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WORK at LIGHTSPEED

Follow the Yellow Brick Roadmap: A Journey To the Emerald CMDB

John Rea-Hedrick
Enterprise Configuration Management Process Owner
Eli Lilly and Company

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Agenda

- Introduction
- We’re not in Kansas Anymore
- Laying the Yellow Brick Roadmap
- We’re off to see the Wizard
- Maintenance, Modeling and Management . . . Oh My!
- The Emerald CMDB

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Speaker Introduction



Name: John Rea-Hedrick

Title: IT Consultant: Enterprise Configuration Management Process Owner

Function: Global Service Management Operations IT

Company: Eli Lilly and Company

Experience: 20 years in Information Technology with Eli Lilly and Company

Expertise: Change Management, Configuration Management, ITSM, SharePoint

Achievements: LRL President's Recognition Award, 2002; Regional Solution Achievement Award, 2010; Global Solution Achievement Award, 2010; CIO Award 2014

Current Projects: CMDB Technical Roadmap, Application Modernization, Application Portfolio Sustainability, Informatica Master Data Management,

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Eli Lilly and Company



Name: Eli Lilly and Company

Industry: Pharmaceutical

Company Summary:

- Founded in Indianapolis, IN in 1876
- ~41,000 employees around the globe
- Vision: Unite caring with discovery to make life better for people around the world

Company's Primary Therapeutic Areas:

- Cardiovascular
- Diabetes
- Immunology
- Neuroscience
- Oncology

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Objectives and What You Will Learn

Objectives

- To understand Eli Lilly and Company's journey planning, implementing and adopting an enterprise CMDB.

What you will learn

- Some of the steps Lilly followed in planning, communicating, and rolling out its enterprise CMDB
- Some of the challenges Lilly faced (and still faces) around managing its enterprise CMDB
- Some of the processes Lilly put in place to overcome its CMDB support and maintenance challenges
- Some of the key takeaways Lilly has learned on its CMDB journey so far

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We’re not in Kansas Anymore

Providing IT Answers at the Speed of Business

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What Sorts of Questions are Being Asked of IT?

What is our current portfolio of business applications and where are they used?

Which applications are used by a specific site/affiliate/Business Unit?

What applications or services are impacted by the planned outage, change, etc.?

How many suppliers/vendors are providing IT products and services?

Which applications are externally facing (i.e. outside the firewall)?

What are all the incidents/problems/requests/CAPAs/ changes associated with a particular Configuration Item or set of Configuration Items?

Who is the primary technical support contact for the applications running on Lilly supported infrastructure platforms/technologies?

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What Sorts of Questions are Being Asked of IT?

Which applications are deployed in a particular location/data center?

Can the CMDB support my system inventory/audit compliance reporting requirements?

How may applications/platforms are using virtualization technology (VDI, Citrix, etc.)?

What levels of Disaster Recovery have been implemented across the organization?

How many applications/platforms are dependent on legacy or declining technology?

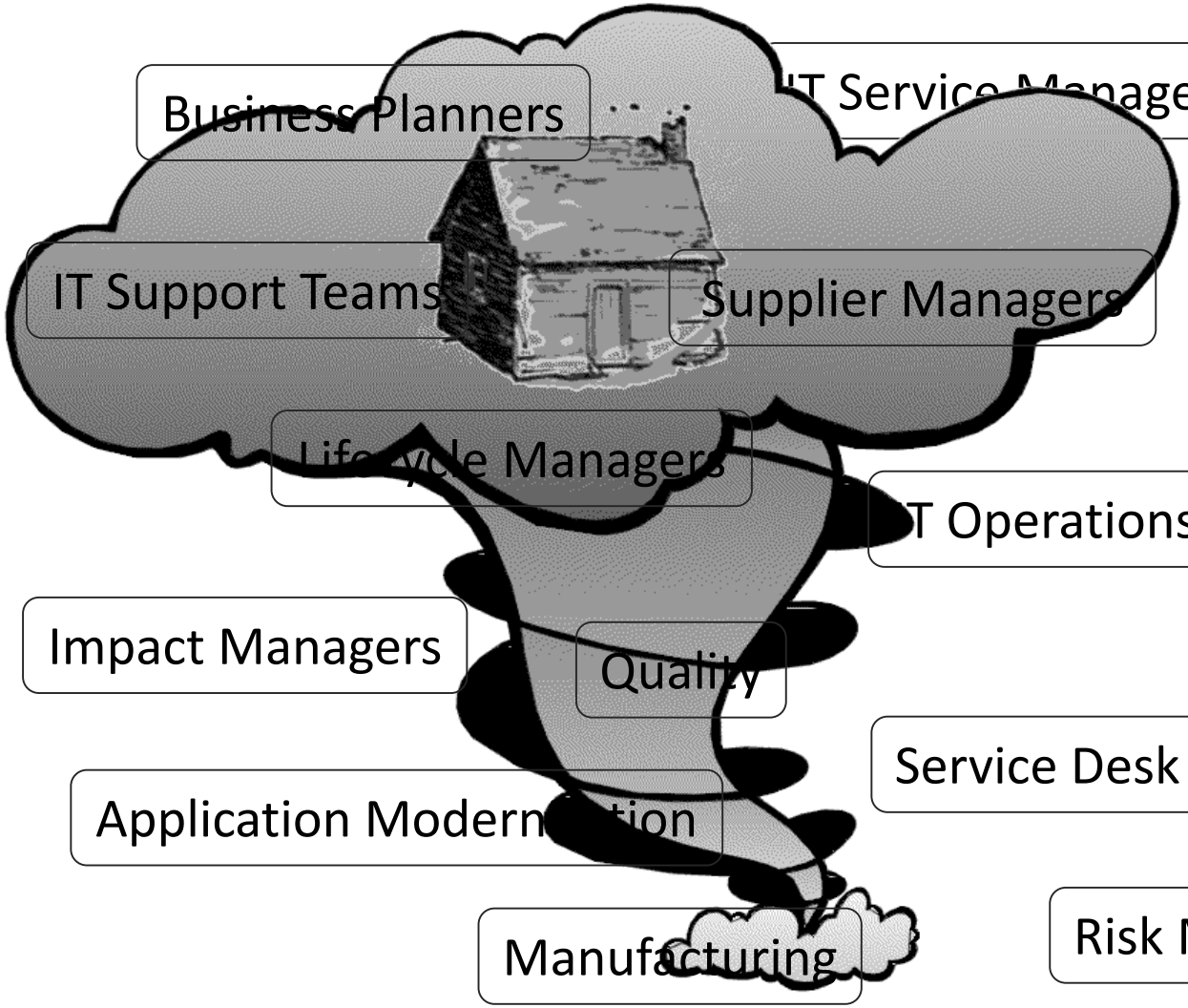
Who do I need to notify when I patch/upgrade a server?

What is the planned end of support date for a given technology and which applications and infrastructure services depend on it?

How many users do I have for my application in a particular region?

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What's the Risk if We Fail to Deliver?



Business Planners

IT Service Managers

IT Support Teams

Supplier Managers

Lifecycle Managers

IT Operations

Impact Managers

Quality

Service Desk

Application Modernization

Manufacturing

Knowledge Managers

Business Integrators

Periodic Review

Asset Managers

Disaster Recovery

Audit Reporting

Vulnerability Risk Management

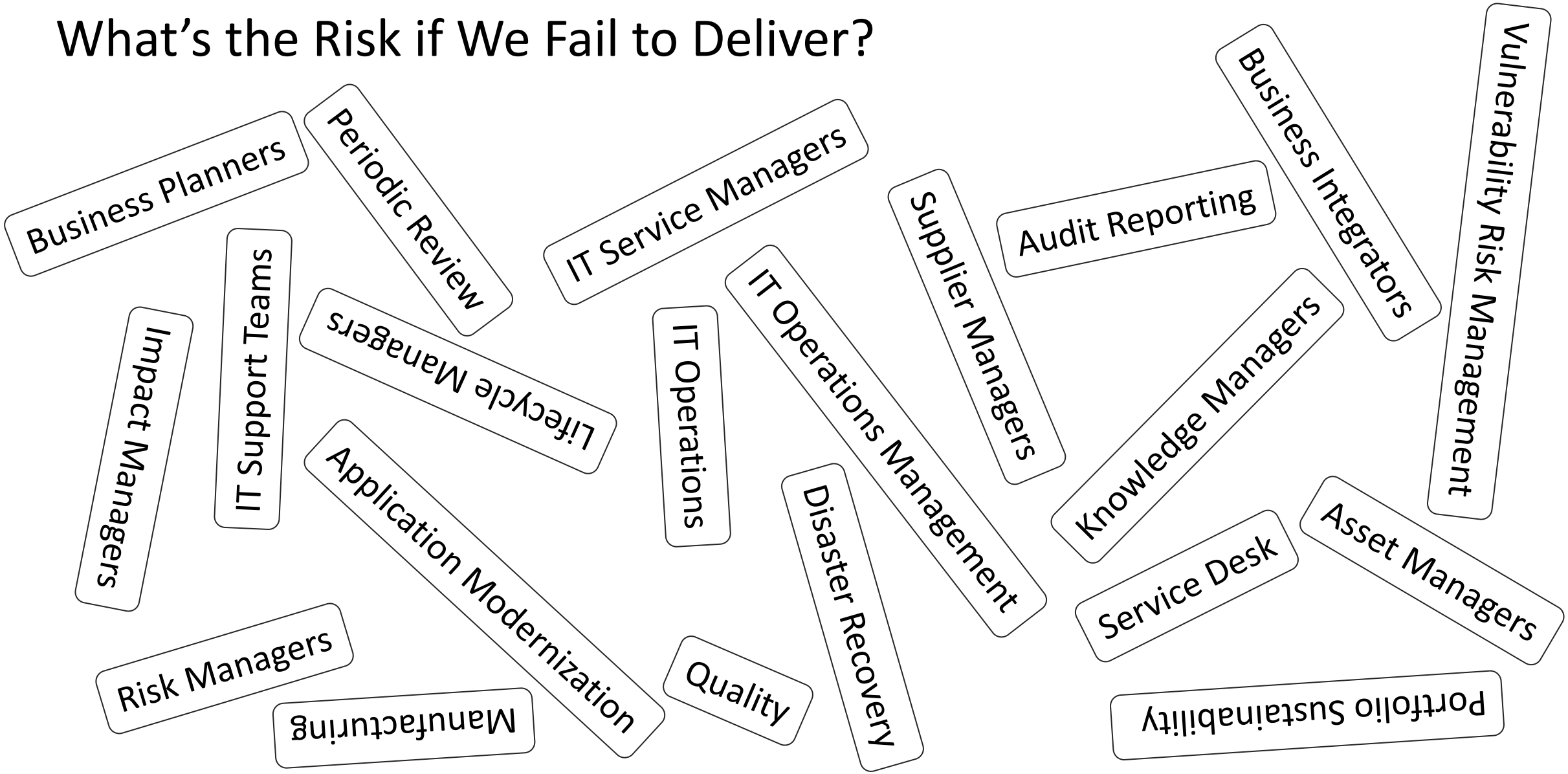
Risk Managers

Portfolio Sustainability

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What's the Risk if We Fail to Deliver?



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Laying the Yellow Brick Roadmap

Architecting the CMDB

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CMDB Objectives:

- Maintain accurate inventory of Configuration Items (CIs)
- Ensure that CIs are controlled throughout their lifecycle by only allowing authorized changes which are audited for traceability
- Consolidate disparate configuration information into a centralized repository
- Record the configuration history of CIs
- Establish flexible relationship design for modeling CI to CI dependencies
- Enable configuration information to support incident, problem and change management processes
- Enable reporting of CI data, attributes and relationships, including the activities of various ITSM processes that impact them



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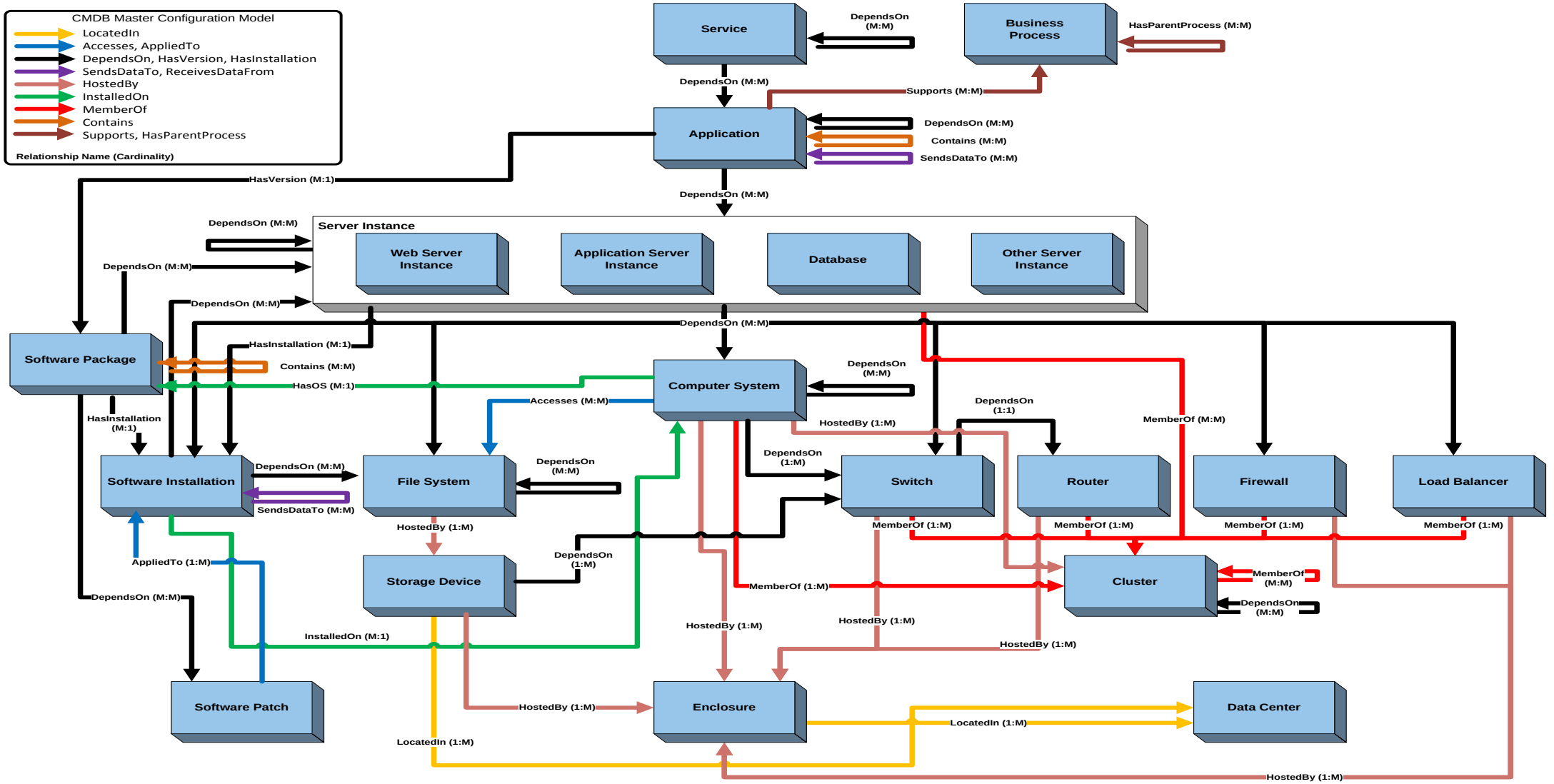
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Drafting the Yellow Brick Blueprint:

- Define the CMDB Data Model
  - Determine what's in scope
  - Identify supported relationships
  - Define key metadata to collect

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CMDB Master Configuration Data Model



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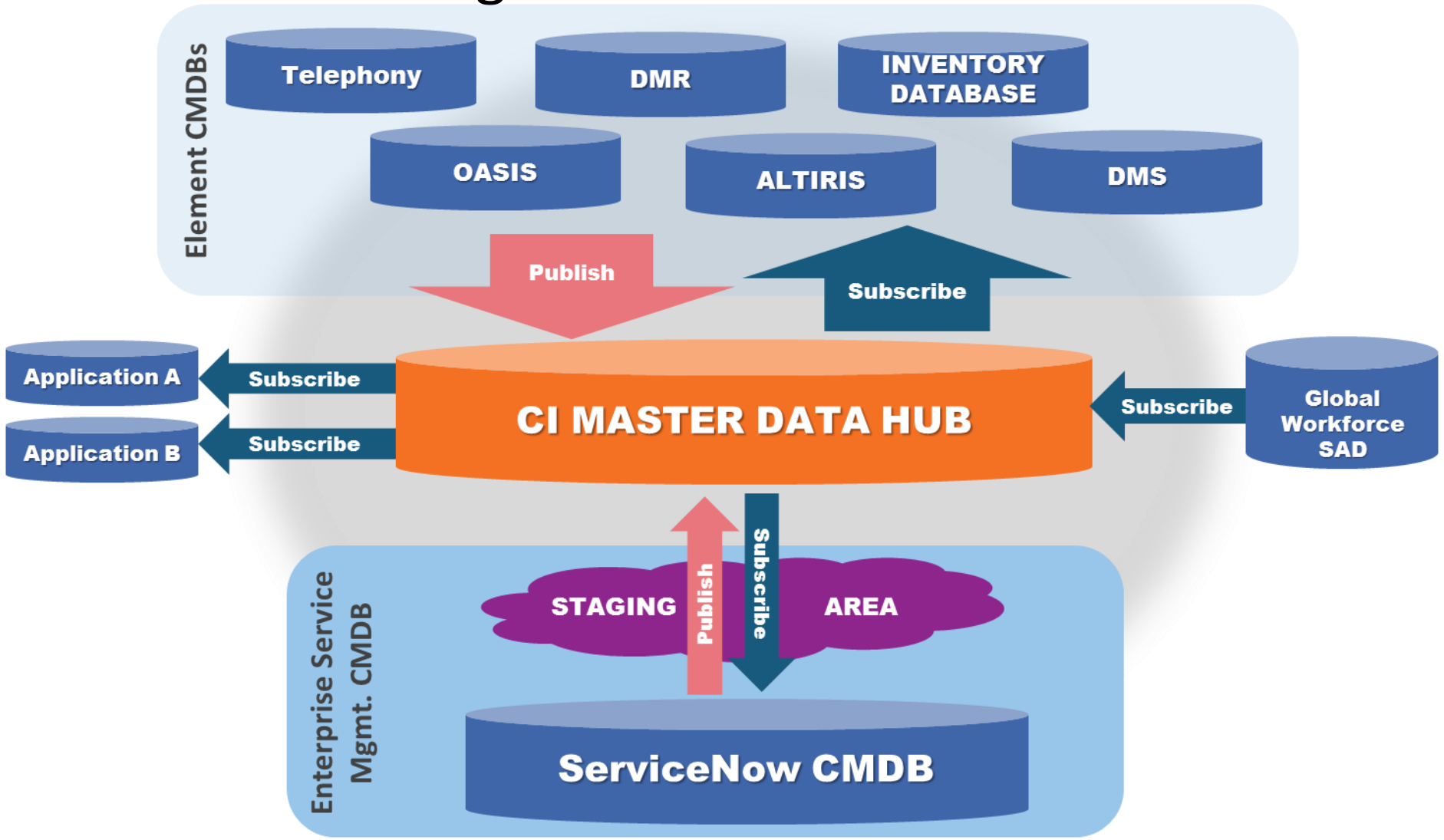
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- Define the CI Master Data Hub
  - Identify data sources across the organization
  - Identify key content for both publishers and subscribers
  - Determine who "owns" each record and field
  - Define data movement across sources

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Federated Master Configuration Data Model



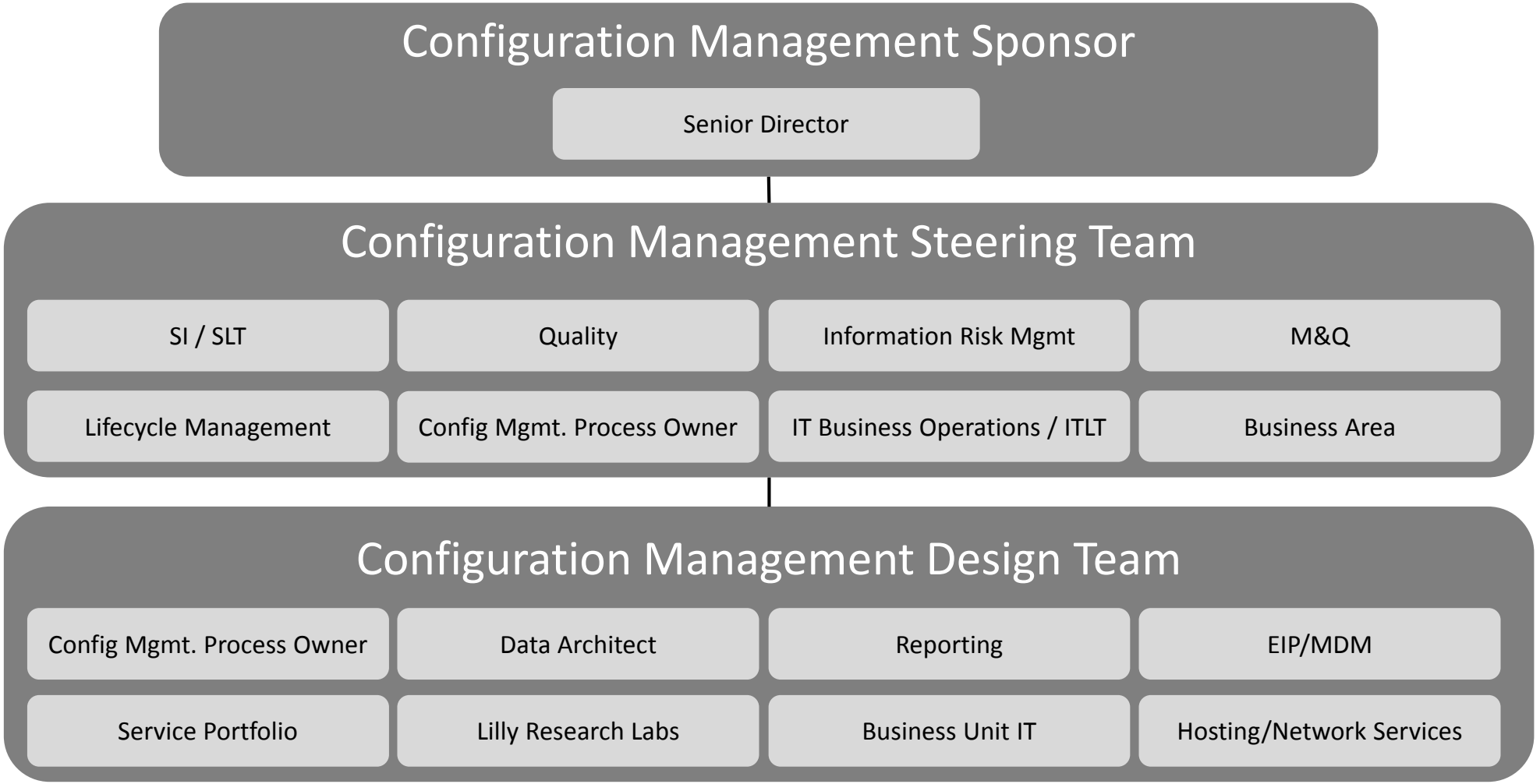
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- Establish a CMDB Governance Model
  - CMDB Steering Team
  - CMDB Design Team

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CMDB Governance Model



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Drafting the Yellow Brick Blueprint:

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- Establish a CMDB Governance Model
  - CMDB Steering Team
  - CMDB Design Team
  - Local Configuration Manager Forum
- Define Operational Support Model
  - Clearly defined roles and responsibilities
  - Identifying an owner for every CI in the CMDB
  - Create master resource knowledge articles
  - Create service requests for CI creation and bulk maintenance

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Who is Accountable for Managing the CMDB?



Global Configuration Manager

Global operation of the Configuration Management Process

Plans, designs, and implements the CMDB

Responsible for the overall accuracy of the CMDB

Plans and coordinates global verification and audit activities.

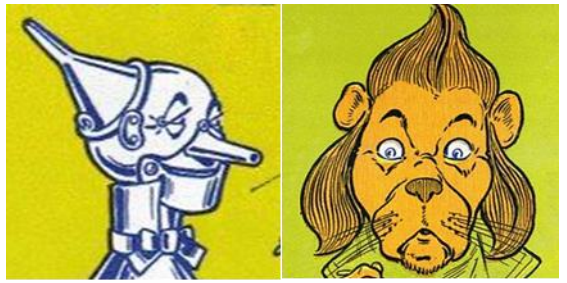


Local Configuration Managers

Provide local support, training and guidance

Ensures local effectiveness of Configuration Mgmt process

Executes verification and audit activities for a given area



CI Owners

Maintain owned Configuration Items

Accountable for the accuracy and completeness of owned Configuration Items



CI Data Stewards

Assist CI Owners in maintaining and ensuring the completeness and accuracy of Configuration Information

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We’re Off to See the Wizard

Going Global with the CMDB

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Preparing the Foundation & Laying the Bricks

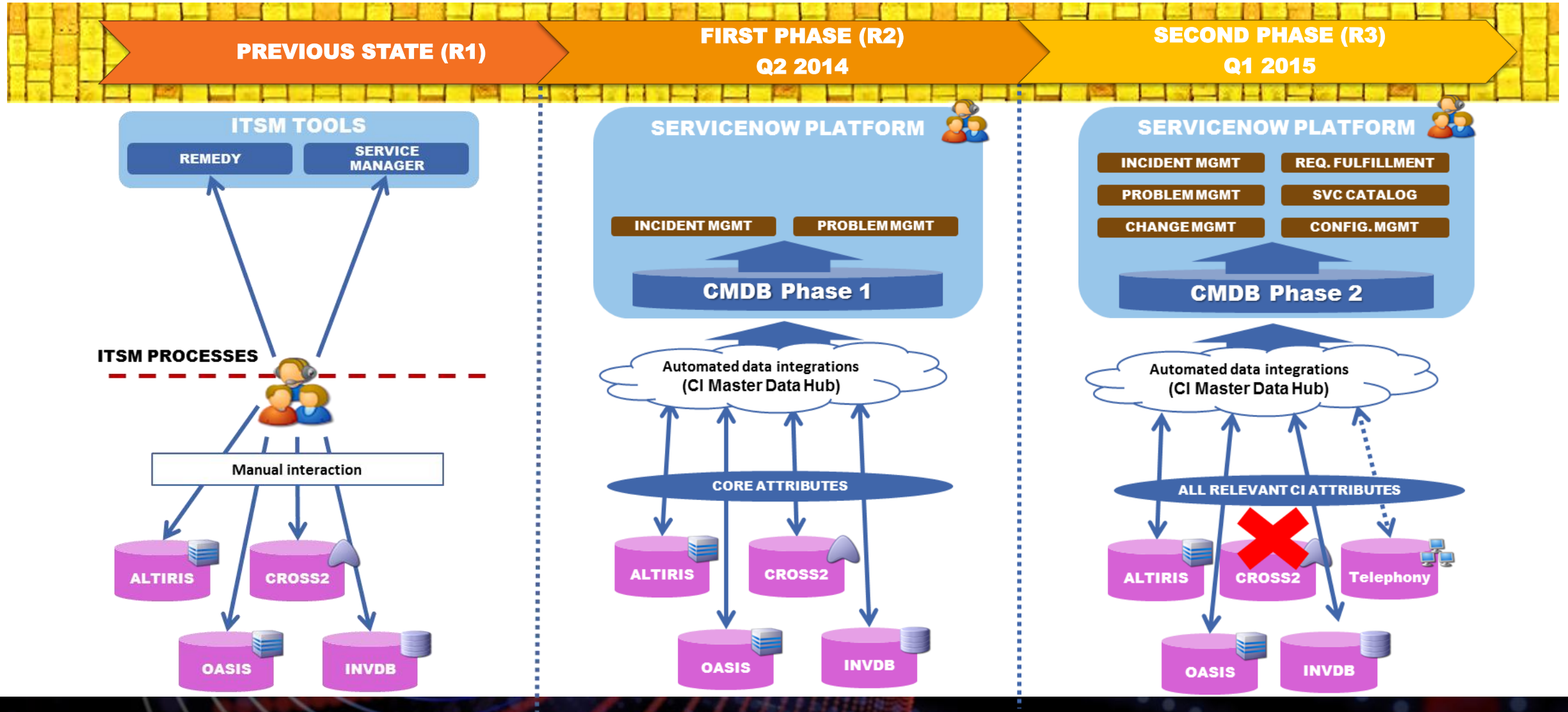
- Corporate Sponsorship
  - Initial IT Commitment and Investment
  - Cascading Global Communications
    - Awareness
    - Expectations
    - Points of Contact
    - Timelines
  - Resource Identification and Allocation

- Accountability Structure
  - Global Service Management IT
    - Implementation Leads
      - Local Area Ambassadors

- Global Readiness and Training
  - Model Office Training
  - Global Leader-led Training
    - Formal Training Materials
    - Participant Guides
  - Power Hours
    - Supplement to Leader-led Training
    - Awareness / Q&A
  - Hypercare (at go-live)
    - Implementation Leads
    - Local Area Ambassadors
  - Open Office Hours
    - Process SMEs
    - Local Area Ambassadors

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CMDB Implementation Roadmap



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Maintenance, Modeling and Management…Oh My!

Life on the Yellow Brick Roadmap

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CMDB Maintenance Challenges

Process & Training

- Communication Breakdown
  - Global Configuration Management
    - → Local Configuration Managers
      - » → CI Owners & Data Stewards
- Complexity of the CMDB
- Evolving Data Model

CI Master Data Hub

- Data Merge/Match Issues
- Subscription Maintenance
- Processing Rules (Record/Field Level Ownership)
- Transform Maps



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CMDB Modeling Challenges

CI Relationships (Rationalization)

- Contains::ContainedBy
- Contains::LocatedIn
- DependsOn::UsedBy
- HasInstallation::HasVersion
- HasArray::HasNode
- HasLogicalMember::LogicalMemberOf
- HasPhysicalMember::PhysicalMemberOf
- InstalledOn::Runs
- RunsInstances::HasInstallation
- SendsDataTo::ReceivesDataFrom
- SendTrafficTo::ReceiveTrafficFrom
- TestedOn::TestedFor
- UsedBy::DependsOn

Existing Complexity (Maturity)

- Clusters
- File Stores
- Virtualization
- Theory vs. Reality

New & Emerging Technologies (Evolution)

- Cloud Computing
- Distributed File Systems





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CMDB Management Challenges

Data Stewardship

- Configuration Item Ownership
- Local Configuration Manager Expectations

Global Configuration Management Capacity

- Daily Operations
- End User Support (LCM and CI Owners)
- Projects: Planning, Strategy & Execution
- Minor Enhancements, OCM, Training



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Moving Forward: Overcoming the Challenges

Maintenance/Modeling Improvements

- Master Knowledge Articles
- Modeling Guidance
- Global Verification Reports
- Data Certification Module
- ServiceWatch Automation

Management Improvements

- Establish CMDB Program Team
  - Operations
  - Technical Roadmap
  - OCM/Adoption
  - Service Strategy & Design

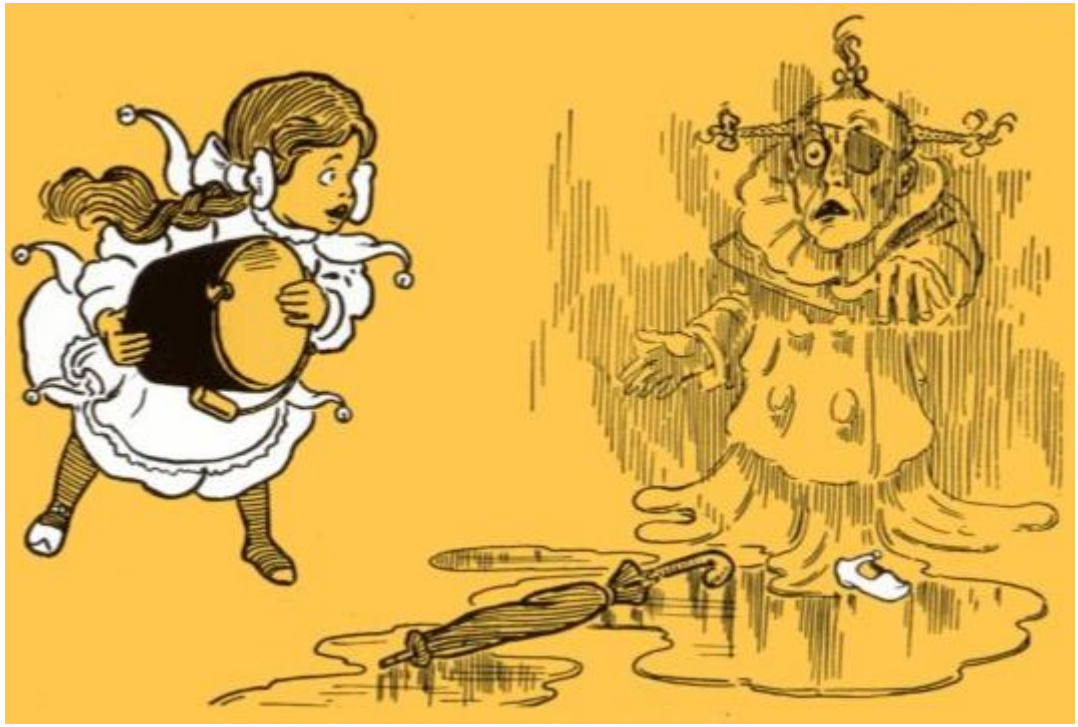


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The Emerald CMDB

Reaching the End of the Yellow Brick Roadmap

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What We've Learned Along the Way

1. CMDB data integrity is only as good as your commitment to process & (re)training.
2. If you can't communicate the value ("what's in it for me"), you'll struggle to achieve end user commitment to compliance.
3. Don't underestimate the importance of gathering and acting on feedback.
4. Without management support, some old habits and behaviors may never change.
5. No one person or team owns an enterprise CMDB.
6. There will always be new business questions to answer.



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The Emerald CMDB: It's Not a Destination; it's a Journey.

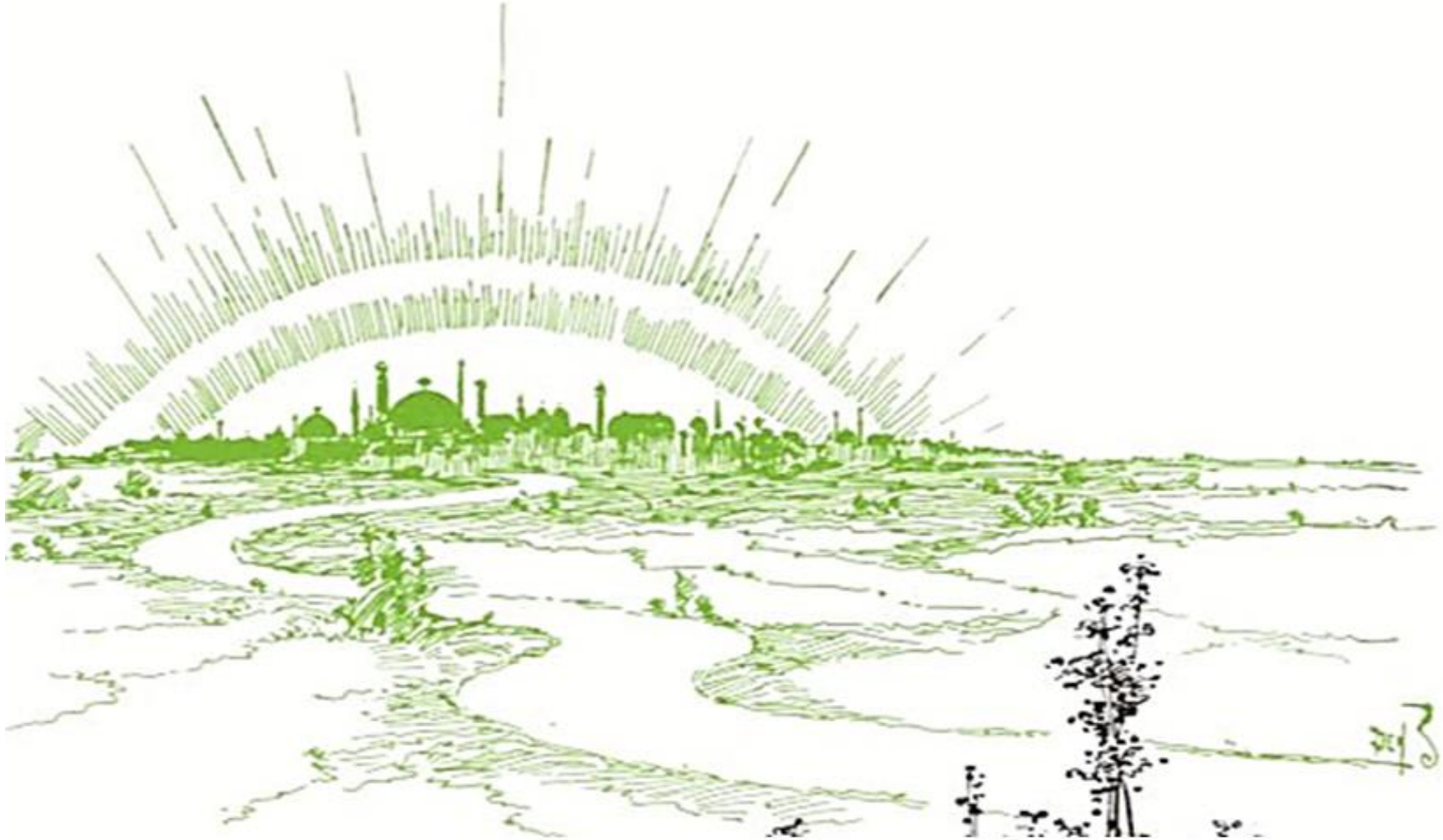


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Thank You

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Q & A

John Rea-Hedrick
Enterprise Configuration Management Process Owner
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BACK UP SLIDES

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