



# Tackle Your Everyday Business Problems Like an Architect

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# SPEAKER INTRO

- Salesforce **Certified Technical Architect (CTA)**
- **B2B & B2C** Solution Architect
- 32x Salesforce **certified**
- DF21 **Golden Hoodie** recipient during the first ever Architect Keynote
- Trailblazer & Mulesoft **Mentor**
- Developer background in **Software Development**
- 17 years in **Salesforce**
- Founder & CEO of **Lizztech Consulting**
- Founder of **ScaleUp Archs**
- **Boston Architect User Group** Leader
- Founder & Admin of **Architect Ohana Slack**



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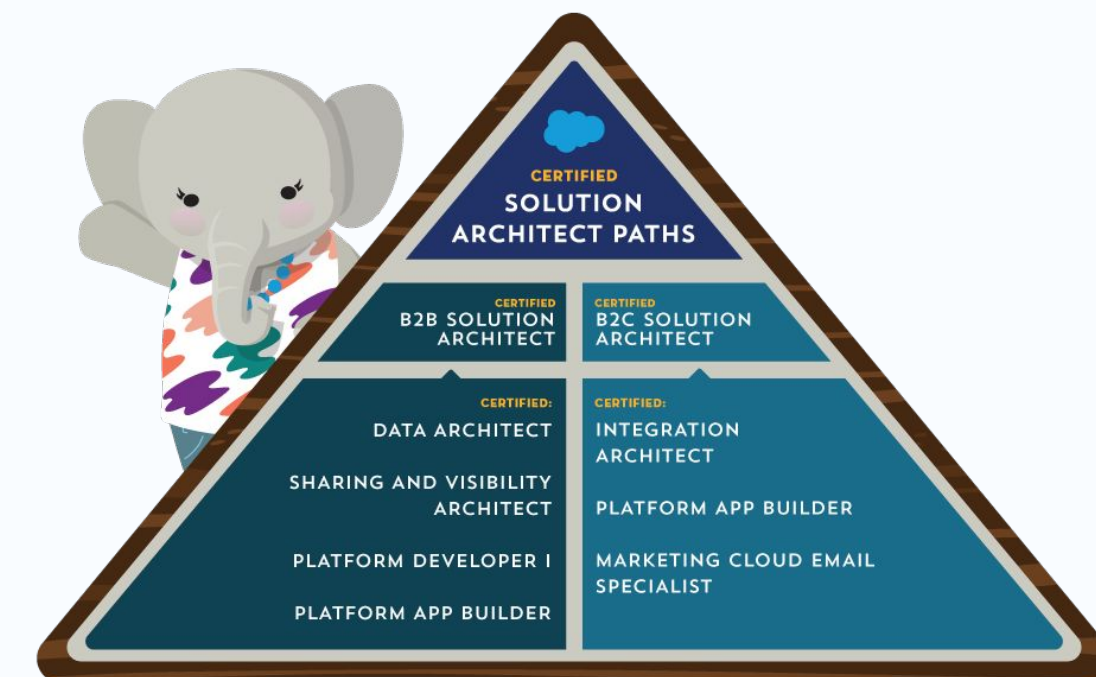
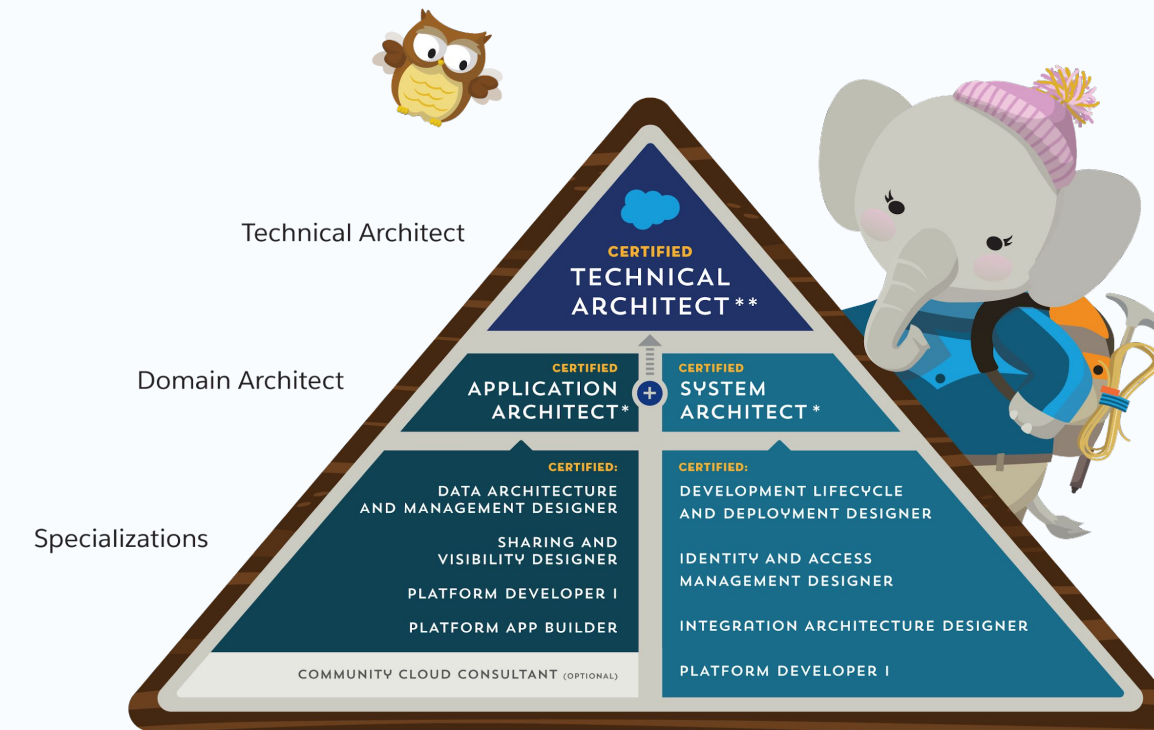
**SCALEUP**  
ARCHS

# Salesforce Architecture

## The Buzzword

Questions that many of you might have:

- What exactly is an architect?
- What exactly is architecture all about?
- What does an architect do?
- Why is the architect role so important?
- Is this something that I can do?
- How can I develop architect skills in my everyday job?
- If I don't consider myself an architect now, how can I start preparing myself to become one?



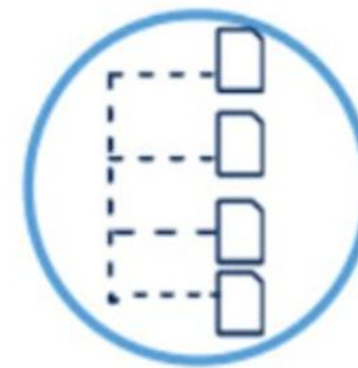
# Why Architecture is So Important

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- ★ Provides the blueprint
- ★ Foundation for Implementation
- ★ Scalability
- ★ Performance
- ★ System Limitations
- ★ Large Complex and Global Implementations
- ★ Regulations (GDPR, CCPA)
- ★ Project Success
- ★ Risk Management
- ★ Reduce Future Costs
- ★ Increase ROI
- ★ Lower Total Cost of Ownership



Large Data Volume



Large number of transactions



Complexity of transactions



Complexity of org



Data Skew

# Think Big Picture

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## Will this scale beyond the current problem I am solving?

Things that can be taken into consideration when scaling your system:

- **Licenses:** Are they correct for users access to objects? Will other functionality be needed down the road? Sales vs Service vs Platform, what is supported for each? Will users be limited at some point?
  - **Account Model:** What should be used? Person vs Account/Contact or a mix. Is your company B2B or B2C or both?
  - **Record Ownership:** Role hierarchy - who should own and see what data? Will anyone own too many records? (ownership skew) Will ownership change?
  - **Large Data Volumes:** Are you dealing with millions of records? What happens if you keep it all on Salesforce? Automation on LDV objects - go async (Queueables, Record-triggered Flow with Platform Events).
    - Move some processing to Batch Apex where possible
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- **Integrations with external systems**
    - Point-to-point vs using middleware
    - Data virtualization - Real-time callouts from Lightning Components vs External Objects
    - Is a response required? Does an update need to happen from an external system? How many inbound API calls would be made?
  - **Document Management and Files:** Will files be stored on platform? Will the storage grow rapidly? What happens when you use up your storage? How should you plan for this and what will your mitigation be?
  - **Archival:** Should you be archiving data and files at some point? If so, how will that work? How do we keep all the relationships? Will external users still need access?
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# Understand Your Org's Security

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- Be better prepared when making changes
  - For record locking or issues with data visibility you can contribute to solving the problem
  - Look at things such as:
    - **Role Hierarchy:** How is it organized?
      - How can you stop data from rolling up through the hierarchy when necessary?
    - **Sharing Rules:** Can you reduce the number of rules by using Public Groups?
      - Max 300 total (with increase to 500 by support), 50 criteria-based or guest user per object - are you close to hitting these limits?
  - **Org-wide Defaults:** are they providing enough security?
    - Are you following the Principle of Least Privilege? This is a good area to review.
  - **Profiles and Permission Sets/Permission Set Groups:** Too many Profiles?
    - Should some permissions be migrated to Permission Sets?
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# Follow Best Practices

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Establish best practices for you and your colleagues to follow. Can you identify areas of improvement?

- **Coding practices:** Are they defined? Are they being followed?

- Code reviews to ensure that patterns and frameworks are being implemented properly

- Implement code analysis tools such as PMD, ESLint, CodeScan, SonarQube

- Create reusable building blocks in LWC, Flows etc

- Selective queries that use standard indexes where possible, no !=null

- **DevOps, CI/CD, Automated Testing and Source-Driven Development:** Is there a mature DevOps process?

- Suggest the use of tools such as Github, Jenkins, SFDX,

- **Gearset (👉👉👉)**, Provar for testing



**Gearset**

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- **Data Quality:** Are there safeguards in place to make sure that data quality is being maintained?

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  - Use of validation rules, duplicate rules
  - Picklists vs Text Fields (but NEVER multi-select, just ask SteveMo about this)
  - Has an impact on downstream integrations, reporting, automations etc
- **Automation for your Users:** Are you relying on automation tools when necessary? (Clicks vs Code)
  - Don't over-customize with code
  - Automation can drive user adoption - how can you make processes easier for your users?
  - Flow can be your friend!
    - Create reusable subflows, naming conventions
- **Event-driven architecture:** Can you find areas to implement?
  - Platform Events or CDC to integrate data to external systems (with pub/sub coming it's also something to look into)
  - Take into consideration Platform Event limits (depends on edition)

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- **Integration Middleware:** Try to avoid point-to-point integrations unless necessary such as for Request/Reply for a User Process
    - Implement something such as Mulesoft to create an API-Led Integration layer
  - **Frameworks:** Do you currently use any patterns or frameworks?
    - Architecture frameworks - SOGAF/TOGAF
    - Apex Enterprise Patterns, Trigger Frameworks
  - **Documentation:** Are there any architectural diagrams?
    - Document architecture especially with diagrams - LucidCharts
    - Use something such as Confluence to store all architectural diagrams and any documentation for your projects
    - Jira for user stories/defects

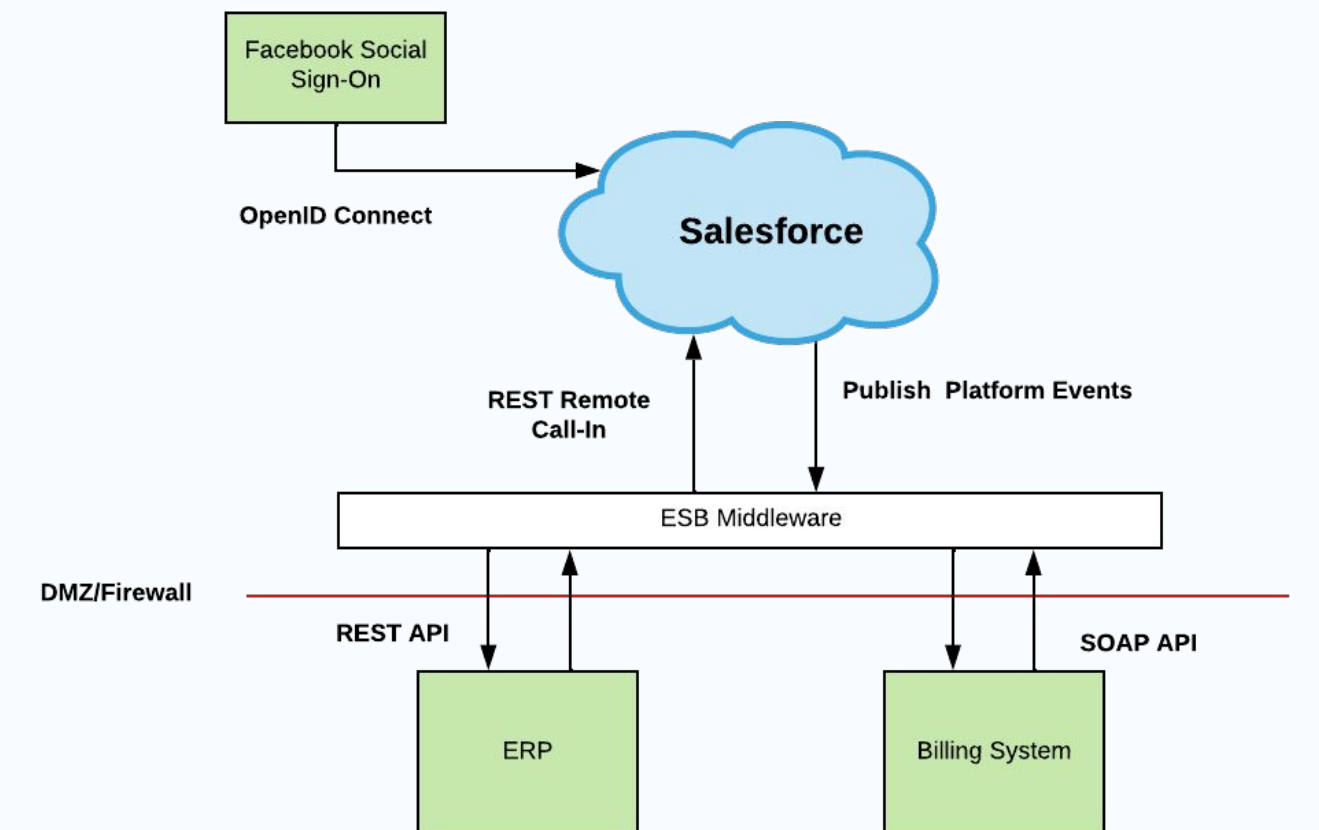
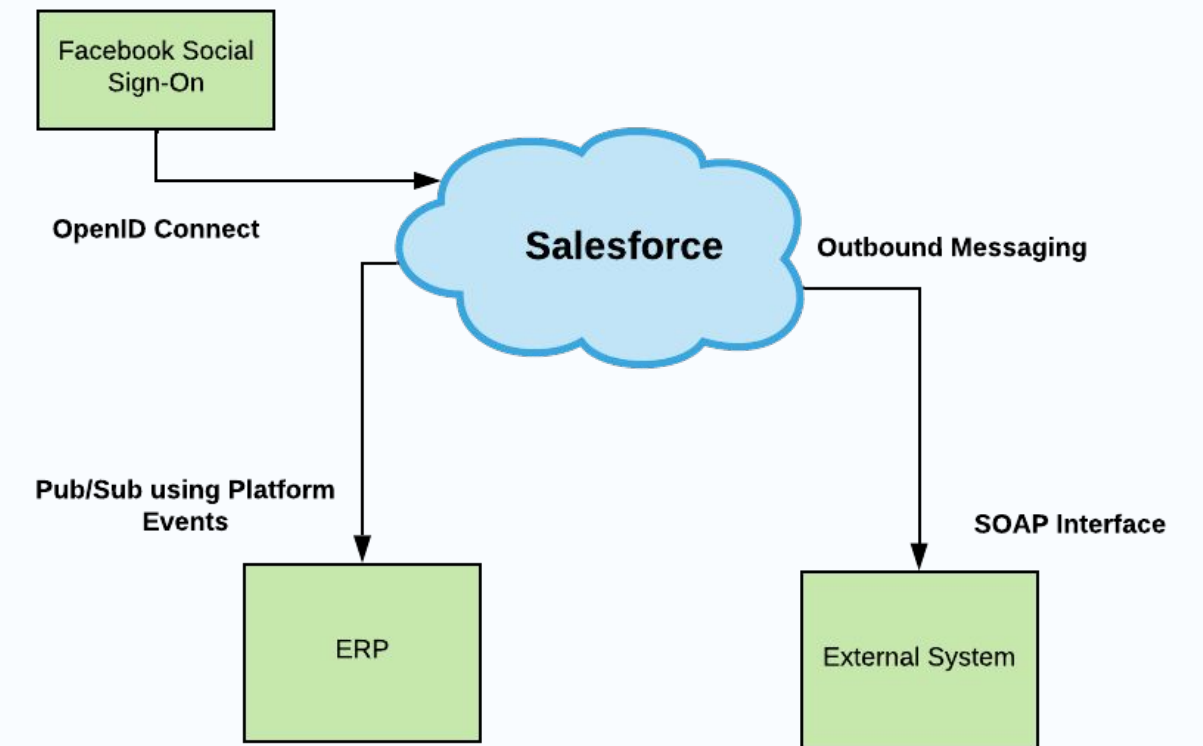


# Create Diagrams

Use diagramming tools such as Lucid Charts to document architecture

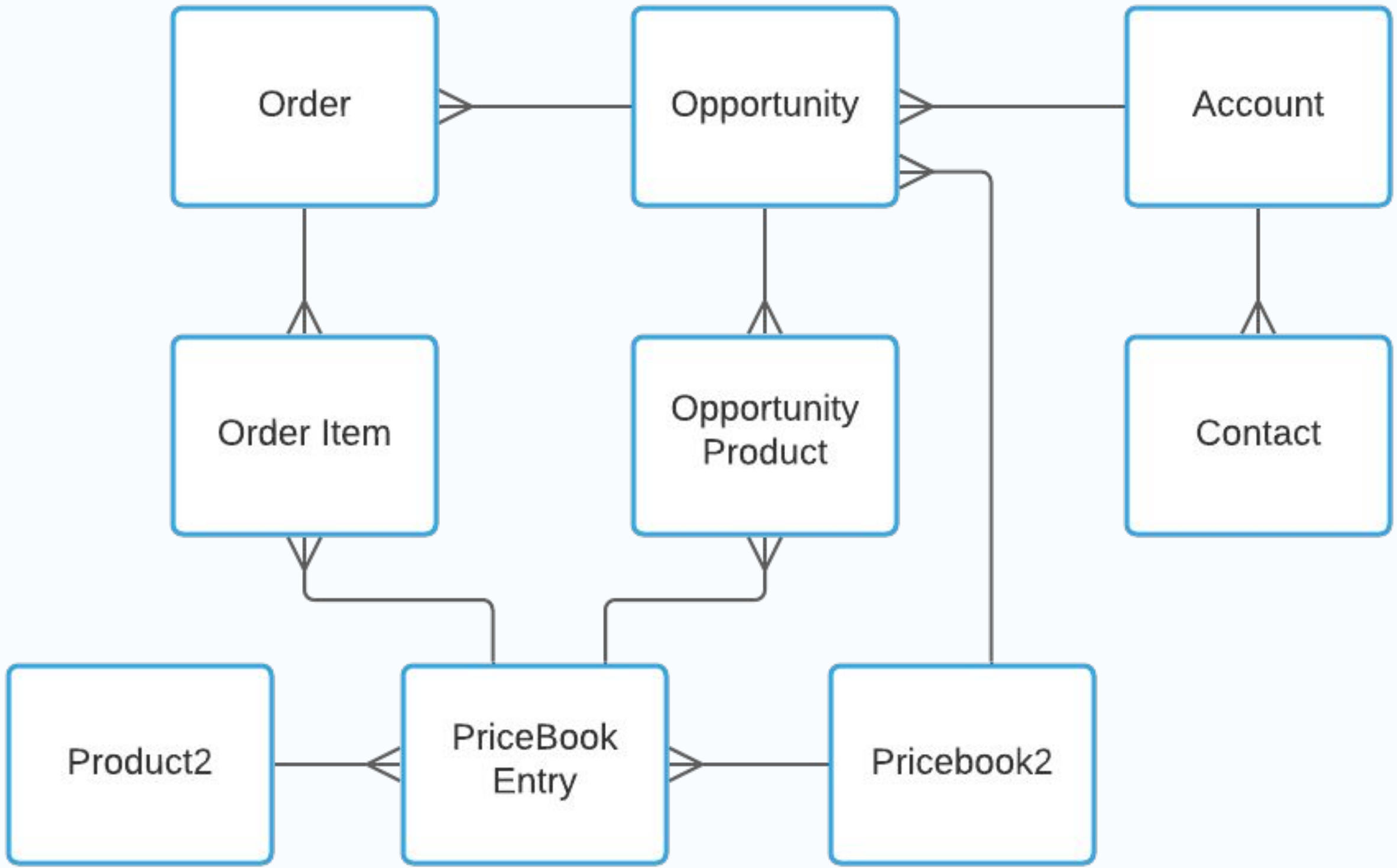
Creating a diagram can be as simple as showing the data model for some new objects that need to be created for a business process or documenting current state/future state landscape.

Or maybe you have a new integration coming into the picture. How will this integration work? Will it be real-time? Asynchronous? What kind of authentication will be used? What is the pattern Request-reply vs Fire & Forget? Batch Data Sync? Draw it out!



# Data Models/ERD

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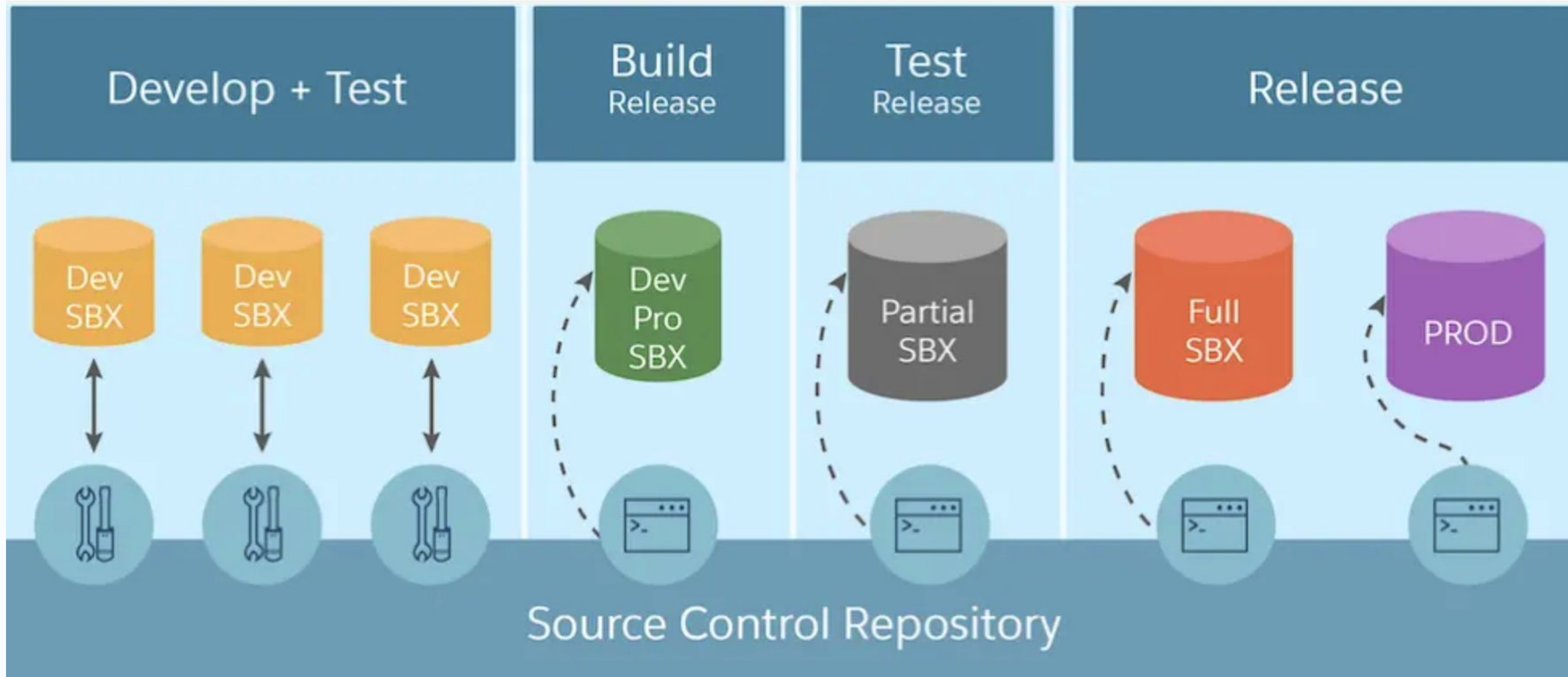
# Establish Governance

- Have a defined **release management** process and assign someone to oversee it
- Define a daily **developer workflow**
- Set up a **Center of Excellence**
- Set up an **Architecture Review Board**
- Follow a **methodology** such as **Agile** or a **hybrid**
- Define a clear **testing strategy**



# Identify Usage of Environments

Make sure the right environments are being used

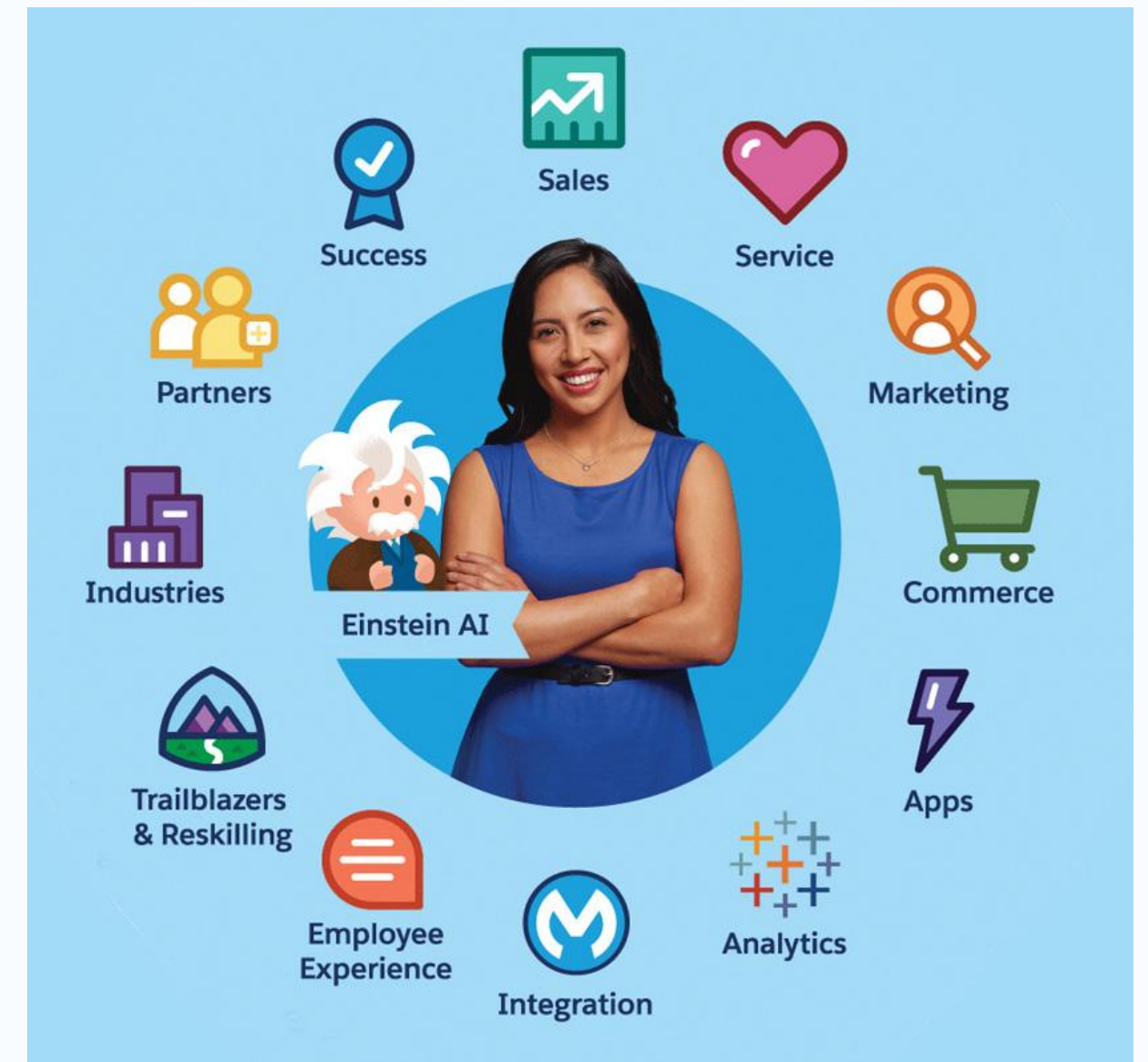




# Understand Capabilities of the Clouds

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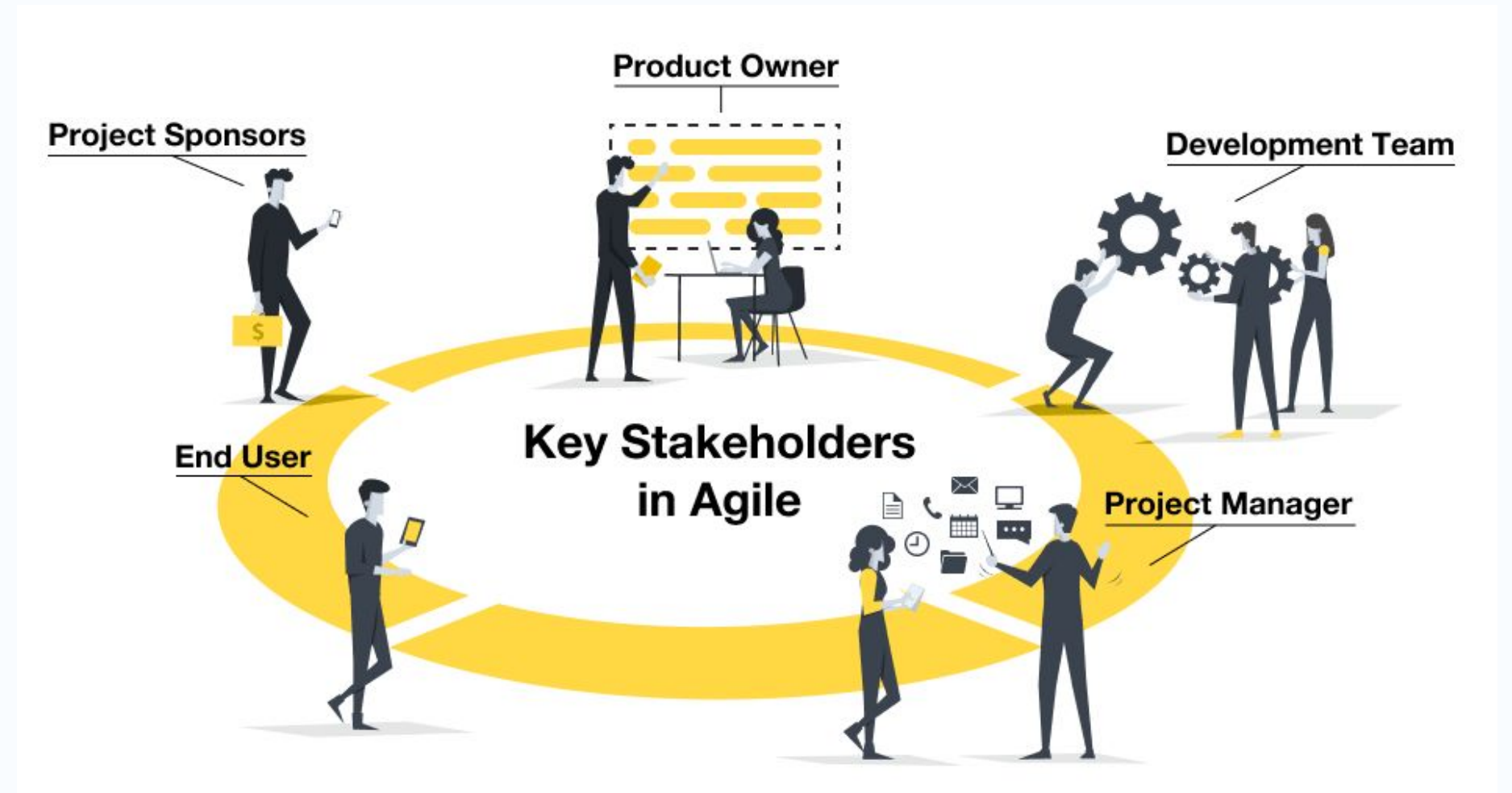
- Architects understand what is available out-of-the-box or as add-ons that may easily solve problems - low risk, faster time to market
- Learn about the capabilities of each of the clouds and how you might be able to incorporate them
- Sales Cloud Features
  - Use of Leads, Web-to-Lead, Lead assignment
  - Opportunities/Sales Processes
  - High Velocity Sales
- Service Cloud Features
  - Digital Engagement
  - Omni-Channel, Skills-based Routing
  - Web-to-Case



# Engage with Stakeholders

Communicate with stakeholders some of your ideas

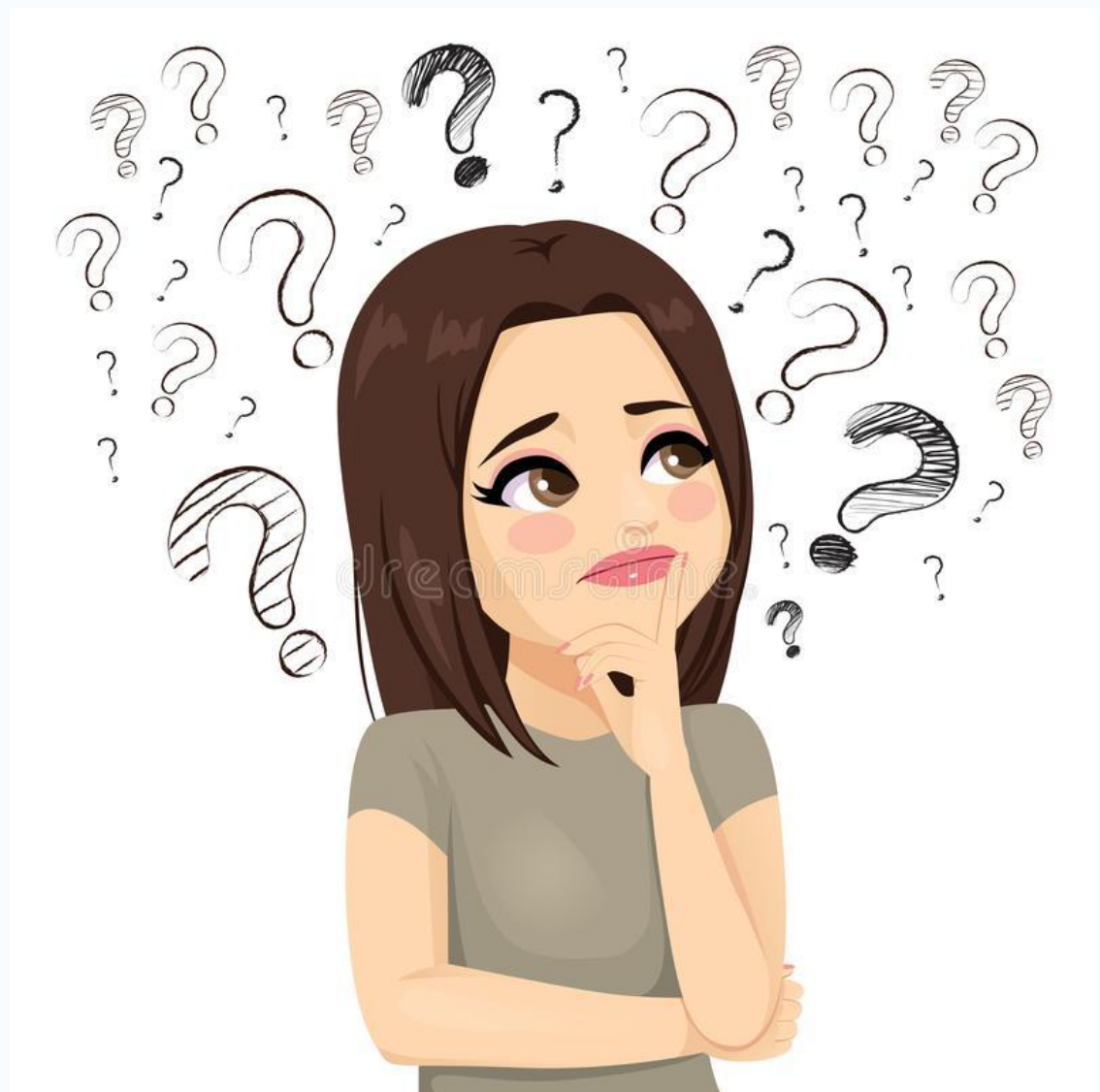
- Project Management, Project Sponsors, Product Owners
- Help fill in any missing gaps there may be in the requirements
- Communicate project objectives and initiatives
- If you want to recommend something, be ready to defend and justify your selections!



# Be Curious!

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- Ask questions about the technical aspects of how a solution is implemented
  - What's really going on behind the scenes?
  - A complex Flow w/integrations
  - A tool such as **Elements.cloud** can help you understand processes in your org
- Poke around in your org and identify areas for improvement
  - Technical Debt?
- Play around in a sandbox doing R&D for changes that you would like to make
  - Make sure that nothing breaks!



# How can you solidify building an Architect mindset?

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Understand  
the business problems



Identify  
potential solutions



Practice  
architect skills



Review  
with a mentor

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# Recommended Reading List

<u>Book Title</u>	<u>Recommendation</u>
<b>Becoming a Salesforce Certified Technical Architect</b>	Must read - should be part of any CTA journey
<b>Salesforce Data Architecture and Management</b>	Strongly recommend
<b>Enterprise Integration Patterns</b>	Strongly recommend
<b>Developing Data Migrations and Integrations with Salesforce: Patterns and Best Practices</b>	Strongly recommend
<b>Salesforce B2C Solution Architect's Handbook</b>	Strongly Recommend for B2C Solution Architect exam
<b>Solving Identity Management in Modern Applications: Demystifying OAuth 2.0, OpenID Connect, and SAML 2.0</b>	Recommended, especially if you struggle with Identity concepts
<b>Salesforce Architect's Handbook: A Comprehensive End-to-End Solutions Guide</b>	Nice to have
<b>Salesforce Lightning Platform Enterprise Architecture: 3rd Edition</b>	Nice to have
<b>Mastering Salesforce DevOps: A Practical Guide to Building Trust While Delivering Innovation</b>	Nice to have
<b>The Practice of Enterprise Architecture: A Modern Approach to Business and IT Alignment</b>	Nice to have
<b>Certified Enterprise Architect All-in-One Exam Guide</b>	Nice to have

# Architect Resources

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- **Architect Ohana Slack (and YouTube):** <https://bit.ly/3OfZwm4>
  - **YouTube:** <https://www.youtube.com/channel/UCfWf8b7Dyitl0rQf7oswWIA>
- **Benelux CTA Study Group:** <https://www.meetup.com/CTA-Study-Group>
- **Salesforce Architects:** <https://architect.salesforce.com/>
- **Ladies Be Architects:** <https://ladies-be-architects.com/>
- **Salesforce Architect Community:** <https://sforce.co/2wWgdAs>
- **Apex Hours:** <https://www.apexhours.com/>



Join Architect Ohana

## Architect Blogs:

- **Salesforce Architects on Medium:** <https://medium.com/salesforce-architects>
- **Gemma Blezard:** <http://gemmablezard.com/>
- **Susannah Kate St. Germain:** <https://www.accidentaladmintoawesomearch.com/>
- **CTA Gang of Four:** <https://ctagof.com/>



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Interest Form

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# How to Reach Me



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