

Using Waivers to Drive Governance

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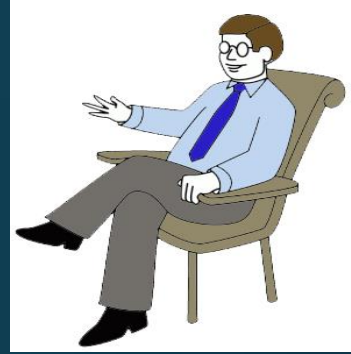


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NEAL FISHMAN, IBM

22nd annual MIT International Conference on Information Quality
October 6th and 7th 2017

“ Nowadays, of course,
I won't even get out of bed
if it's less than a petabyte. ”



Neal Fishman

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IBM Hybrid Cloud / Advanced Analytics
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Sr. Certified IT Architect – *IBM*

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Viral Data in SOA,

Enterprise Architecture Using the Zachman Framework,

A Matter of Consequence (forthcoming)

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Abstract

- Many data governance programs are established in order to bring people and projects into some form of alignment: a corporate singularity
 - The singularity may be perceived as necessary to support an internal or external standard, a regulation, a compliance need, or simply to support the notion that “one” is better
- From a pragmatic standpoint, a data governance program must also adopt policies and procedures to handle dispensations and waivers due to time constraints, cost, organizational geography, conflicting standards or objectives, etc.
 - Offering to support waivers can prevent rogue and under-the-wire projects
- As organizations adopt complex projects involving broad integration and interoperability through various forms of modernizing, many data governance practices and data architectures are being disrupted
- Managing waivers is one practice a data governance program or data architecture team can embrace to avoid a fragmented IT department and dysfunctional business

Waiver

- Noun
 1. an intentional relinquishment of some right, interest, or the like
 2. an express or written statement of such relinquishment

dictionary.com

- Exceptions
 - Deviations
 - Sanctions
 - Variance
-
- An ability to grant dispensation
 - A particular arrangement or provision

Waivers

- A waiver program would allow an organization to create policies that allow areas of the business / technology to request exemptions from certain policies, rules, & regulations
- There are different types of waiver programs
 - In some, waivers are granted, on a rule-by-rule basis, to projects facing emergency circumstances, such as a shortage of funds – they don't have to be granted for “all time”
 - In others, only certain projects or departments, such as those that will be sunsetted, are eligible for waivers on either a rule-by-rule basis or through a blanket waiver: an automatic waiver from many rules & regulations
- Or...

A Way to Avoid the 800lb Gorilla



Data Governance

- To serve a purpose, the function of data governance should be distinct and distinguishable from normal work activities
 - Therefore, data governance should be distinguishable from data management, programming, database administration, data entry, and so on
- Although governance can be used to provide a cadre of oversight mechanisms that help stay behaviors and push to establish consistency, governance should not necessarily be an unbending and unwavering mechanism
- The effectiveness of data governance depends on how the governance body reacts and adapts to the cultural environment
 - To that end, data governance may have to continually adjust its *modus operandi* or help to influence a change in corporate behavior

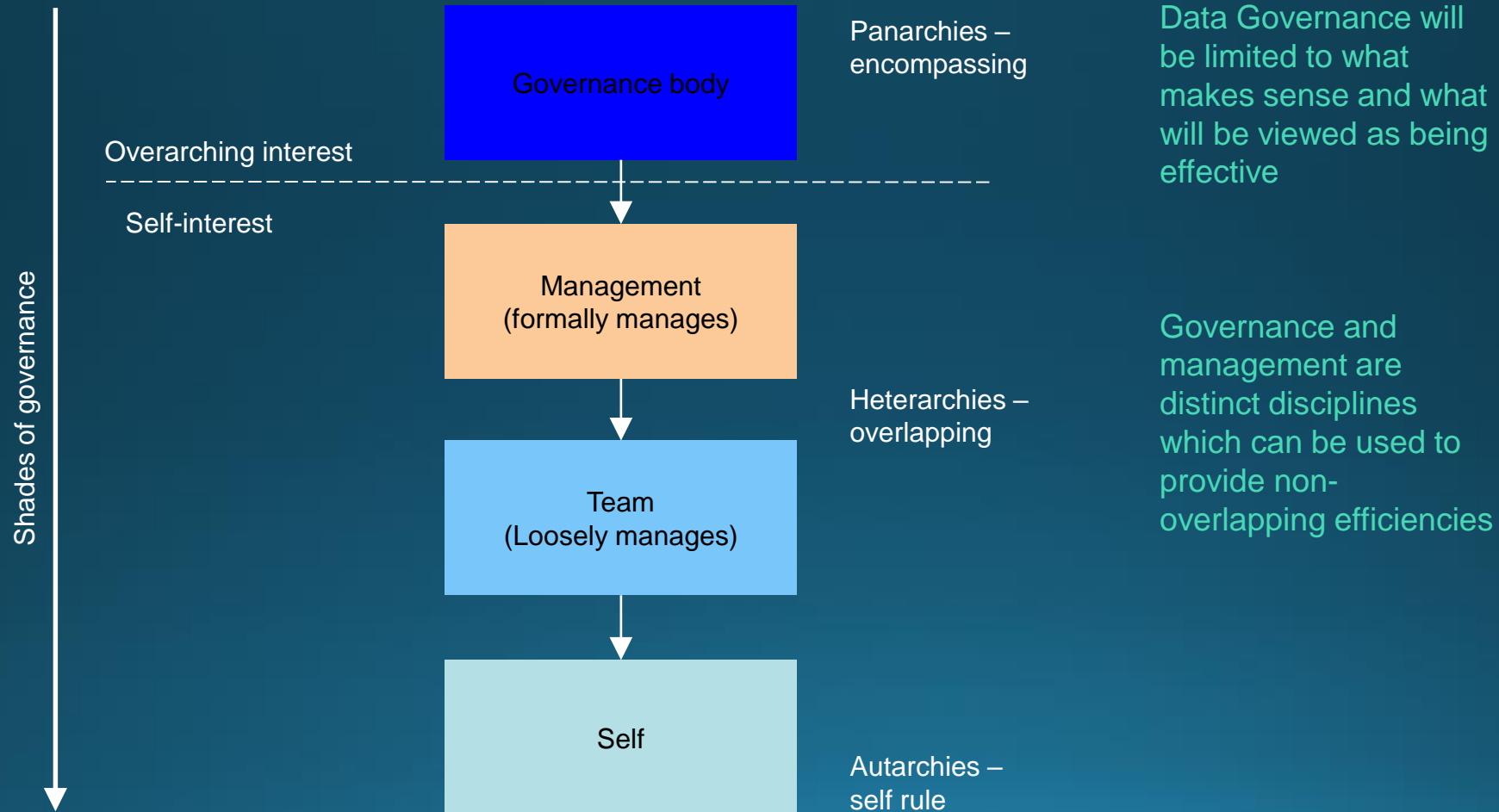
Getting Your Act Together

- A big challenge in any governance effort is changing often-entrenched organizational behaviors
- Individuals unaccustomed to making decisions, or a corporate culture that stresses consensus over clear accountability, may doom a governance program
- Unclear authority or elusive ownership policies can sabotage governance efforts
- The organizational challenges that confront most data governance efforts include
 - Vague authority and accountability
 - Ineffective planning
 - Poor expectations management
 - Unclear or ineffective communications
 - Absence of decision-making protocols
 - Lack of perceived value

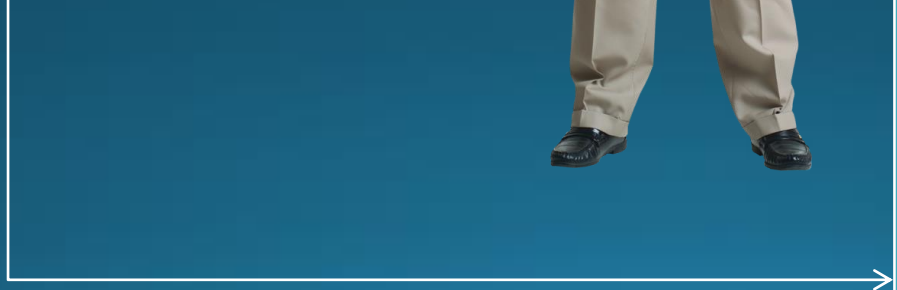
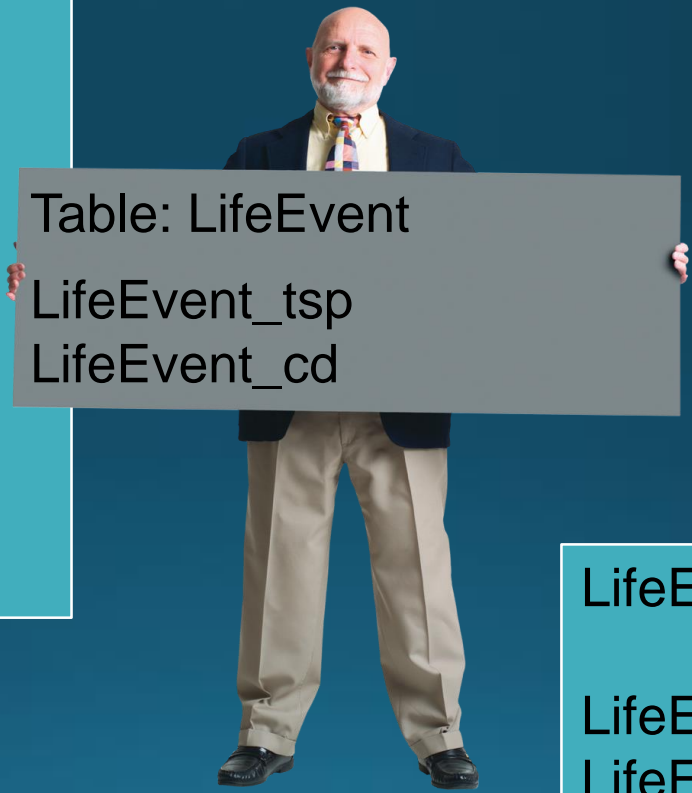
Governance Challenges

- Inconsistent application of data governance, which can cause a disconnect between business goals and IT programs
- Governance policies are not linked to structured requirements gathering and reporting
- Risks are not addressed from a lifecycle perspective with common data repositories, policies, standards and calculation processes
- Metadata and business glossaries are not used to bridge semantic differences in global enterprises
- Assessing data asset values that are linked with security, privacy, and compliance
- Controls and architecture are deployed before long-term consequences are modeled

Shades of Governance

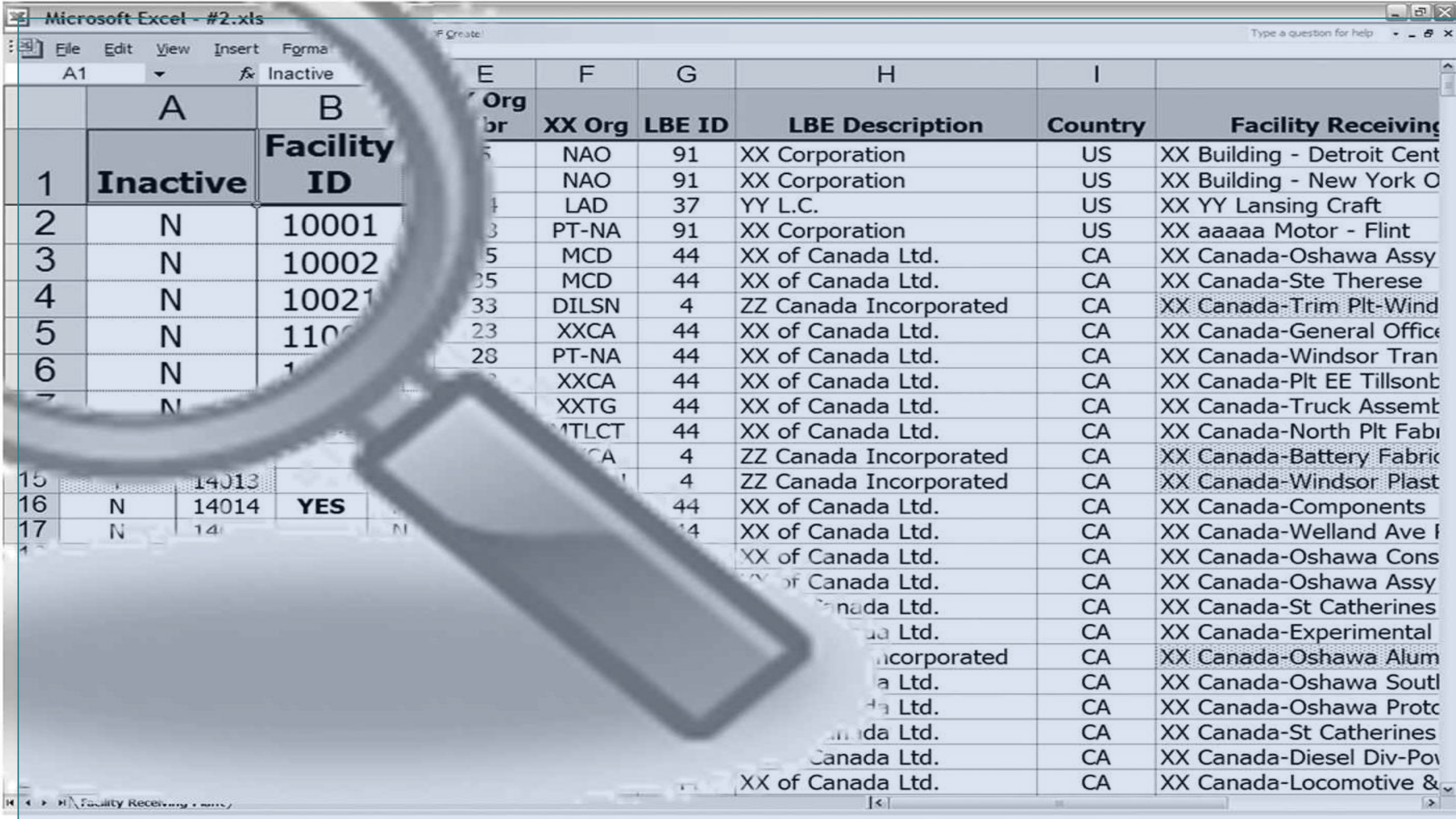


Standards Aren't Always Sufficient to Ensure Consistency



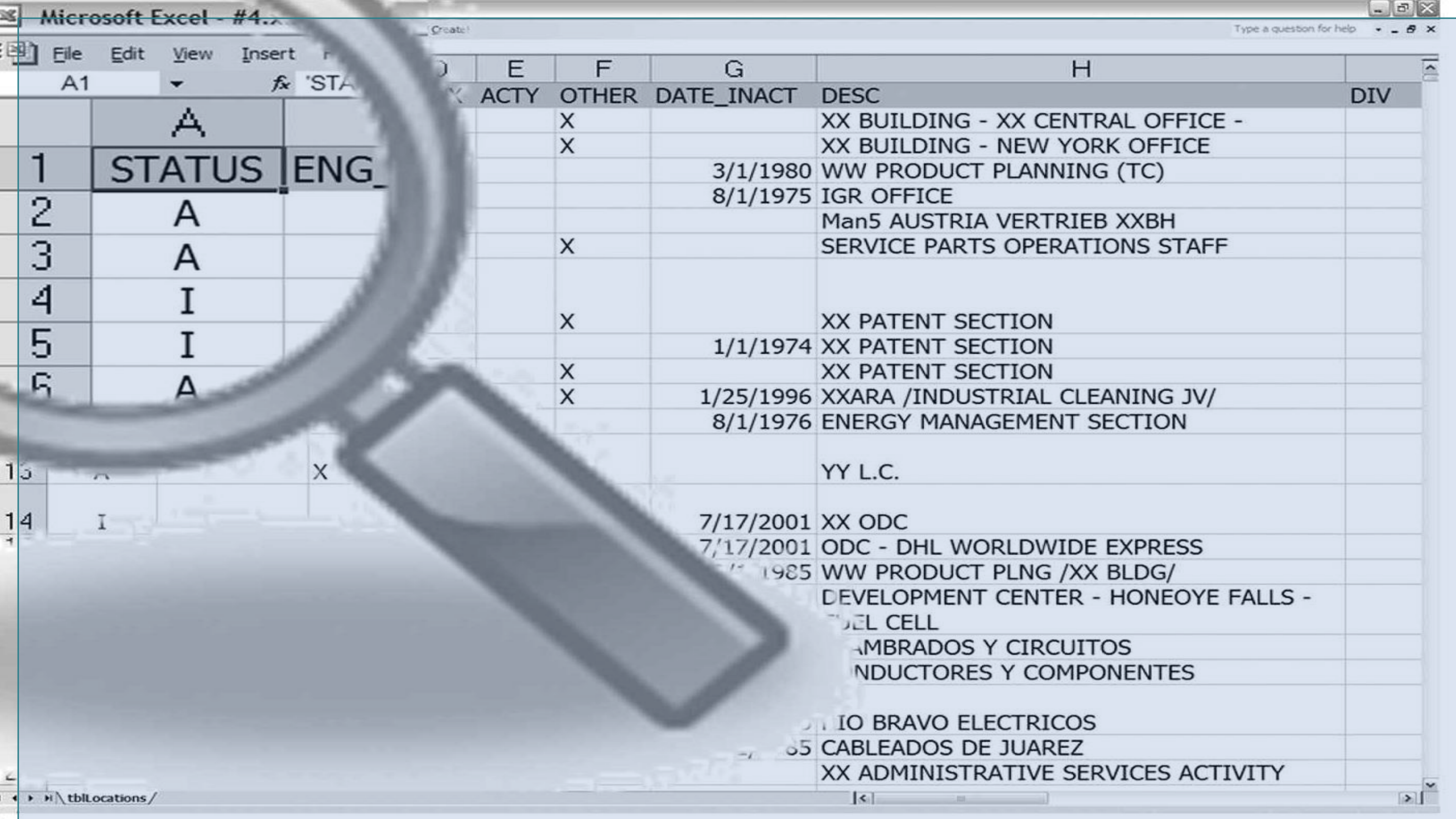


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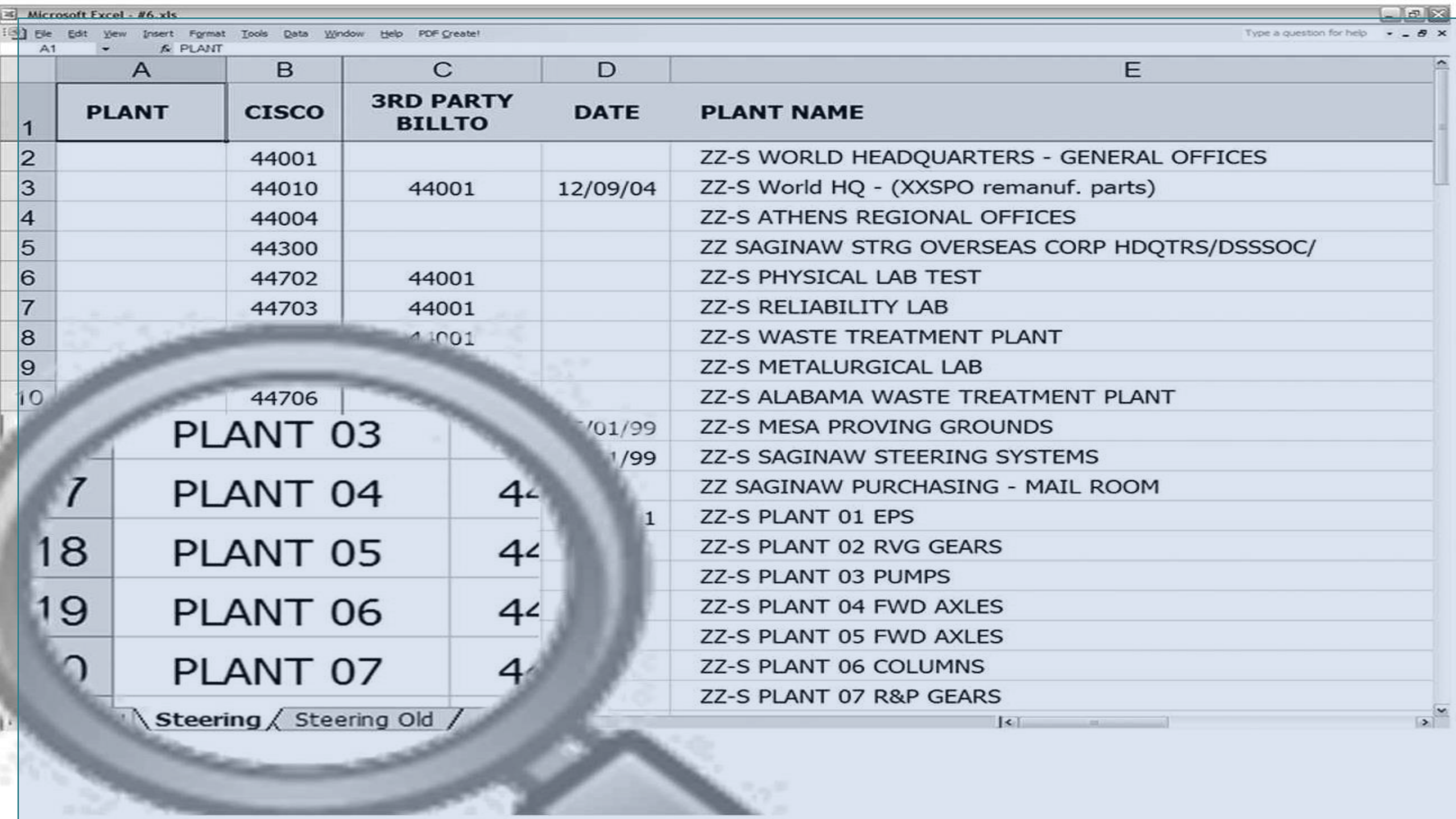
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2	N	10	XX CENTRAL OFFICE-XX BUILDING	XX CORP
3	N	10	XX YY LANSING CRAFT-LANSING	XX YY LANSING CRAFT CTR
4	N	11	XX Man2 MOTOR-FLINT	XX POWERTRAIN-V-6 ENGRG CTR
5	N	12	XX Man3 MOTOR-CENTRAL OFFICE	XX NAVO-DETROIT
6	N	1	XX CLCD-ZONE OFFICE	XX CLCD-ATLANTA
7	N	1	XX Man1 MOTOR DIV-MOTORSPORTS	XX Man1 MOTOR
8	N	1	XX Man1 MOTOR - ATLANTA	XX Man1 MOTOR
9	N	1	XX Man1 MOTOR - DENVER/ENG	XX Man1 MOTOR
10	N	1	XX Man1 MOTOR - CHICAGO/NA	XX Man1 MOTOR
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			XX CANADA LTD	XX CANADA LTD-TILLSONBURG
			XX CANADA LTD	XX CANADA LTD-TRUCK ASSY
			XX CANADA LTD	XX CANADA LTD-BODY PLANT TOC
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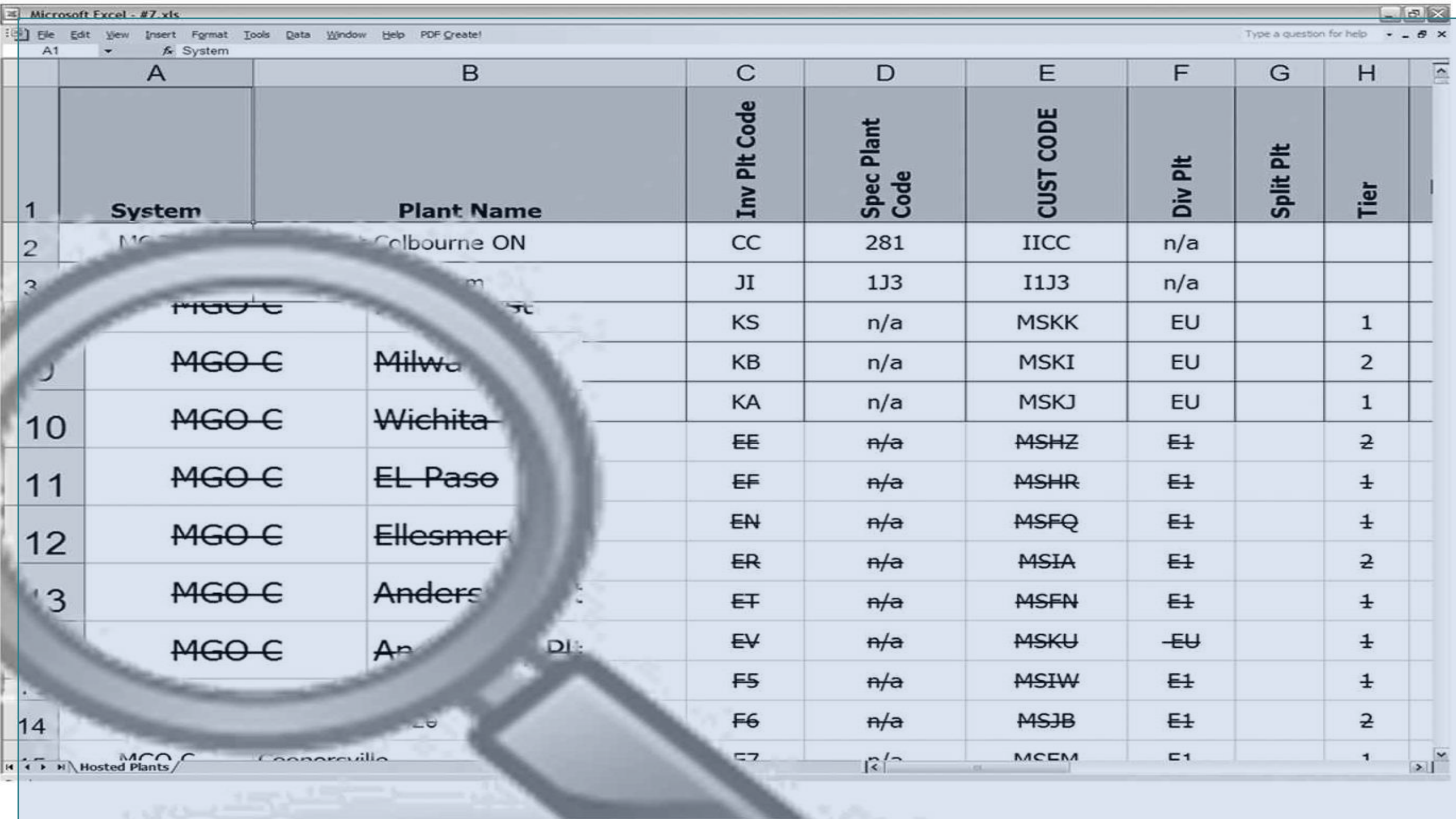
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5	I		X		XX PATENT SECTION	
6	A			1/1/1974	XX PATENT SECTION	
			X		XX PATENT SECTION	
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				8/1/1976	ENERGY MANAGEMENT SECTION	
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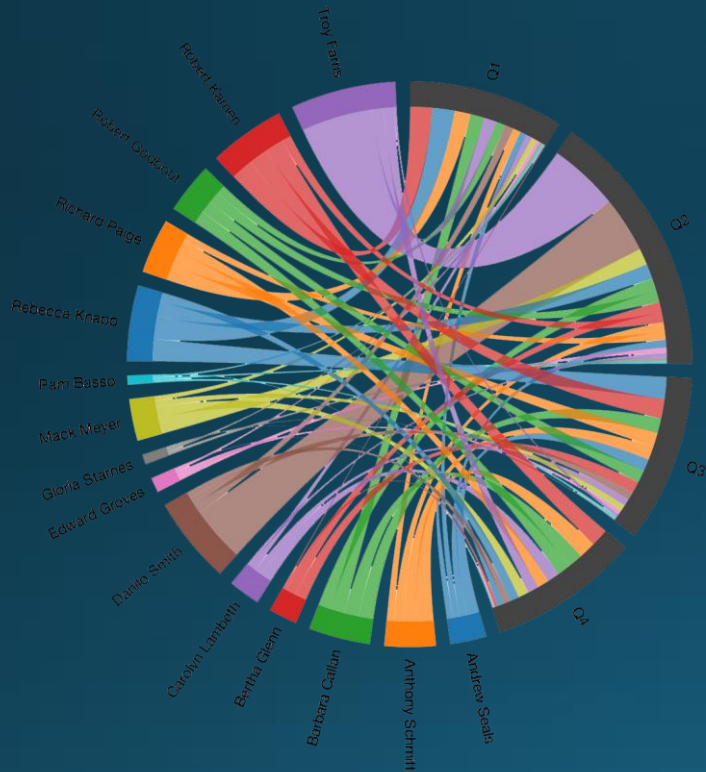


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1		44001			ZZ-S WORLD HEADQUARTERS - GENERAL OFFICES
2		44010	44001	12/09/04	ZZ-S World HQ - (XXSPO remanuf. parts)
3		44004			ZZ-S ATHENS REGIONAL OFFICES
4		44300			ZZ SAGINAW STRG OVERSEAS CORP HDQTRS/DSSSOC/
5		44702	44001		ZZ-S PHYSICAL LAB TEST
6		44703	44001		ZZ-S RELIABILITY LAB
7		44001			ZZ-S WASTE TREATMENT PLANT
8					ZZ-S METALURGICAL LAB
9		44706			ZZ-S ALABAMA WASTE TREATMENT PLANT
10	PLANT 03			1/01/99	ZZ-S MESA PROVING GROUNDS
11				1/99	ZZ-S SAGINAW STEERING SYSTEMS
12	PLANT 04	44			ZZ SAGINAW PURCHASING - MAIL ROOM
13				1	ZZ-S PLANT 01 EPS
14	PLANT 05	44			ZZ-S PLANT 02 RVG GEARS
15					ZZ-S PLANT 03 PUMPS
16	PLANT 06	44			ZZ-S PLANT 04 FWD AXLES
17					ZZ-S PLANT 05 FWD AXLES
18	PLANT 07	44			ZZ-S PLANT 06 COLUMNS
19					ZZ-S PLANT 07 R&P GEARS

Steering / Steering Old /



Loosely Coupled / Tightly Bound



User Experience



Processing



Persistence

Focus Areas

Governing
Data
Management

Governing
Mastered
Domains

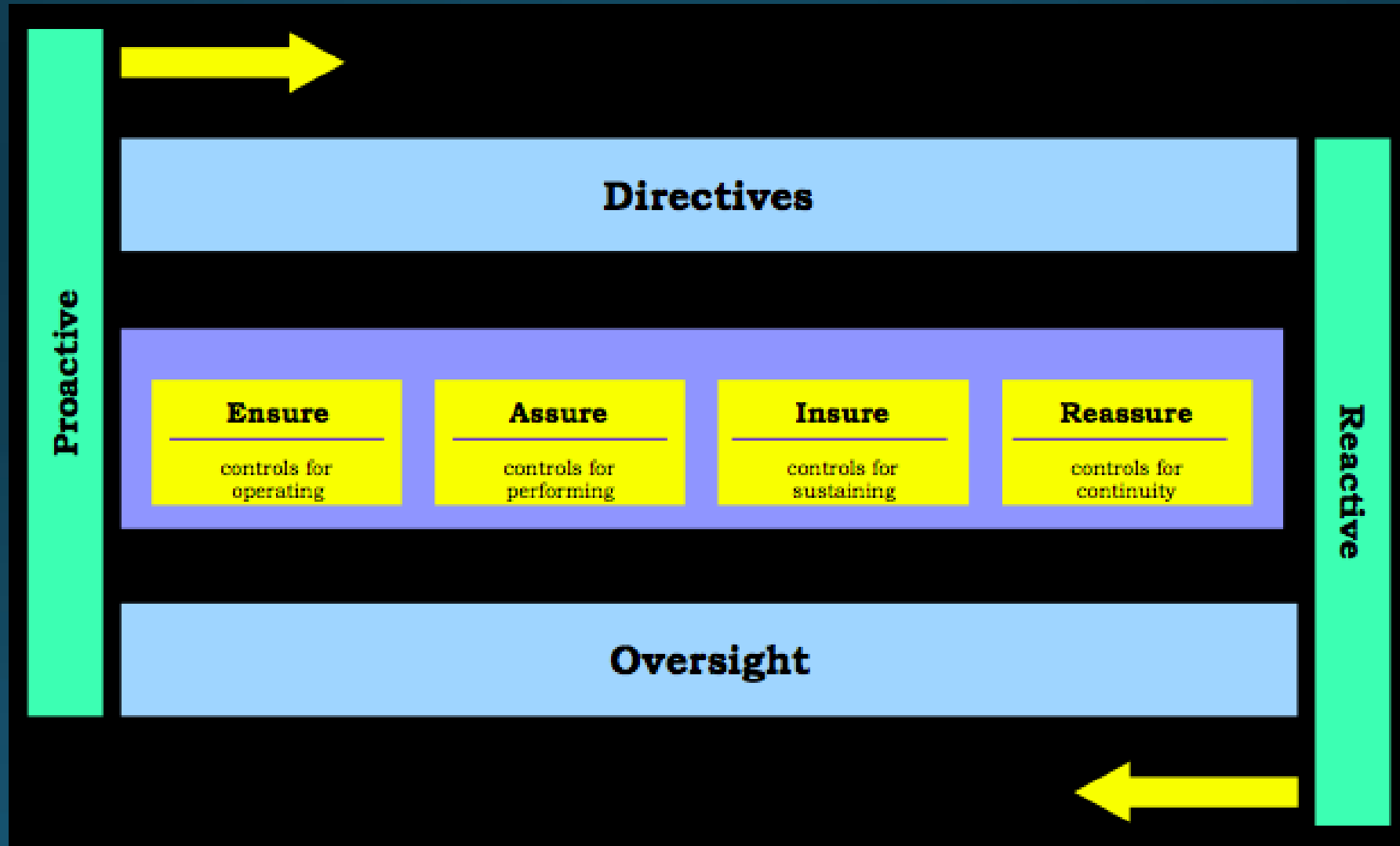
Governing
Preparation,
Movement/Exchange
“line management”

Governing
Data For Analytics

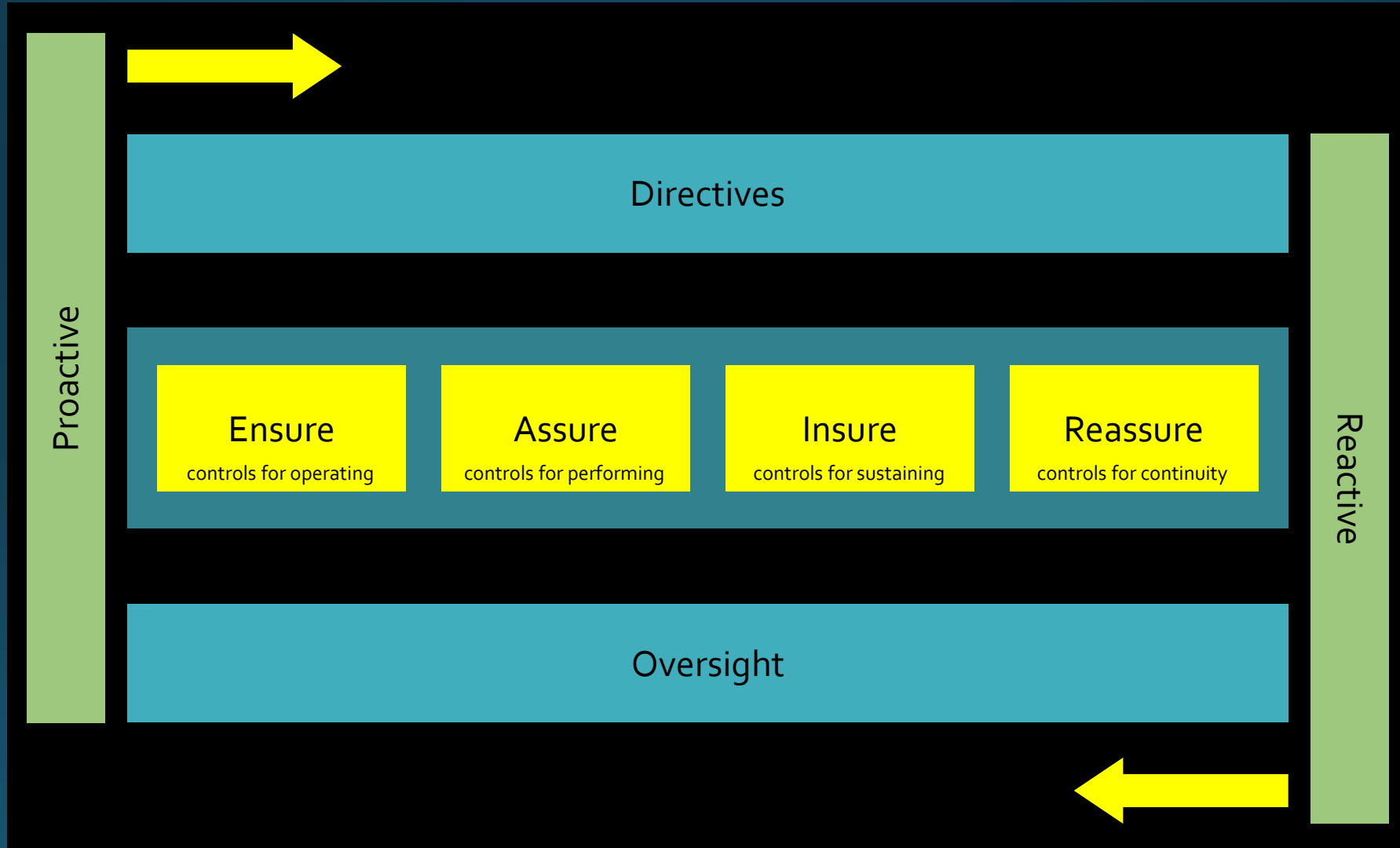
Governing
Information
Architecture

Governing
Analytics (Tooling) and
Dissemination

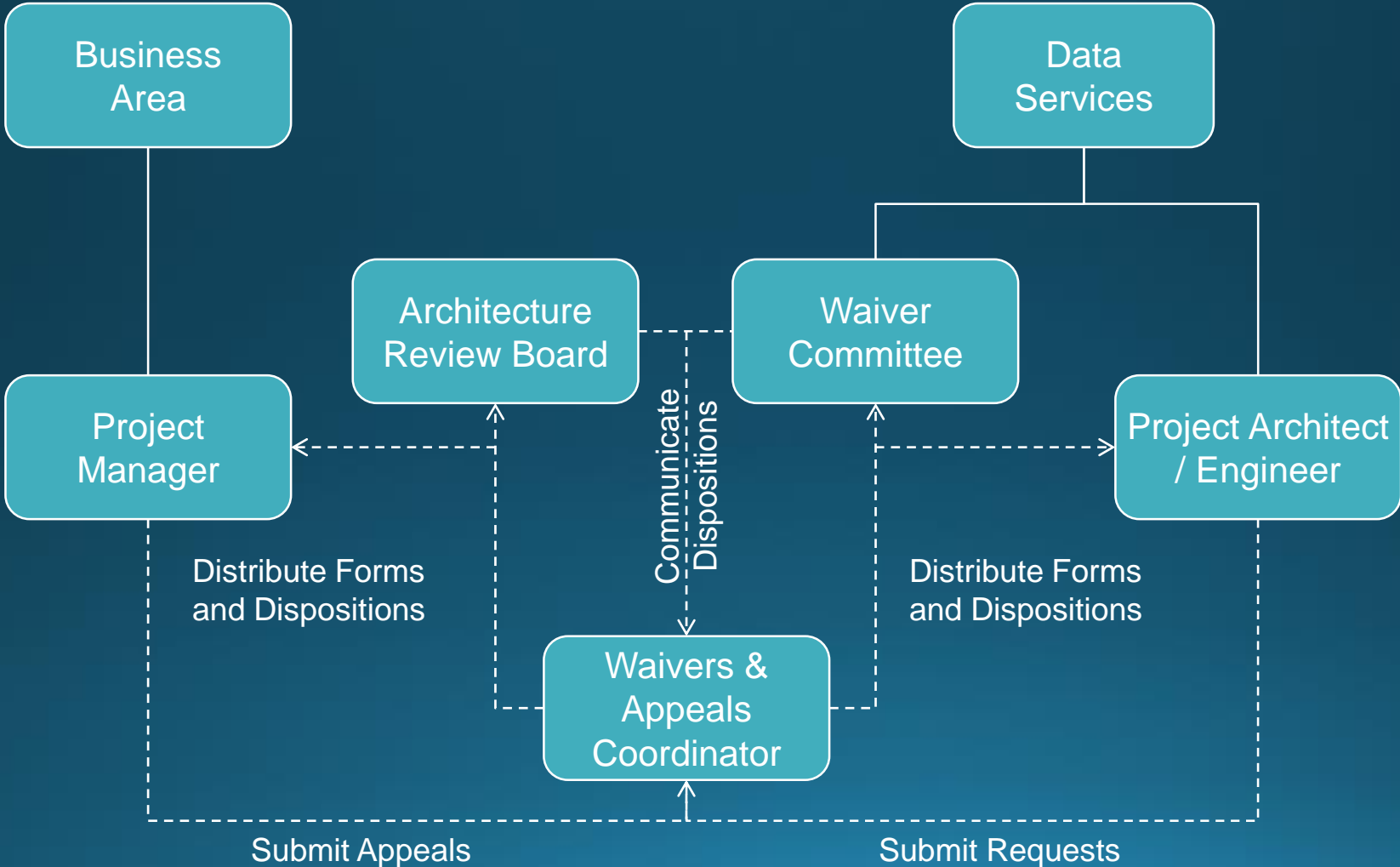
MetaModel



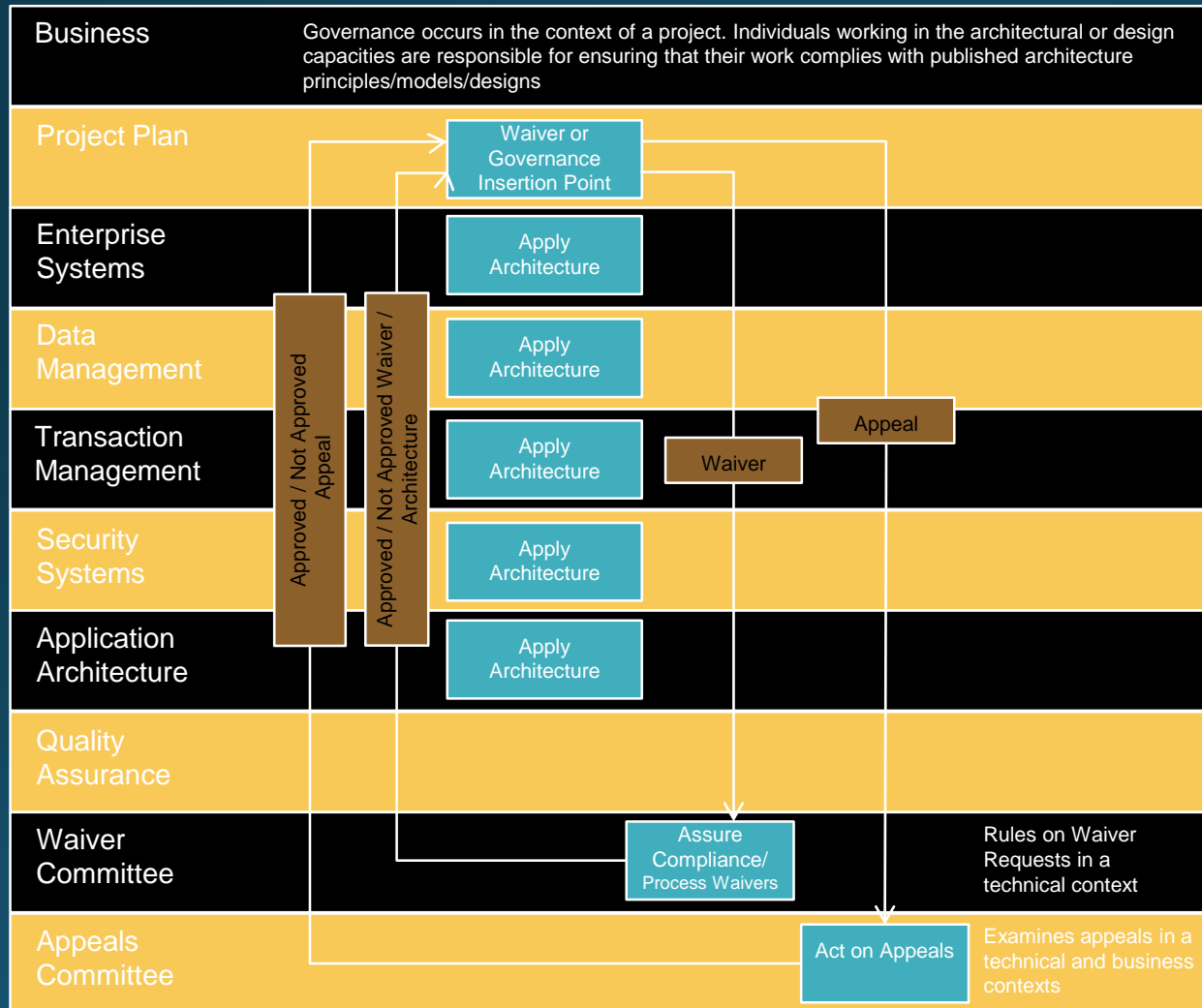
MetaModel



Functional Organization



Waiver Process



During the course of a project, requirements may lead architects and engineers to make design decisions that depart from accepted Enterprise Architecture principles, standards and models

The governance model addresses these departures through the Waiver Process

Waiver Committee (1/2)

- The Waiver Committee consists of individuals who represent organizations that contribute to the enterprise architecture, who understand its principles, standards and models and who can assess the legitimacy and implications of waivers in either a business or a technical context
- The objective of the Waiver Committee is to quickly rule on the legitimacy of each proposed submission
 - If a waiver is not viewed as legitimate from a business or a technical perspective (that is, the problem can be mitigated with existing capabilities and can be accommodated within infrastructure standards), the Waiver Committee must deny it
 - If a waiver is legitimate, the Waiver Committee must approve it and ensure that it will be implemented in a manner not detrimental to the Enterprise Architecture

Waiver Committee (2/2)

- The Waiver Committee may insist on a time limit for a requested waiver
 - Prior to the expiration of a granted waiver, the Waiver Committee should request a new waiver submission
- The Waiver Committee may request a cost study (financial justification)
 - Associated with entering compliance
 - Associated with being out of compliance

Architecture Review Board

- Managers of projects whose waiver requests are denied by the Waiver Committee can request a hearing before the Architecture Review Board
- The Architecture Review Board ensures that business benefits are not subjugated for purely technical reasons
 - The Architecture Review Board consists of individuals who can weigh the technical and business costs and benefits of architectural compliance with the technical and business cost and benefits from architectural non-compliance
- If the Architecture Review Board rules that a waiver's denial places business benefit at risk, then it must approve the appeal and require that the requesting project employ the waiver in a way that is not detrimental to the Enterprise Architecture

Completing a Waiver Request (1/2)

- Provide information about the submitter
 - Submitter's Name, Department, Job Title, Telephone Number, Email Address
- If the waiver is being sought within the context of a project, information associated to the project should be supplied
 - Project name, project manager, project architect, project start/end dates, anticipated production date, current lifecycle phase
- Indicate the nature of waiver request
 - Architecture, data sharing, domain standards (including data quality), COTS/GOTS, security, test data management
- Provide a brief description of the proposed waiver for the application/system including any interfaces to internal and external systems

Completing a Waiver Request (2/2)

- Provide a brief description summarizing the reason for to justify a waiver
- List any alternative option considered for resolving the issues that have led to the waiver request
 - In each case, note why the alternative option was unsuitable
- Reasoning from a technology standpoint, write an impact assessment evaluating the risks and benefits associated with implementing the plan versus the risks and benefits of instead employing the most suitable standard alternative (or combination of alternatives)
- If appropriate, paste a diagram of the architecture/design
- Indicate the duration of the waiver
 - Permanent, temporary

Submitting a Waiver Request

- Submit an assembled waiver request as an Email attachment to the Waiver and Appeals Coordinator listed under “Data Governance” in the office mail directory
- If the waiver is being sought within the context of a new project, attach to the Email a copy of the Project Proposal Summary
- The Waiver and Appeals Coordinator reviews the Waiver Request for completeness
 - If incomplete, the form is returned to the submitter for revision
 - If complete, the Waiver and Appeals Coordinator distributes the form to committee members for review

Reviewing a Waiver Request (1/3)

- Waiver Committee members ensure that the Waiver Request is well-formed per the Waiver Request Screening Procedure

Screening a Waiver Request

- Waiver Committee members independently review the completed request to assess its legitimacy and completeness
- The Waiver Committee chairperson schedules a meeting to discuss the request and reach a consensus regarding its legitimacy and completeness
- If the committee does not agree that the request is legitimate and complete, the chairperson assigns a committee member familiar with the problem space to work with the requester to resolve outstanding issues
- The requestor submits the revised request to the Waiver and Appeals Coordinator, who distributes copies to committee members
- When the committee agrees that the request is legitimate and complete, the Waiver and Appeals Coordinator schedules a meeting with the requestor to present the request

Reviewing a Waiver Request (2/3)

- At a meeting arranged by the Waiver and Appeals Coordinator, the requestor presents the Request to the Waiver Committee, answers any questions from the committee members and then leaves the meeting
- The members of the Waiver Committee discuss the request (including alternatives) and the path forward
- During this discussion, Waiver Committee members
 - Review Enterprise Architecture principles, standards or models for which the waiver is being sought
 - Review the requirements driving the Waiver Request
 - Assess the validity of the waiver's rationale and ensure that the requestor has performed due diligence on available options

Reviewing a Waiver Request (3/3)

- If a waiver is not legitimate from a technical perspective, the Committee must deny the waiver
- If the waiver is legitimate, the Committee must approve the waiver with the stipulation that it be incorporated into the project in a way that is not detrimental to the Enterprise Architecture
- The Waiver and Appeals Coordinator communicates the waiver request to the Enterprise Architecture Maintenance Process
- The Waiver Committee chairperson completes the disposition portion (with the rationale) of the Enterprise Architecture Waiver Request
- The Waiver and Appeals Coordinator returns the completed Enterprise Architecture Waiver Request form to the waiver requestor as an Email attachment

Reviewing a Waiver Appeal (1/2)

- Architecture Review Board members review the waiver ruling and all related materials
- Architecture Review Board members assess the validity of the costs and benefits of architecture compliance
- Architecture Review Board members assess the validity of the costs and benefits of architecture non-compliance
- If the benefits of non-compliance exceed the cost of compliance, then the Architecture Review Board must render a favorable ruling, provided the plan mitigating associated architectural risks is credible and the requestor is committed to executing it
- If the benefits of non-compliance are less than or equal to the benefits derived from architectural compliance, then the Architecture Review Board must deny the request

Reviewing a Waiver Appeal (2/2)

- The Architecture Review Board may grant a time limit in lieu of an outright acceptance or denial
- The Architecture Review Board chairperson completes the disposition part of the Enterprise Architecture Waiver Appeal
- The Waiver and Appeals Coordinator returns the completed Enterprise Architecture Waiver Appeal form to the waiver requestor as an Email attachment

Summary

- Data Governance is about oversight and influencing behaviors
 - Whether to bring “data” into compliance
 - Or, to permit “data” to be out-of-compliance
- Keeping visibility on all data-centric initiatives
- Reducing rogue & out-of-sight initiatives
 - Out of control
- Transcending the business and technology
- Mastering variance is a core discipline

Viral Data

Thank You in SOA

An Enterprise Pandemic

Neal A. Fishman

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