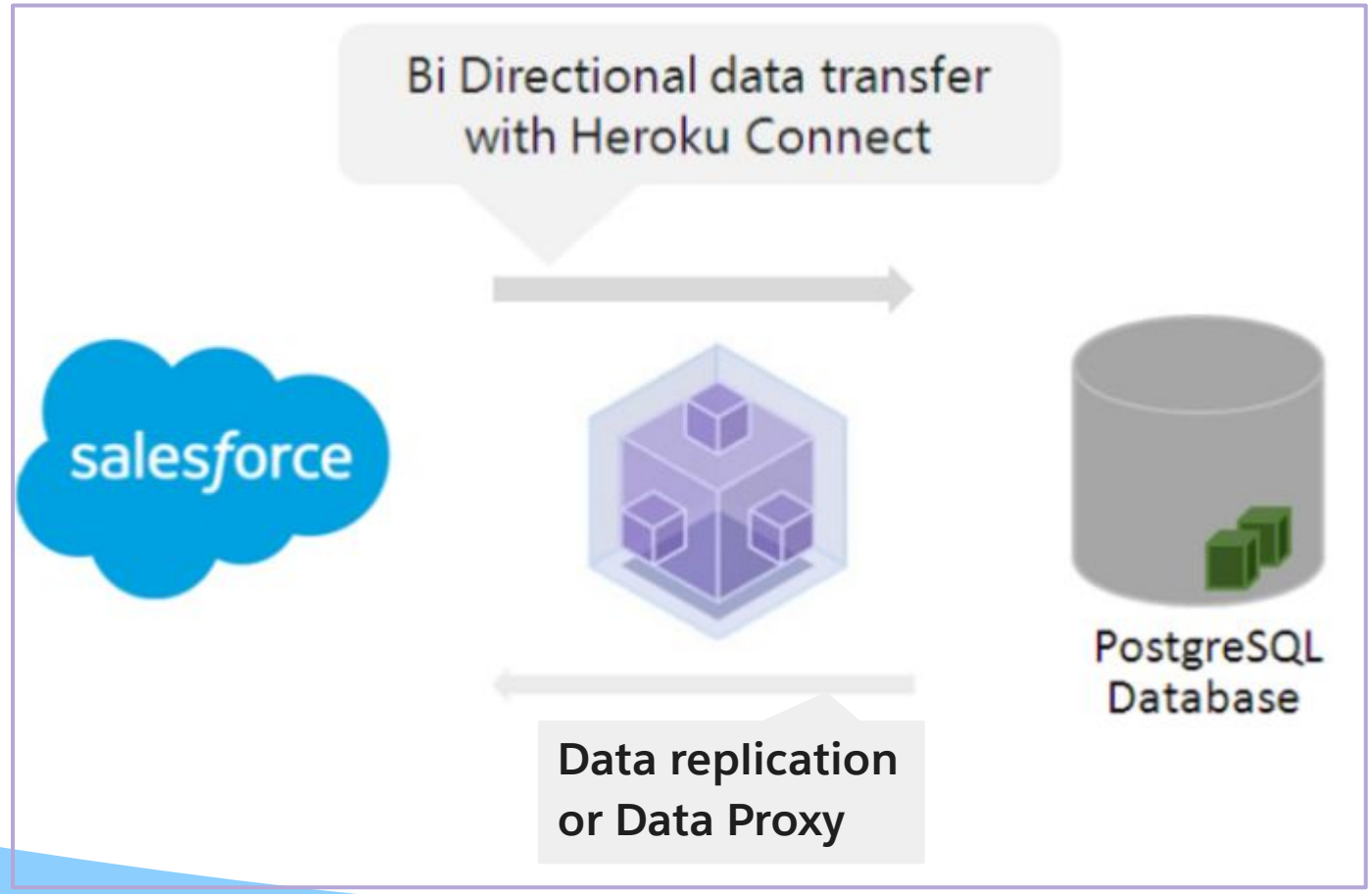
Developer centric

Heroku: Web Application Architecture



Heroku: Integration with Salesforce

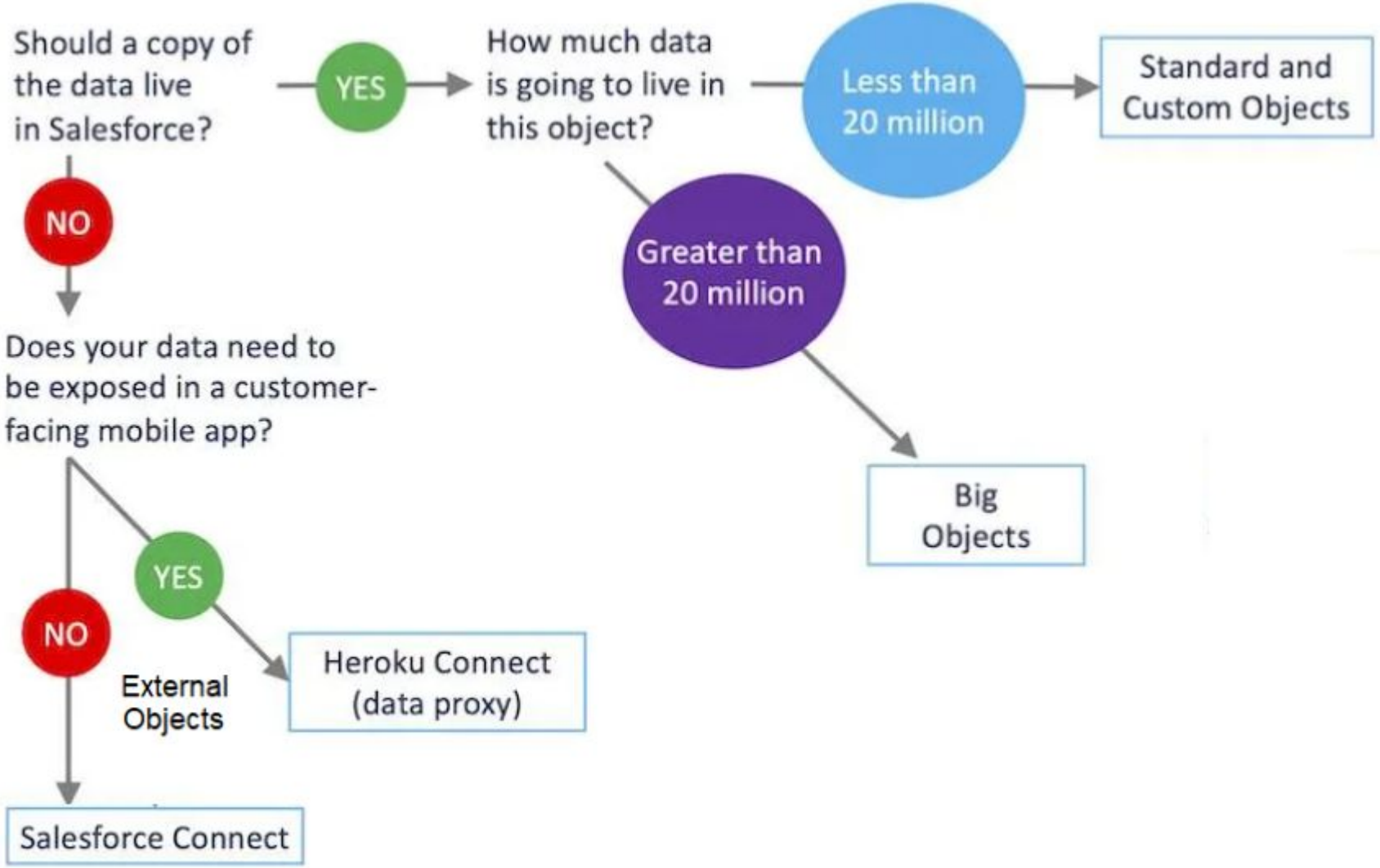
Heroku Connect is a service (add-on) that provide bi-directional data sync between SF and Heroku PostgreSQL DB.



Use Cases:

- Consolidate **multiple data sources into PostgreSQL**. And make all this data available in SF
- PostgreSQL as **DWH**
- Build **customer facing apps** on Heroku, wich read/update data in PostgreSQL
- **Empowering Mobile** and IoT via API Services

Heroku: Another Choice for Big Data Architecture



CRM Data Strategy - Archiving

Why do I need to move my data from Salesforce?

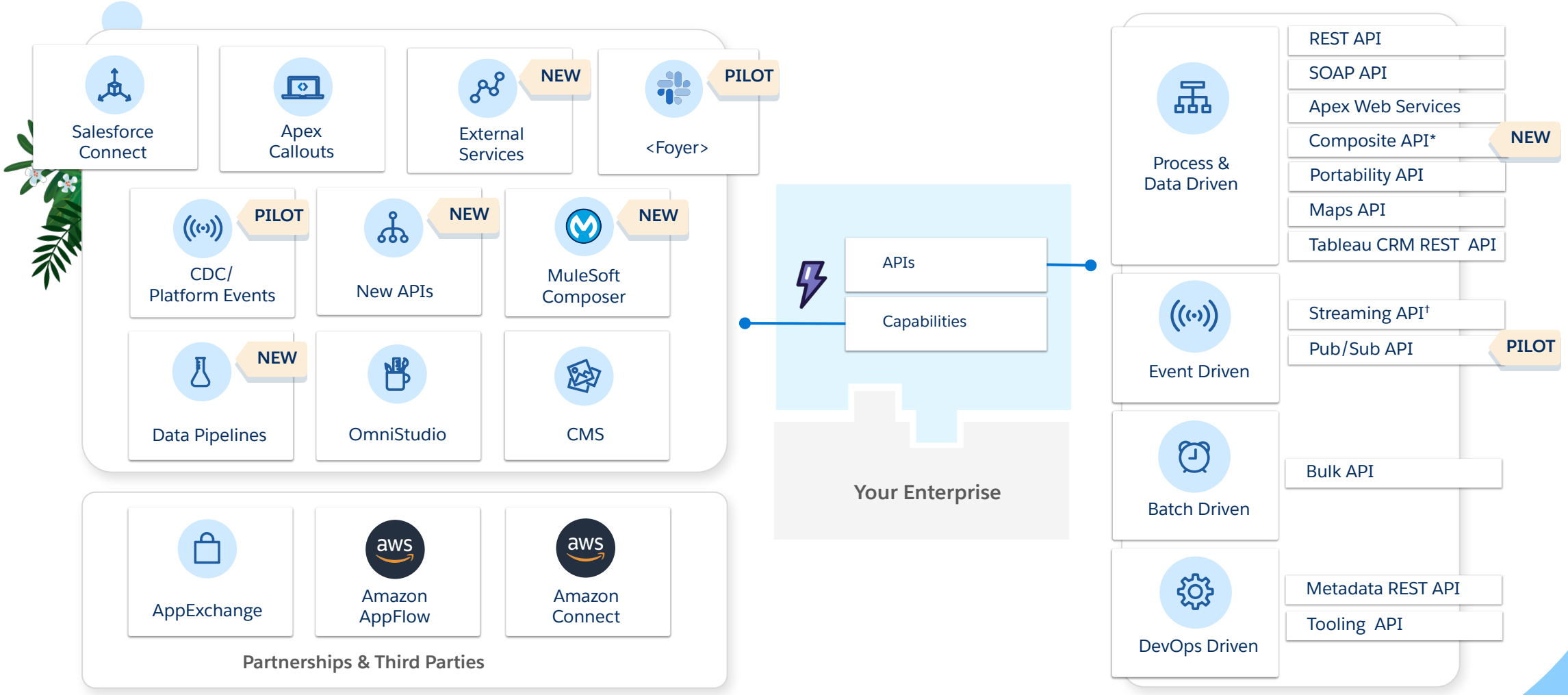
- Optimize data storage usage
- Reduce costs
- Consistent application performance
- Regulatory compliance

CRM Data Strategy - Archiving Solutions

How can I move my data from Salesforce?

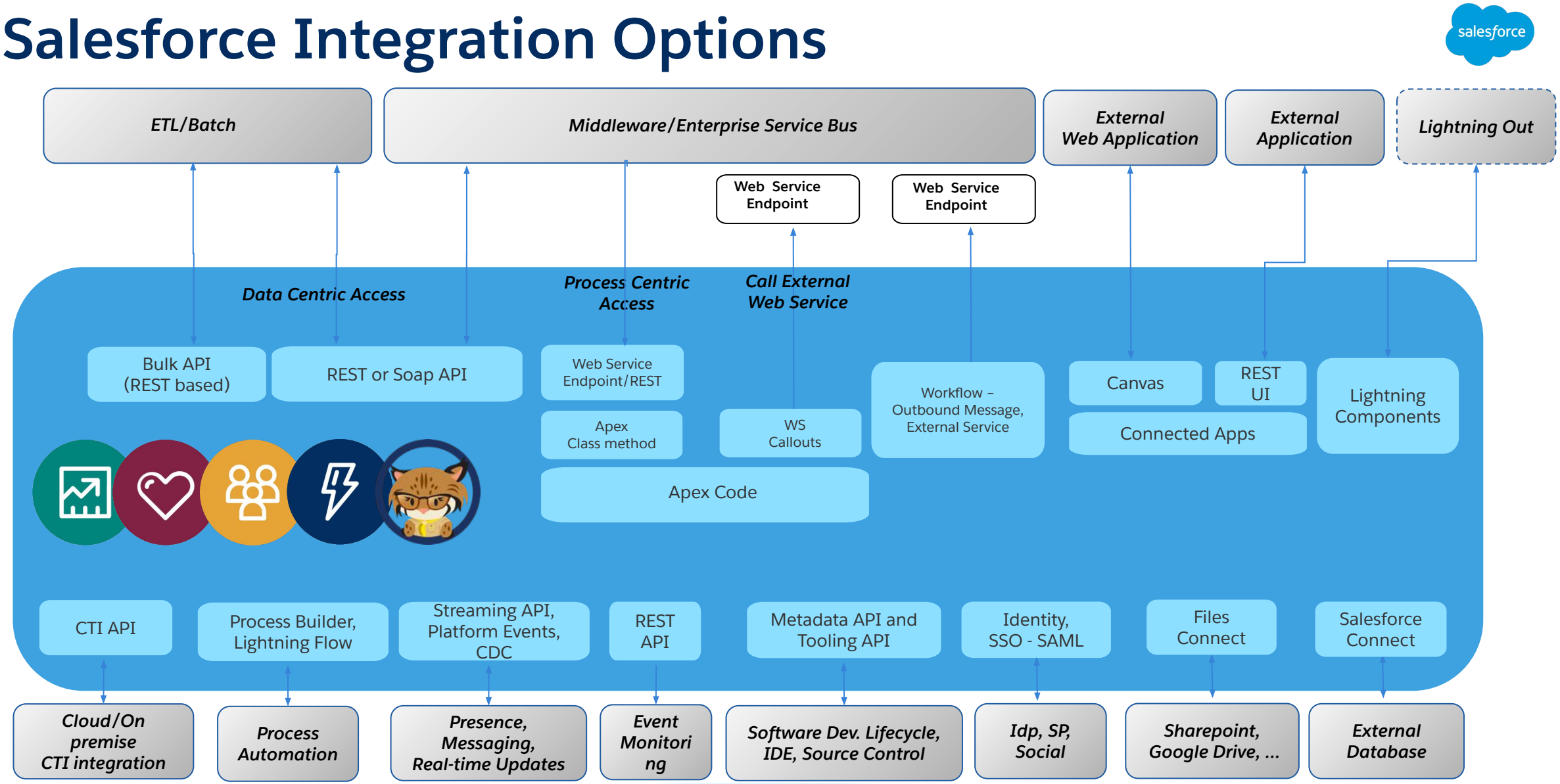
- Data Extracts via Bulk API
- Big Object
- Heroku Based Solutions
- AppExchange Archiving Solutions
- Custom Solutions e.g. Data Lakes, DWH

Salesforce Core Integration Options



*Composite resources include composite, batch, SObject tree, collections, graph (new - GA) and mass operations (new - Pilot)
†The Streaming API subscription mechanism supports multiple types of events, including PushTopic events, generic events, platform events, and Change Data Capture (CDC) events

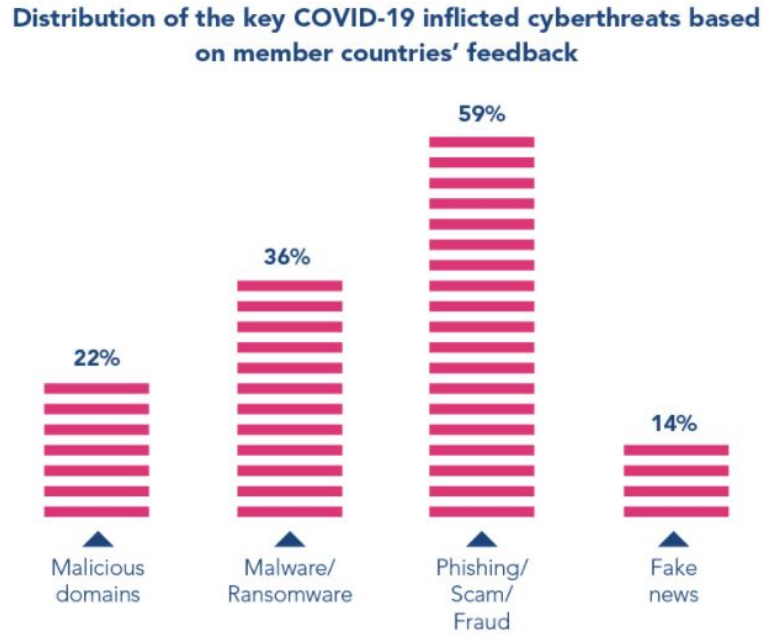
Salesforce Integration Options

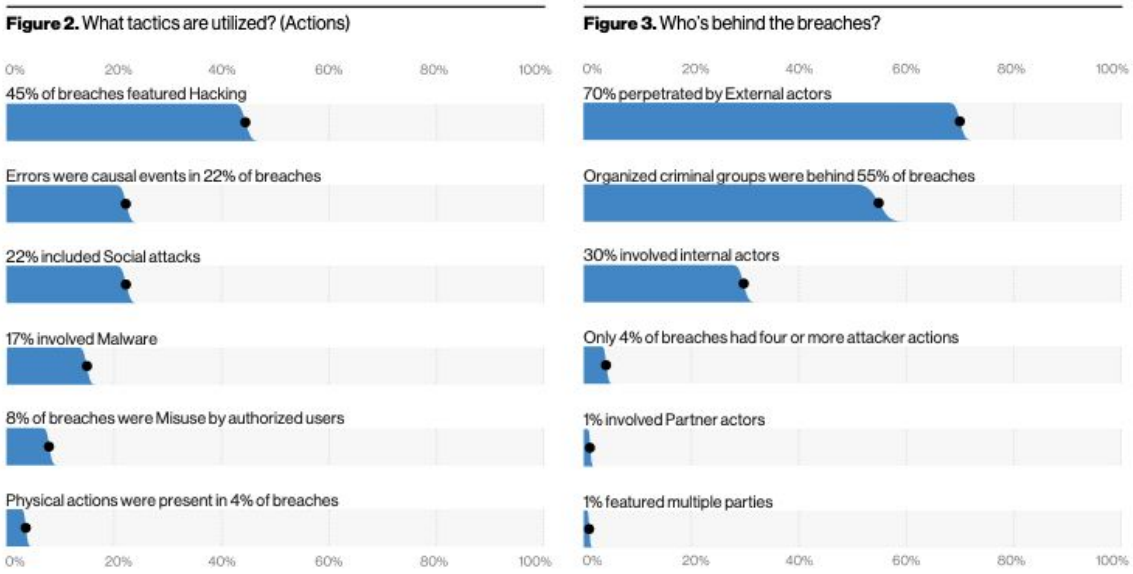


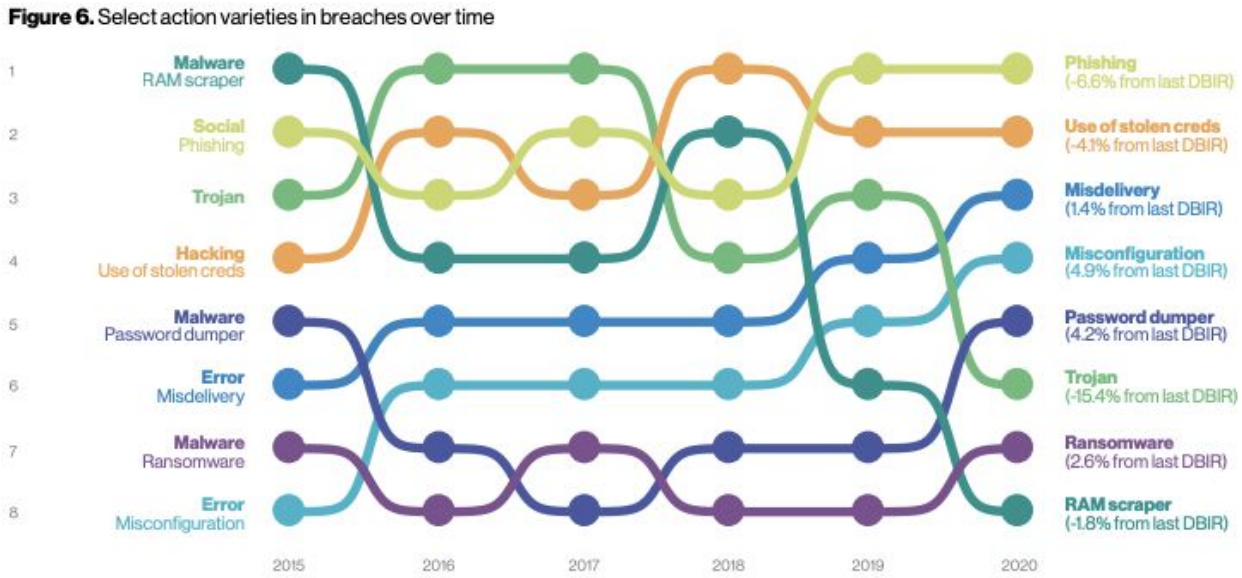
Cybersecurity

"Cybercriminals are developing and boosting their attacks at an alarming pace, exploiting the fear and uncertainty caused by the unstable social and economic situation created by COVID-19."

Jürgen Stock, INTERPOL Secretary General







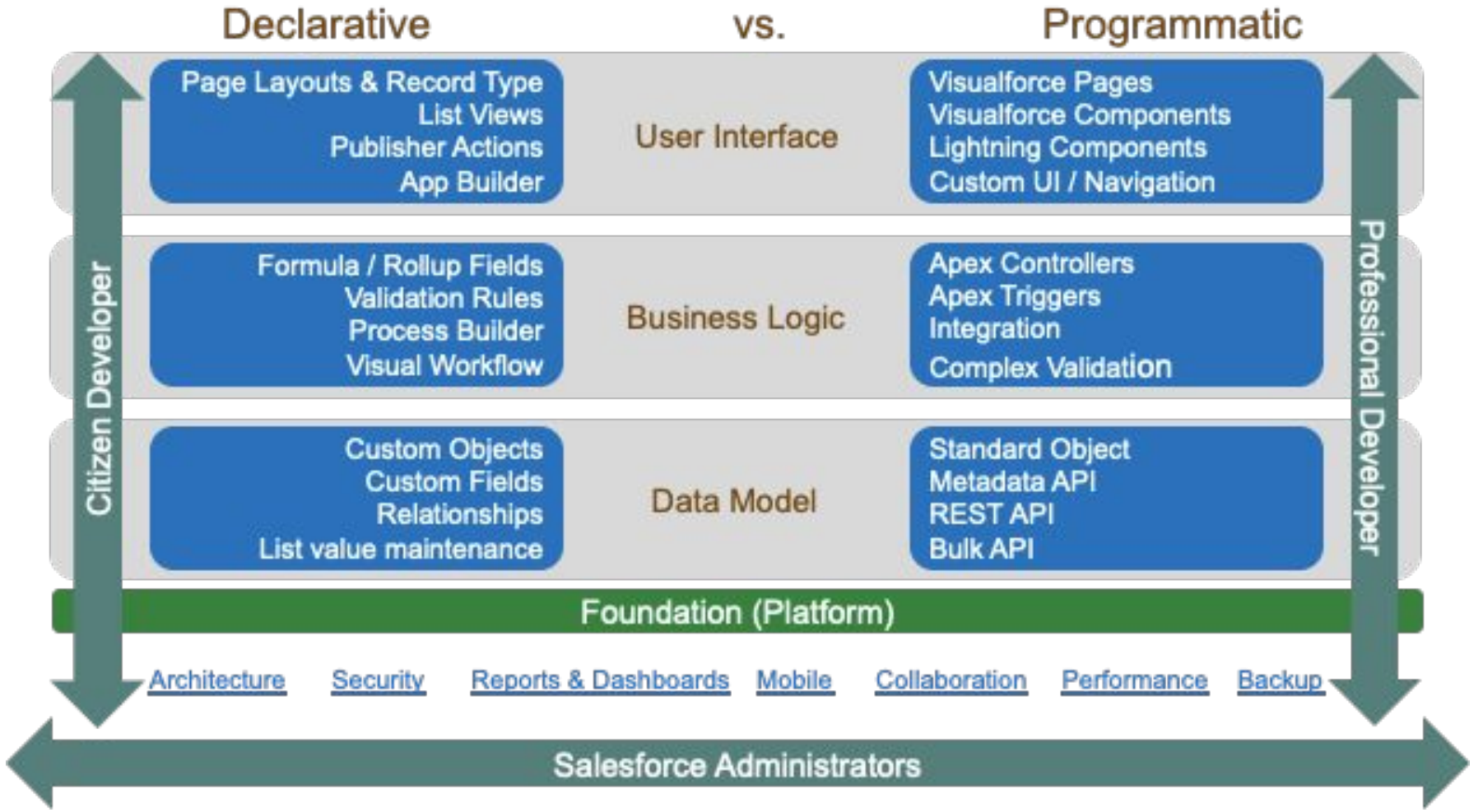
Sources:

https://www.interpol.int/en/News-and-Events/News/2020/INTERPOL-report-shows-alarming-rate-of-cyberattacks-during-COVID-19

https://enterprise.verizon.com/content/verizonenterprise/us/en/index/resources/reports/2020-data-breach-investigations-report.pdf

No code, low code, code

Several options for all types of users and application layers



Programmatic Org-Based Development Model

Promote org changes utilizing IDE Extensions, CLI, and Source Control

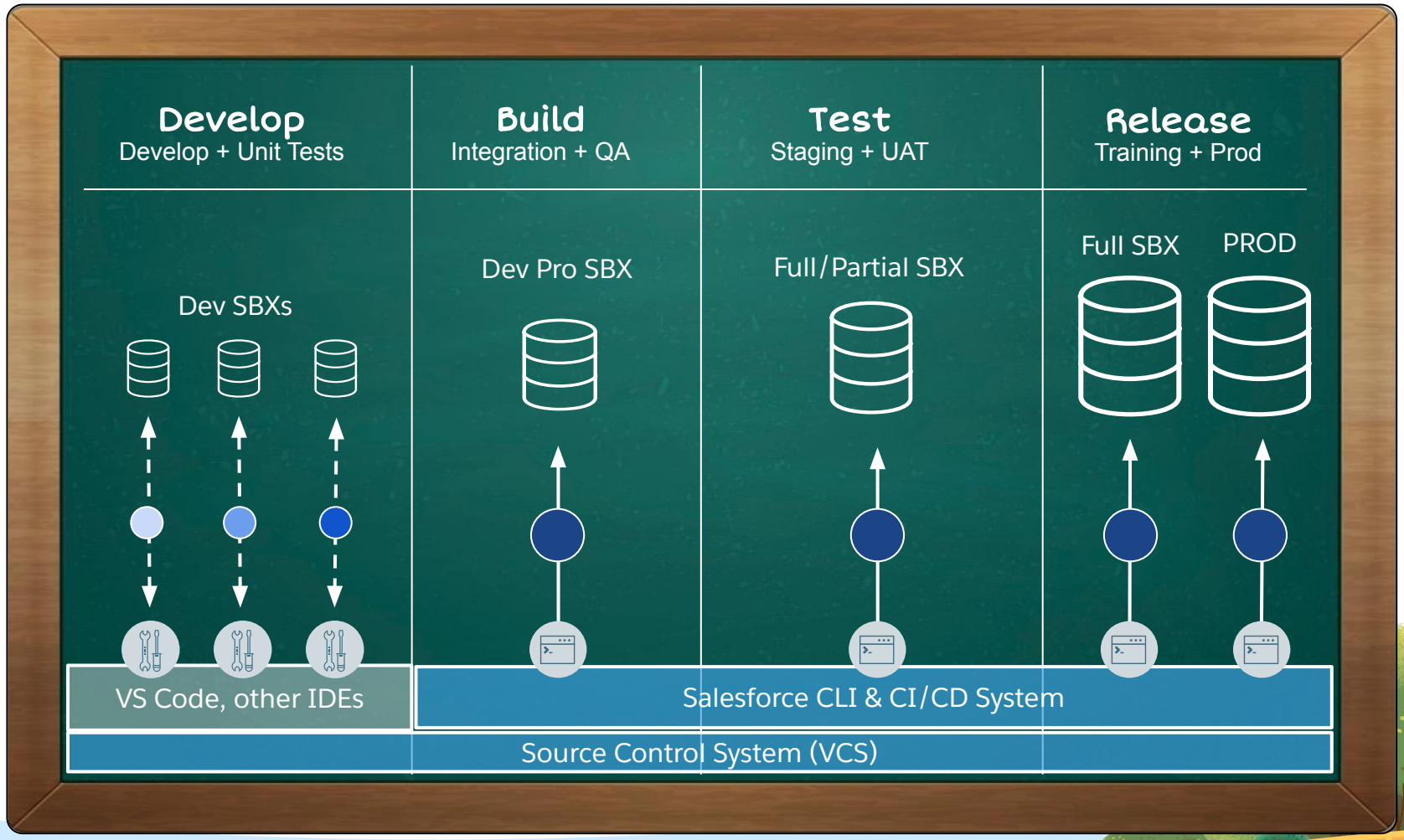
Unpackaged changes are tracked in each dev org. All changes are aggregated in source control and released via CLI

source:deploy | source:retrieve
mdapi:deploy | mdapi:retrieve
source:push | source:pull (pilot)

source:deploy | mdapi:deploy

track changes from dev orgs

aggregate changes to release



Key Takeaways

Bringing modern ALM to your org

Source-driven, API-first

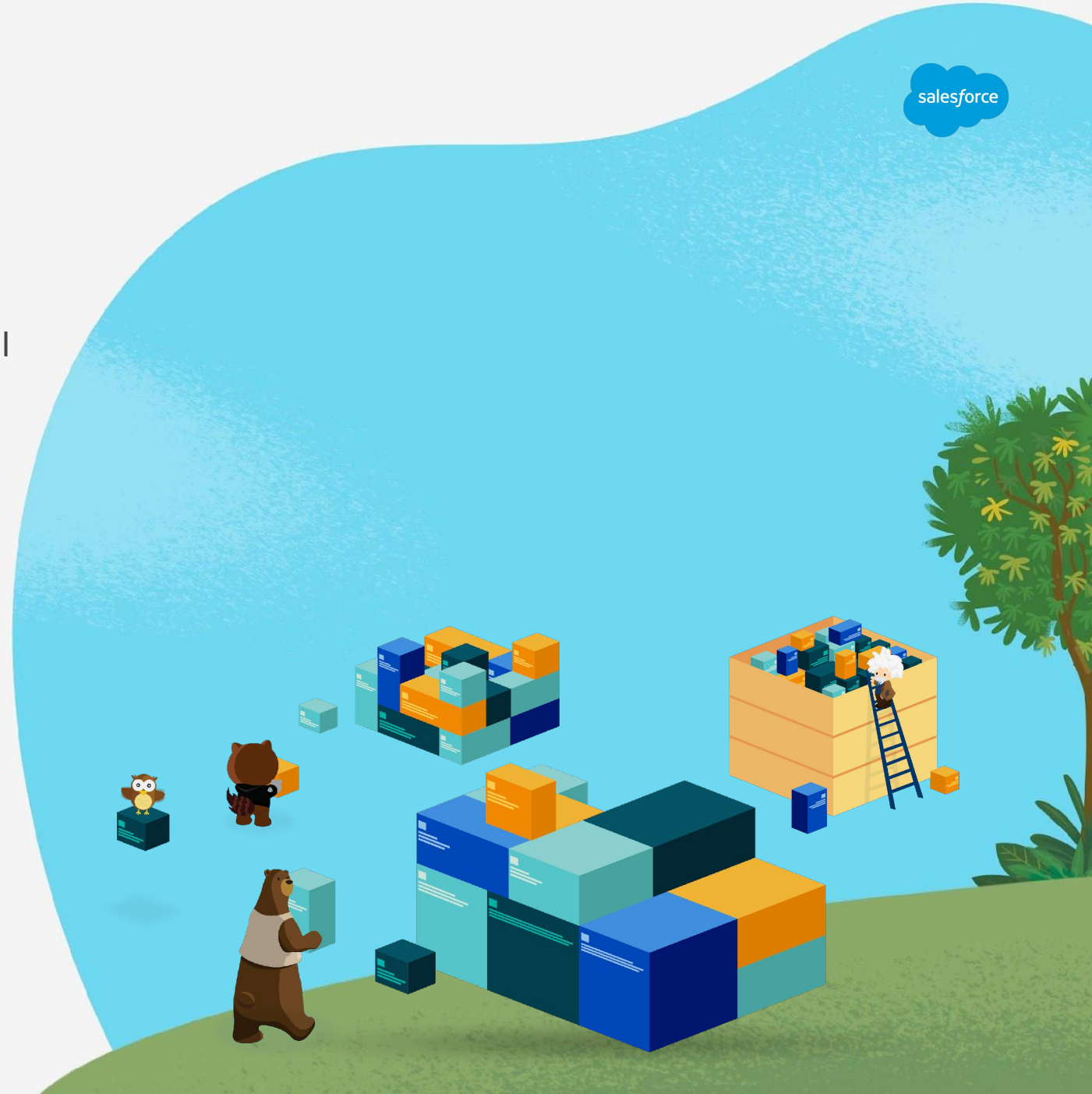
Source-driven modern ALM; CLI commands for all operations; easy to setup CI / CD

Dependency Management

Rich versioning and dependency management capabilities

Organize Metadata in your Org

Modularize Metadata in your prod orgs with a set of well-defined packages



Which process fits my needs?

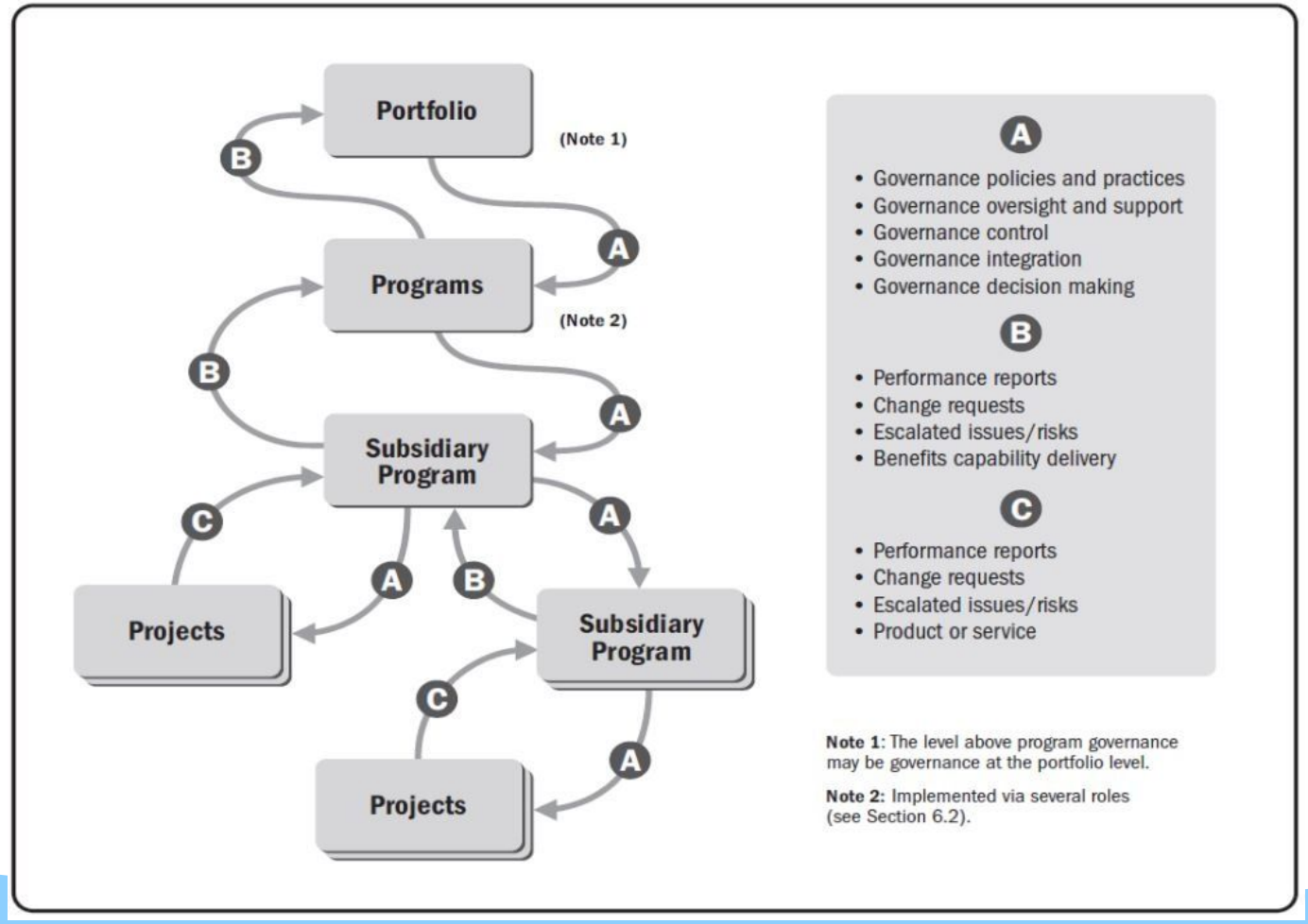
Decision drivers

Drivers for packaging and DX based development process:

- Multiple production Orgs
- Multiple teams developing to a single production Org
  - If there is isolation of dev process for each group, the product of each team could be a package
  - If many teams work on the same thing, a package based approach may not necessarily provide improvements
- Many applications running on a single Org
- Parallel projects and need for flexible release schedules

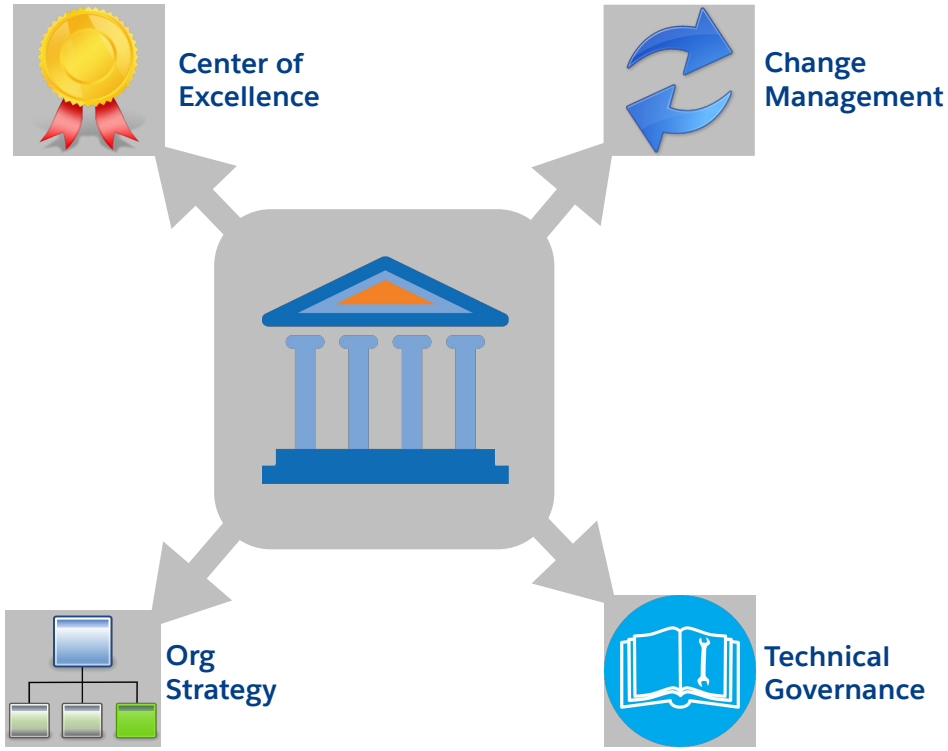
Governance

Program Governance relationships with portfolio and program components (sub-programs, projects)



Governance

Key Elements of a Salesforce Governance Framework[1]



Within the Salesforce context, the components that comprise a governance program fall into four major categories:

- **Center of Excellence (CoE)[2]**
  The process of managing governance.

- **Change Management**
  The process of managing change within the overall program or project lifecycle – from collecting Business requirements through go-live in production.

- **Org Strategy**
  The design and structure of the foundational “orgs” or areas where the customer’s Salesforce applications will reside and run.

- **Technical Governance**
  The guiding principles for effectively developing the technical aspects of Salesforce.

[1] The Salesforce Governance framework embraces the core principles of key industry frameworks such as COBIT5 and ITIL .

[2] Many Salesforce customers rebrand their CoE using terms including "Network of Excellence", "Center of Innovation, etc.

Architecture Review Board

Key roles and responsibilities

Domain	Role/Responsibility
Decision Making	• Establish architecture roadmaps • Establish architectural and design principles and best practices • Evaluate solution designs per best practices; if design is rejected provide recommendations for improvement • Solicit and consider input from other governing bodies during decision making process • Document rationale for decision in meeting minutes or other documentation • Provide input to decisions made by other governing bodies
Escalation	• Escalate decisions beyond their authority to CIO or Executive Team (ET) • Recommend a course of action and provide supporting analyses (when decision is escalated to another body)
Communication	• Communicate decisions to CIO and other key stakeholders in accordance with communications plan • Keep CIO informed of major IT architecture decisions
Ongoing Activities	• Create architecture strategy and roadmap • Define architecture principles and best practices • Identification of innovation in IT that can help the business (e.g., new technologies
Ad-Hoc Activities	• Create temporary teams to address specific tasks