



Introduction to Enterprise Architecture

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Enterprise Architecture

A background image of a city skyline with various skyscrapers and buildings under a cloudy sky.

- **The process of translating business vision and strategy into effective enterprise change by creating, communicating and improving the key requirements, principles and models that describe the enterprise's future state and enable its evolution over time**

A process to deliver critical mass of understanding to the enterprise!

Critical Mass of Understanding...

Critical Mass of Understanding

No Blueprint = Disjointed Understanding

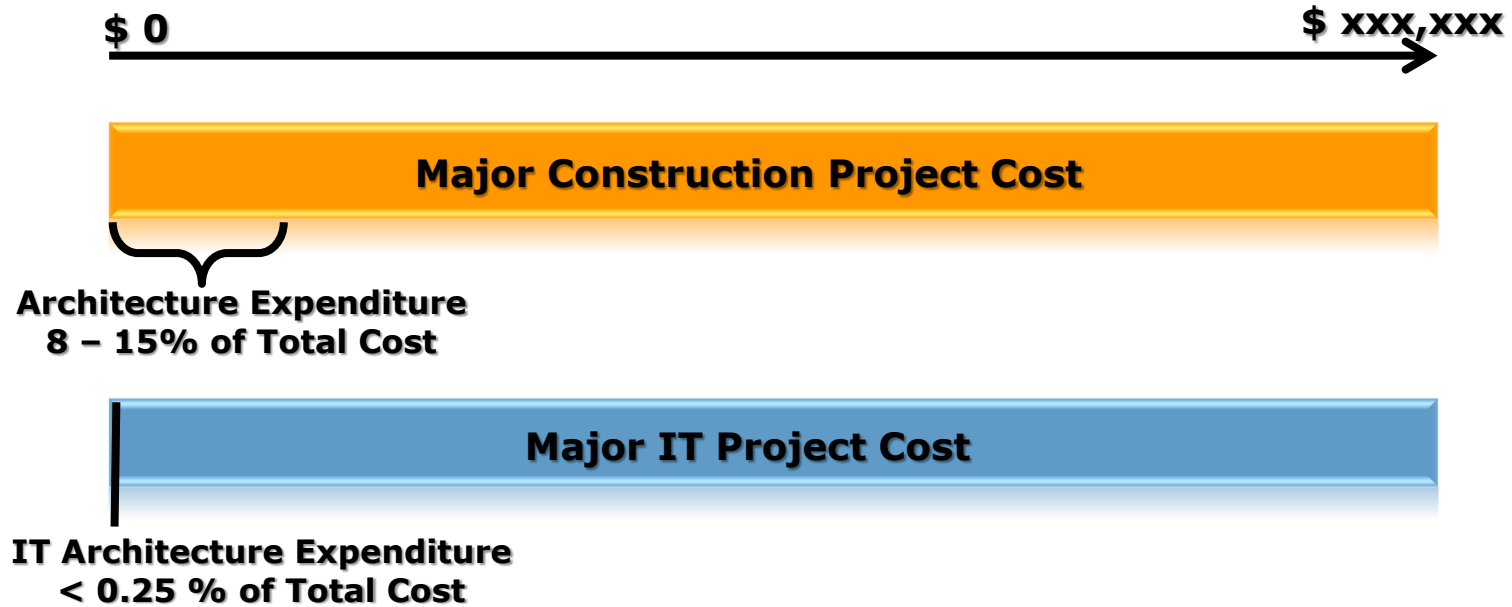


Blueprint = Mutual Understanding



critical
momentum = mass x velocity in a given direction
understanding

Comparative Investment



Important EA Terms



- **Vision:** Outlines what the organization wants to be, or how it wants the world in which it operates to be (an "idealized" view of the world). It is a long-term view and concentrates on a description of the **future state**. It can be emotive and is a source of inspiration.
- **Mission:** Defines the fundamental purpose of an organization or an enterprise, succinctly describing why it exists and **what it does to achieve its vision**. A high-level action or **process description** of an organization, spells out its overall goal, provides a path, and guides decision-making. A formal short written statement of an organization's value proposition.

Important EA Terms



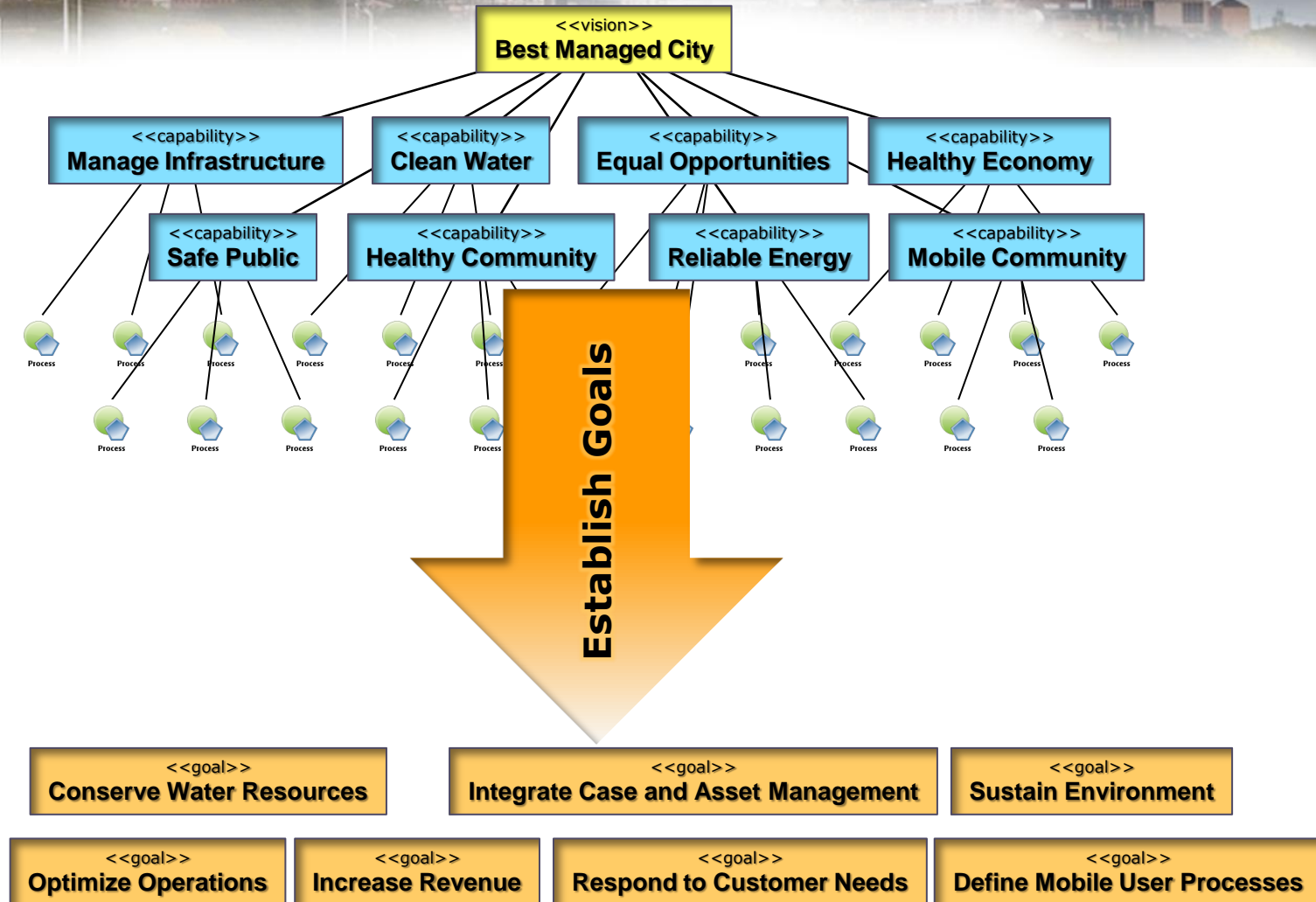
- **Capability:** People, processes and systems delivering value for a specific purpose. The quality of being capable; to have the capacity or ability to do something, achieve specific effects or declared goals and objectives
- **Goal:** A desired result a person or a system envisions, plans and commits to achieve. A desired end-point in some sort of assumed development. Many people endeavor to reach goals within a finite time by setting deadlines (a milestone). Goals amplify and quantify the organization's Vision
- **Objective:** Quantifies a Goal – a performance measure of behavior

Trick to Remember Difference Between Goal and Objective

Think of a football field...



Dealing With Complexity

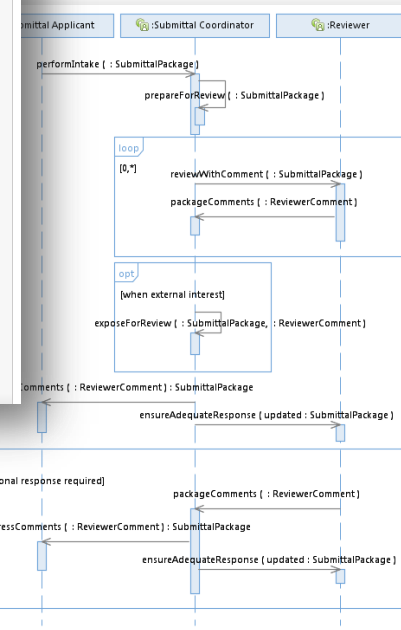
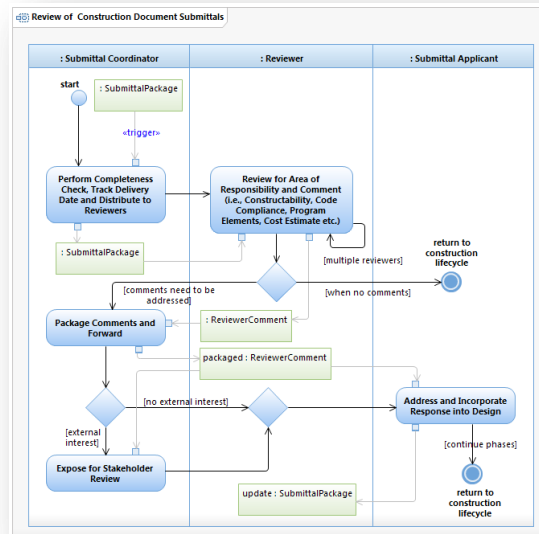


Dealing With Complexity

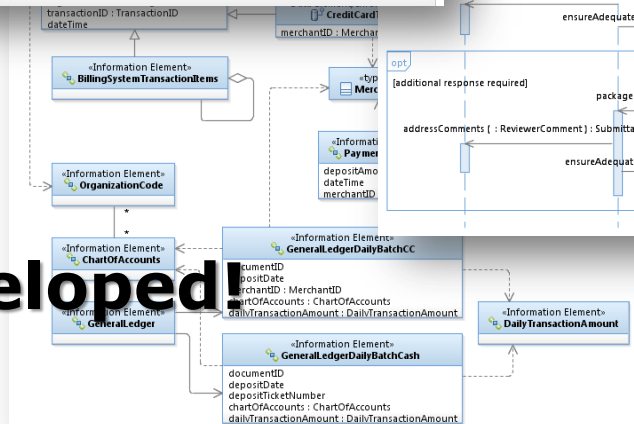
Process



Capability Usage

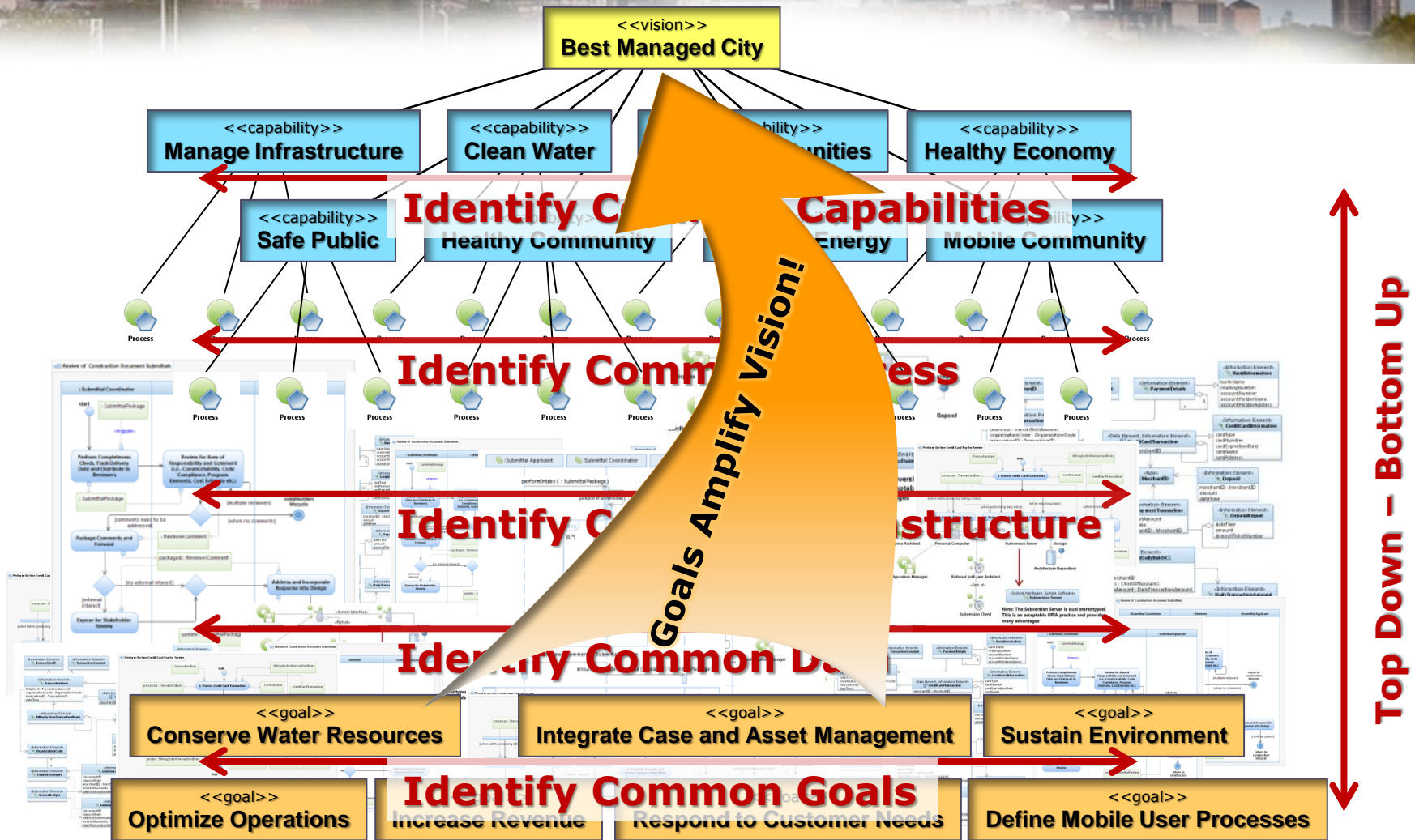


Stakeholder developed!



Sample use case model

Dealing With Complexity



Connecting Business Needs to IT Solutions

Monday, Nov. 26th Executive Team Staff Meeting:

Staffing Plan Criteria	
	EUM: language from attribute definitions in Effective Utility Management Principles
1	Operational Optimization Managing a growing system; New facilities; Maintaining basic operations; Repair and maintenance
2	Staffing Customer service; Environmental protection; Public health; Financial stability; Asset management
3	Employee Leadership and Development Succession planning; Program manager concept; Supervisor development <ul style="list-style-type: none"> (EUM) Recruits and retains a workforce that is competent, motivated, adaptive, and safe-working. Establishes a participatory, collaborative organization dedicated to continual learning and improvement. Ensures employee institutional knowledge is retained and improved upon over time. Provides a focus on and emphasizes opportunities for professional and leadership development and strives to create an integrated and well-coordinated senior leadership team. Identifies positions associated with key organization succession risks.
4	Innovation <ul style="list-style-type: none"> (EUM) Maintains awareness of information and operational technology developments to anticipate and support timely adoption of improvements.
5	Industry Best Practices Support (For example: Finance, PIO, Audit staffing) <ul style="list-style-type: none"> (EUM) Operational Resiliency: Ensures utility leadership and staff work together to anticipate and avoid problems. Proactively identifies, assesses, establishes tolerance levels for, and effectively manages a full range of business risks (including legal, regulatory, financial, environmental, safety, security, and natural disaster-related) in a proactive way consistent with industry trends and system reliability goals. Regulatory Initiatives (for example TCEQ) <ul style="list-style-type: none"> (EUM) Product Quality: Produces potable water, treated effluent, and process residuals in full compliance with regulatory and reliability requirements and consistent with customer, public health, and ecological needs. Water Resource Adequacy <ul style="list-style-type: none"> (EUM) Ensures water availability consistent with current and future customer needs through long-term resource supply and demand analysis, conservation, and public education. Explicitly considers its role in water availability and manages operations to provide for long-term aquifer and surface water sustainability and replenishment. Stakeholder Understanding and Support <ul style="list-style-type: none"> (EUM) Engenders understanding and support from oversight bodies, community and watershed interests, and regulatory bodies for service levels, rate structures, operating budgets, capital improvement programs, and risk management decisions. Actively involves stakeholders in the decisions that will affect them.
6	Revenue Generating; Cost Offset Positions <ul style="list-style-type: none"> Positions that enhance existing revenue streams. (For example: Improved large meter maintenance to recover water and wastewater revenues.) Cost offset: for example, budgeted contracted services or temporary positions made permanent positions.

3

Employee Leadership and Development

Succession planning; Program manager concept; Supervisor training; Organization development

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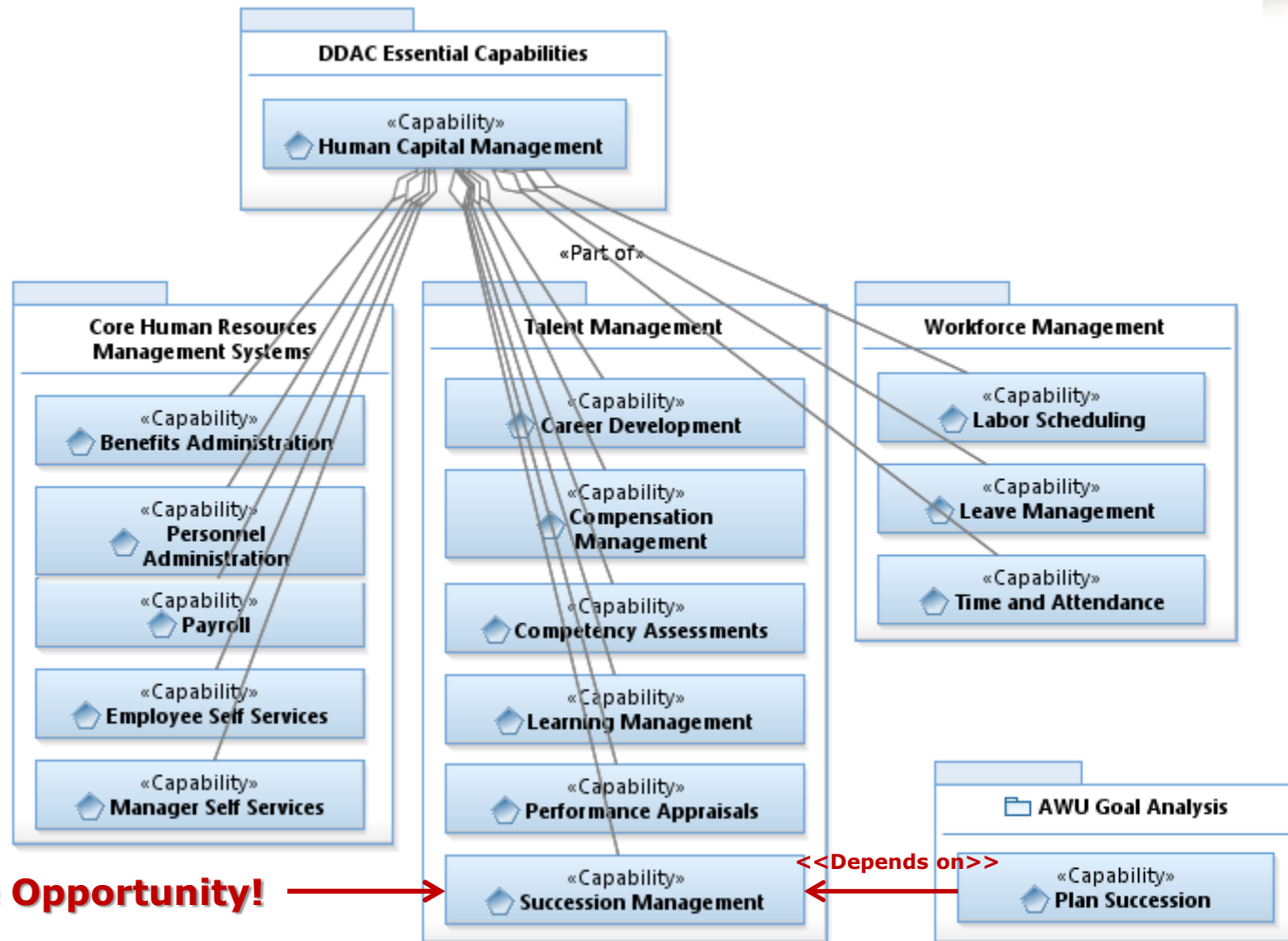
The Architect's Viewpoint

«Capability»
Plan Succession

Recruit and maintain a competent, motivated, adaptive, and safe workforce. Establish participatory, collaborative organization dedicated to learning and process improvement. Ensure institutionalization of retained knowledge. Emphasis professional and leadership development and integrate a well-coordinated leadership team.

Connecting Business Needs to IT Solutions

continued...



Connecting Business Needs to IT Solutions

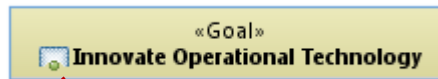
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5	Industry Best Practices

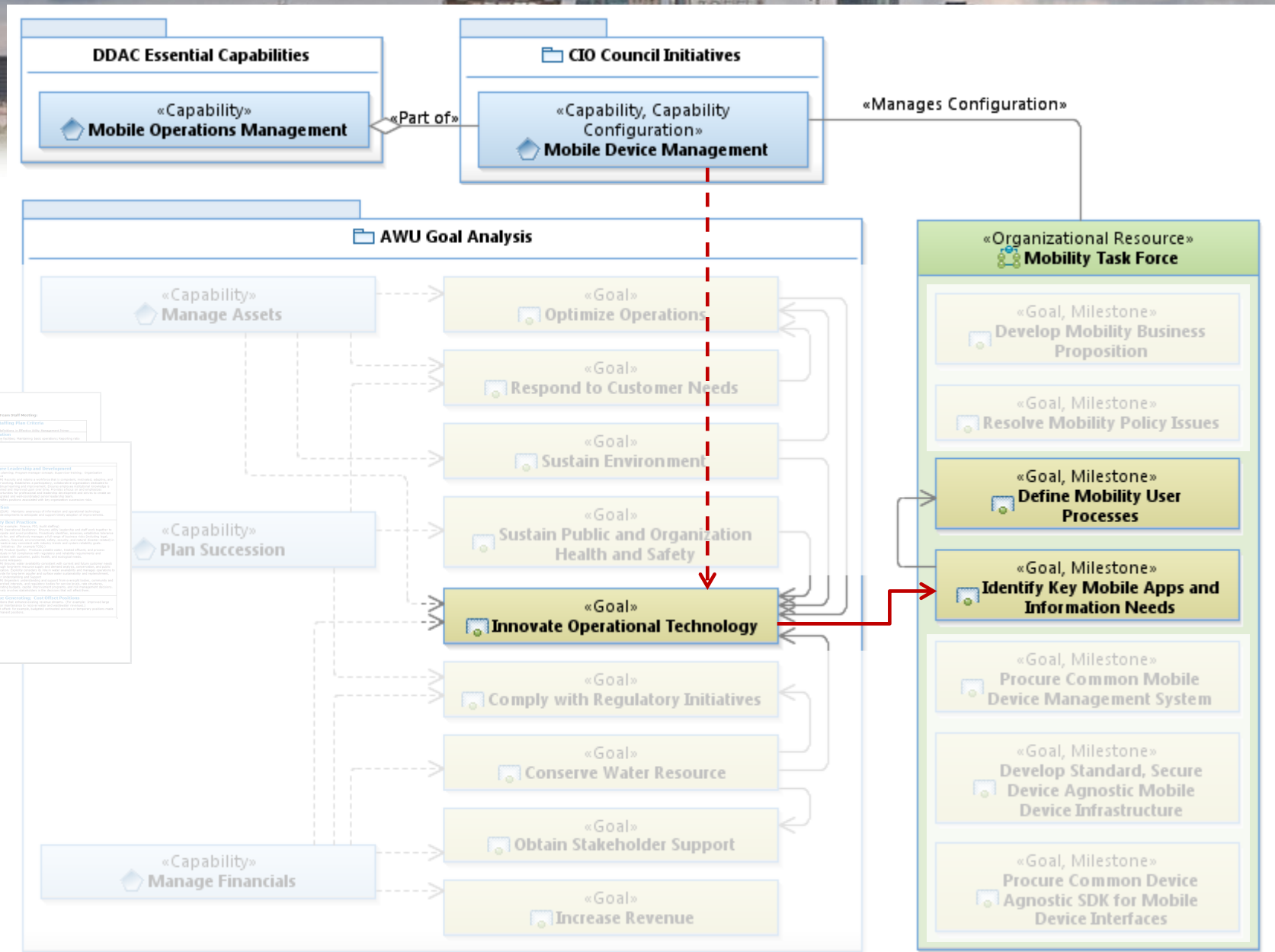
The Architect's Viewpoint



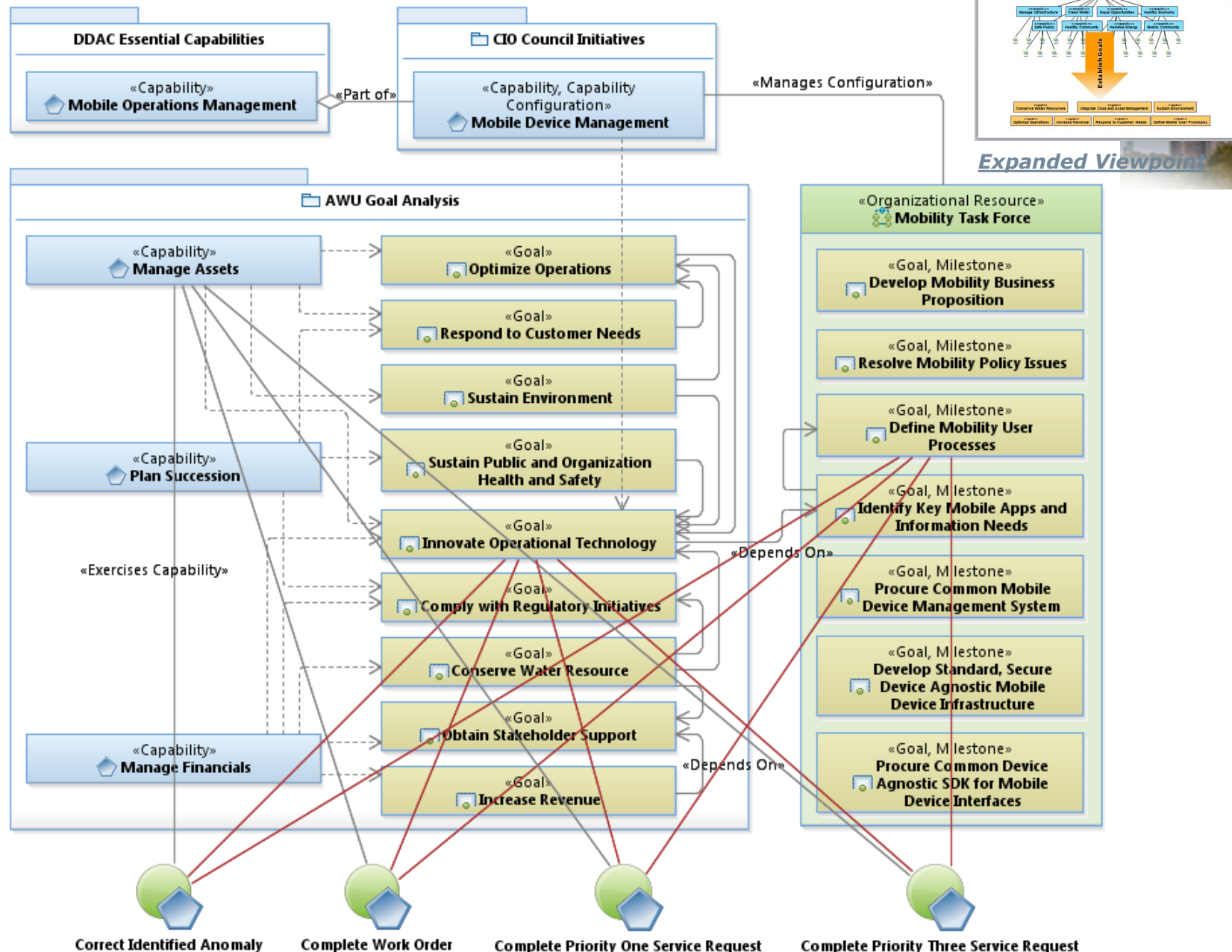
Employ innovative operational technology to support timely improvements.

Connecting Business Needs to IT Solutions

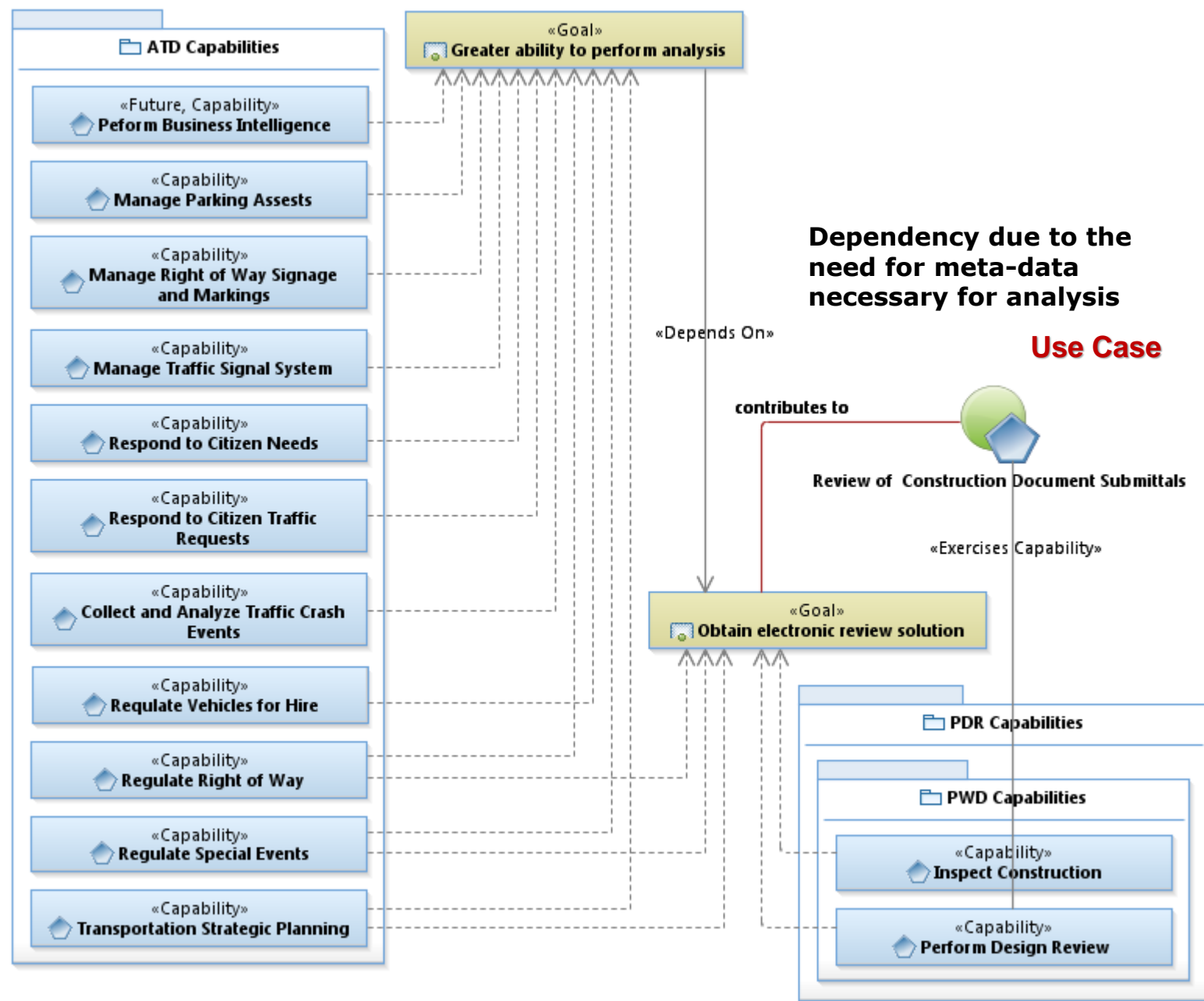
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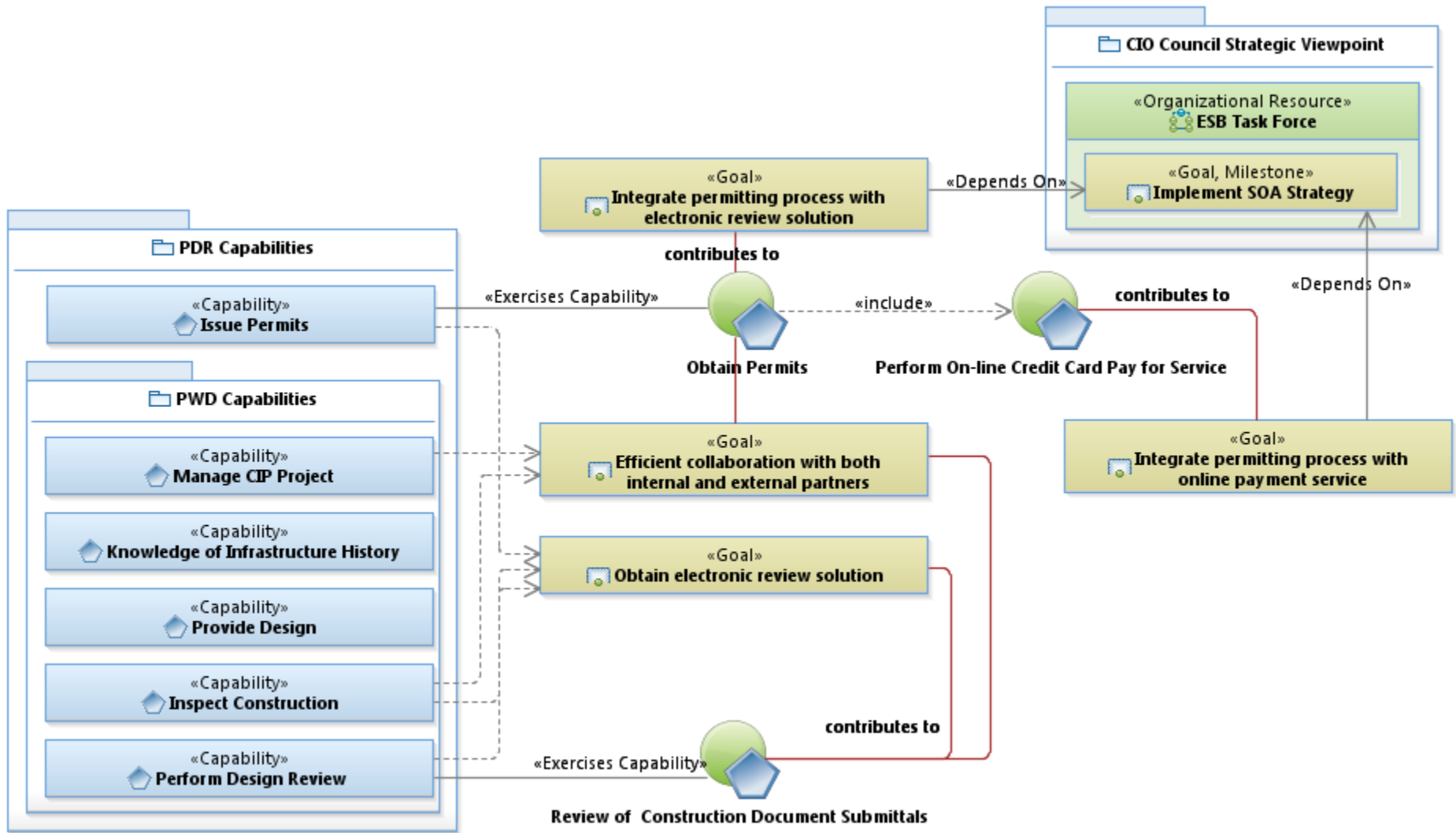
Improving Capability Using EA



Identifying Common Process



Developing IT Strategy



The Value of Enterprise Architecture

- **Ensures business outcomes drive IT solutions**
- **Helps identify important goals and their dependency**
- **Increases team communication and understanding**
 - **Reduces implementation risk**

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