



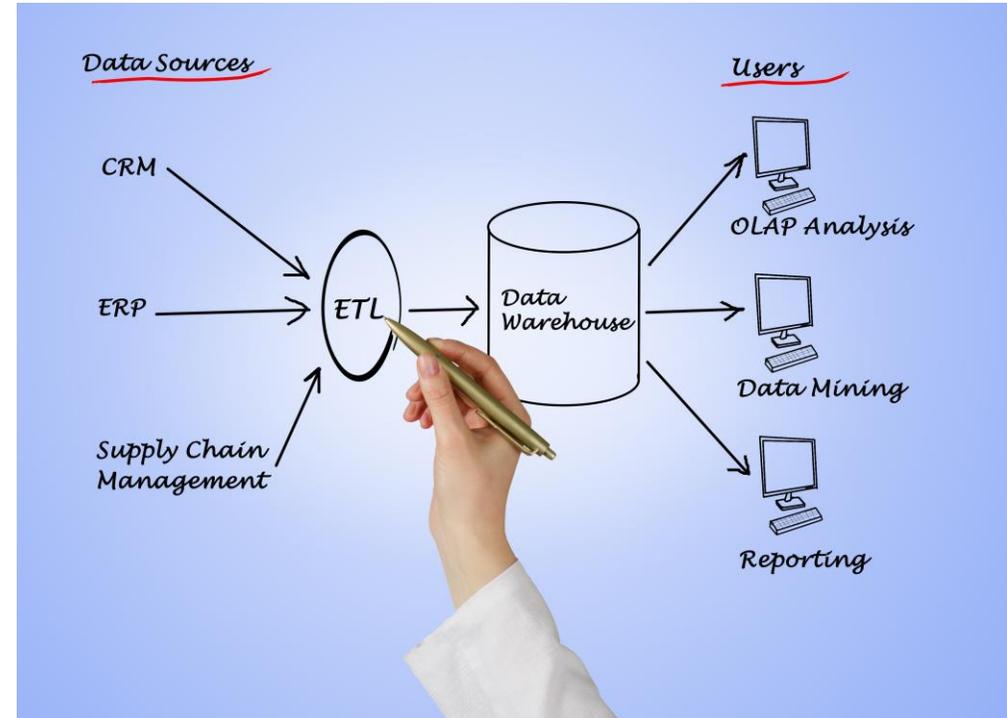
# CLOUD DATA INTEGRATION IN HEALTHCARE

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# AGENDA

- Introduction
- Data Integration
- Cloud Technology
- Techniques
- Tools
- Summary

- Collection of Data from Heterogenous Sources
- Store Data for further analysis
- Data Warehouse
- Data Analysis
- Data Prediction



# DATA INTEGRATION

Data sharing between hosted applications (SaaS) and on-premise applications

Application Could be either in Cloud or on-premise

Applications communicate directly or through 3<sup>rd</sup> Party vendors

Batch, real-time, Social Media or Big Data



# WHAT IS CLOUD DATA INTEGRATION ?

# HOW IS IT DIFFERENT ?

## Cloud Data Integration

After the fact thinking

Data in the Cloud

Plug and Play

Agility to connect to any type of data source

Application Knowledge is not required

Business analysts/End users are empowered with integration

## Traditional Data Integration

Think before you act

Data within the firewall

Data Storage and Architecture

Custom Coding

Need Application knowledge

Need technical expertise

# CLOUD INTEGRATION TECHNOLOGY

## REST API (Representational State Transfer)

- Used to identify the particular resource involved in an interaction between components.
- Takes advantage of HTTP when used for Web APIs.

## SOAP (Simple Object Access Protocol)

- Allows clients to invoke web services and receive responses independent of language and platforms.
- Often relies on HTTP or SMTP protocols and uses XML for the message format

## Cloud Connectors

- Connect between on-demand cloud applications and on-premise systems

## Json (JavaScript Object Notation)

- lightweight data-interchange format based on a subset of JavaScript
- very commonly used for asynchronous browser–server communication

## Real-time Integration

- event-driven application integrations, API-based services, and service orchestrations for use behind the customer's firewall, or in the Cloud, or both.

# DATA INTEGRATION IN HEALTHCARE



Patient Data



Insurance Data



Patient Orders



Case and Response Data



Managed Care



# TECHNIQUES

Identify the Use Case

Top 10 Applications

Consider Hybrid Model

Create SDLC ( Software Development Life Cycle )

Best Practices for integration

Release Management

# CLOUD APPLICATIONS

Microsoft Office 365

Salesforce.com

Box

Amazon Web Services

Google G Suite

Concur

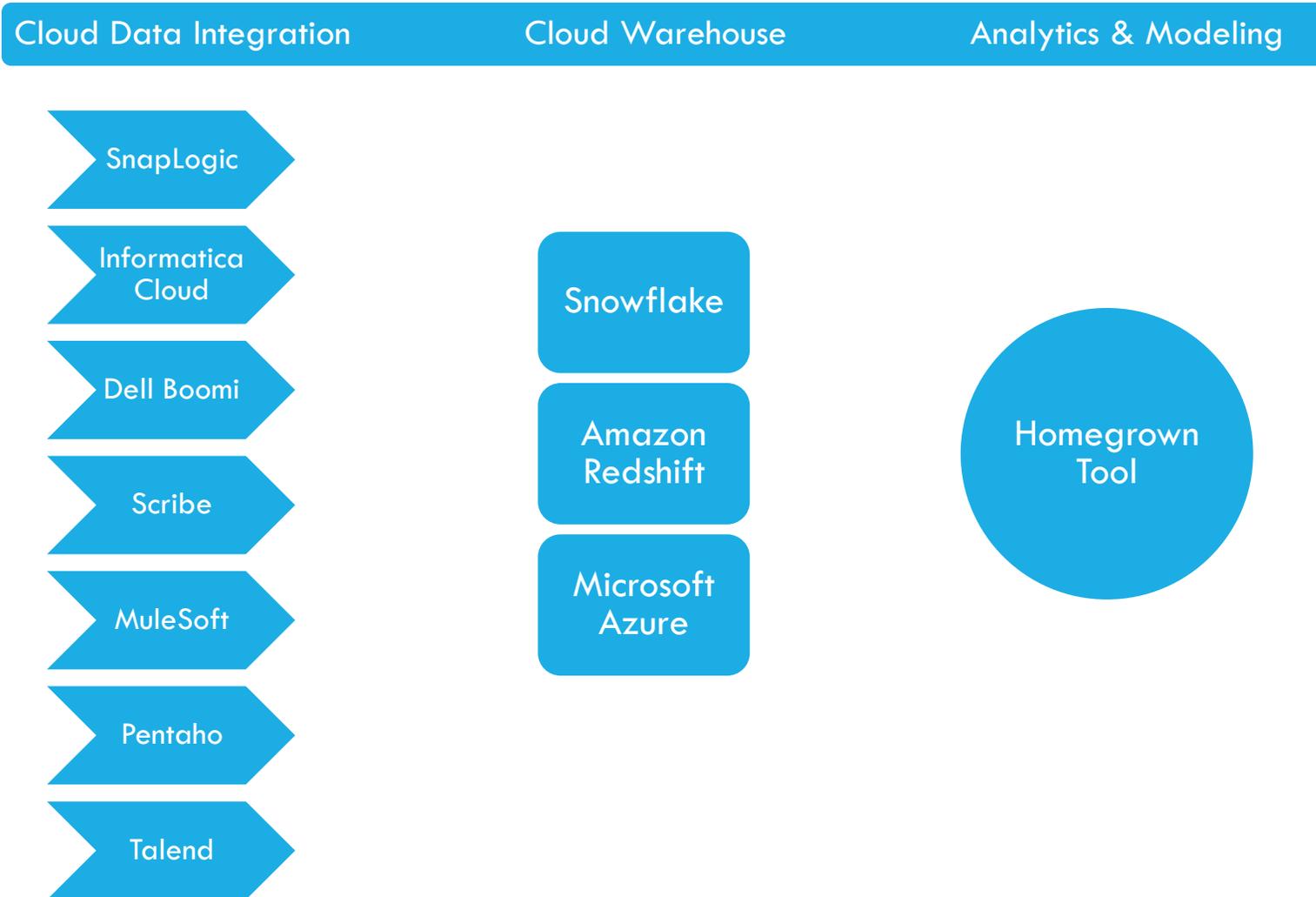
JiRA Atlassian

Slack

Zendesk

ADP

# TOOLS



# IPAAS ( INTEGRATION PLATFORM AS A SERVICE )

Provides integration capabilities as a multi-tenant Cloud service

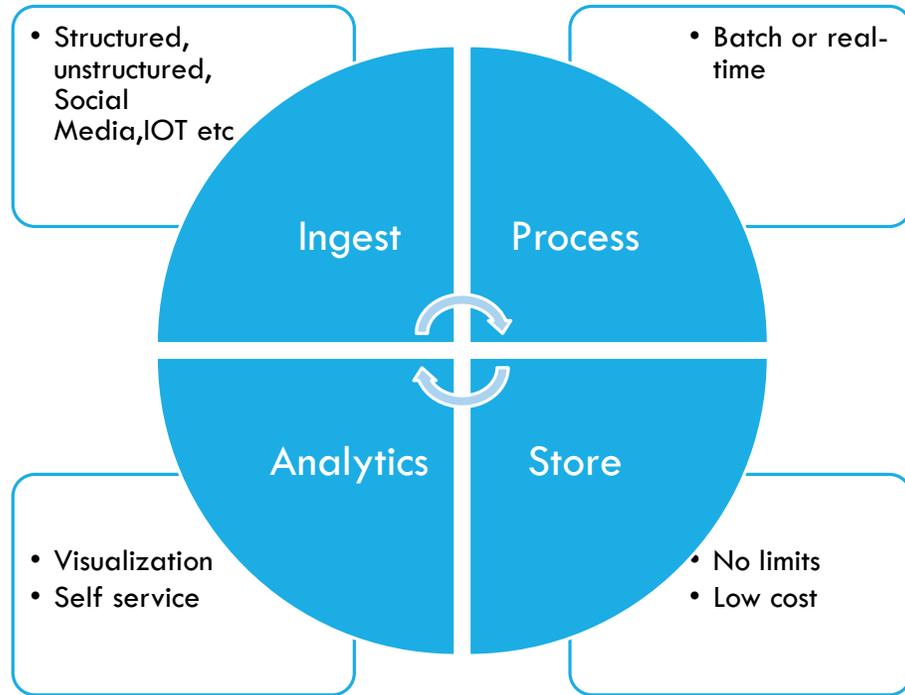
Web based interface

Connectors to Cloud applications

Cloud to Cloud or Ground to Ground or Cloud to Ground or Vice versa

Subscription service Model ( Pay as you grow )

No upgrades to the software



ONE MORE.....DATA LAKE!

Thank you for your time.