

# EA in Complex Organizations A TOGAF Response

**Presented by :**

**Bruce Miner, Enterprise Architect, Direct Energy Marketing**

*“From Architecture Vision to Value Realization”*



# Direct Energy: Who are we?

- Direct Energy is one of North America's leading integrated energy companies and a member of the Centrica group of companies.

**centrica**  
storage

**centrica**  
energy

**British Gas** 

**DYNO**  
Part of **British Gas** 

**OXXIO**

**luminus**  


**centrica**  
energi

**centrica**  
energie

**centrica**  
energia

 **Direct Energy**

**CPL**  
Retail Energy™  
A Direct Energy® Company

**WTU**  
RETAIL ENERGY™  
A Direct Energy® Company

# Direct Energy: Who are we?

- In 9 years, Direct Energy grown to become one of the largest energy retailers in North America.
- Operations across Canada, Texas, North-Eastern United States & California.
- Direct Energy delivers over 11 billion of energy and related services to over five million residential and commercial customers.
- Worldwide, the Centrica group of companies provides energy and other services through more than 32M customer relationships, with over 30K employees.

# Introduction: Motivation for Discussion

**It is a recognized fact that EA can deliver business value. How do you establish context for EA in Complex Organization and what could be the target SMART Objectives.**



# Introduction: Context - TOGAF and Complexity



This is a TOGAF Tutorial that describes how to use TOGAF to demonstrate the value of EA and establish an effective EA practice in complex organizations. Complexity will be discussed in terms of size of the organization, multinational landscape, political and centralized versus decentralized funding model.

# Introduction:

## Presentation lexicon

Navigates four aspects of organizations that are impacted by or impact complexity.

- Business
- People
- Systems
- Technology

Cross reference these to complexity factors and TOGAF.

## DE - A Complex Organization

# Definitions:

## **com-plex-i-ty** (k m-pl k s -t )

- *n. pl.* **com-plex-i-ties**
- **1.** The quality or condition of being complex.
- **2.** Something complex: *a maze of bureaucratic and legalistic complexities.*
  
- *the definition of complexity as midpoint between order and disorder depends on the level of representation: what seems complex in one representation, may seem ordered or disordered in a representation at a different scale.*



# Complexity ... where does it come from?



- Complexity is often a characteristic of a market that has not achieved maturity. (Energy Market maturity)
- Rapidly evolving products and value proposition.
- Initially little motivation for:
  - Standardized processes
  - Integration
- A natural evolution
  - Without disorder there would be little change.
  - Human nature is to introduce order.

# Many definitions

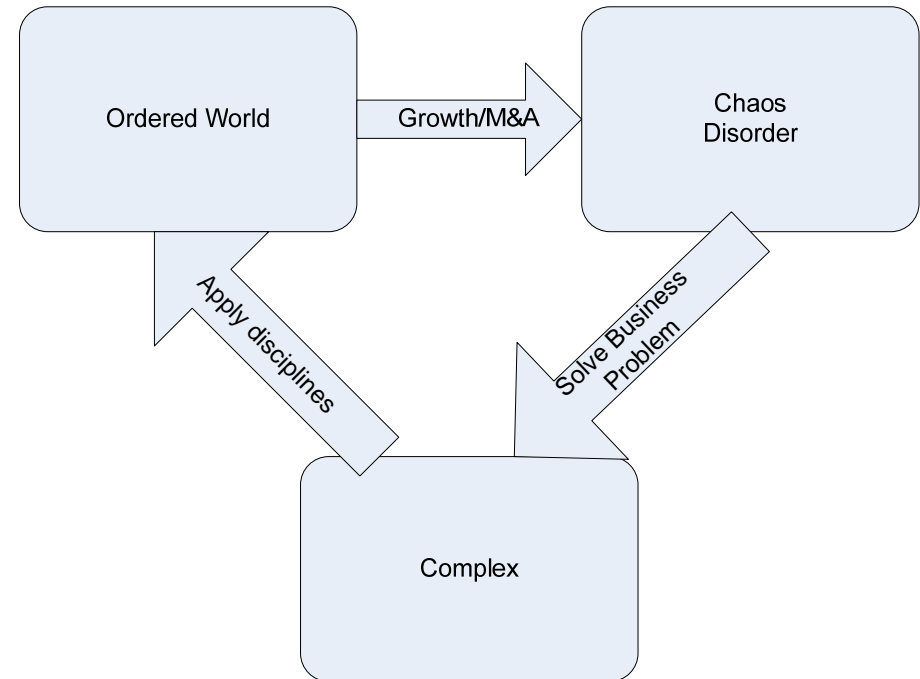
- In general usage, complexity tends to be used to characterize something with **many parts in intricate arrangement**.
- Definitions are often tied to the concept of a 'system' – a set of parts or elements which have relationships among them differentiated from relationships with other elements outside the relational regime.
- Many definitions tend to postulate or assume that complexity expresses a condition of **numerous elements in a system and numerous forms of relationships among the elements**. At the same time, what is complex and what is simple is relative and **changes with time**.
- The approaches which embody concepts of systems, multiple elements, multiple relational regimes, and state spaces might be summarized as implying that complexity arises from the number of **distinguishable relational regimes** (and their associated state spaces) in a defined system.



# Cyclic Forces



- Starting from an ordered world.
- Growth (M&A) create chaos and disorder.
- Solutions to chaos usually evolve in silo. (decentralized)
- Result of silo is complexity.
- Response to silo is to apply disciplines to standardize.
- Result of standardized components and ordered world. (centralized)



## Characteristics



1. a few types of customer segments.
2. You know everyone.
  3. Few systems, highly integrated.
  4. IT is small, multi-disciplined with effective communication

### Global/Complex Firms:

1. Several products with many customer types.
2. You know your immediate management and peers.
3. Many systems, low integration.
4. IT is large, specialized with (often) siloed communication

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## products and customers

**Dorothy: “Toto, I don’t think we’re in Kansas any more.”**

**Toto: “Where’s my food dish?”**



# Complexity Characteristics Products and Customers



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Historical customer complexity

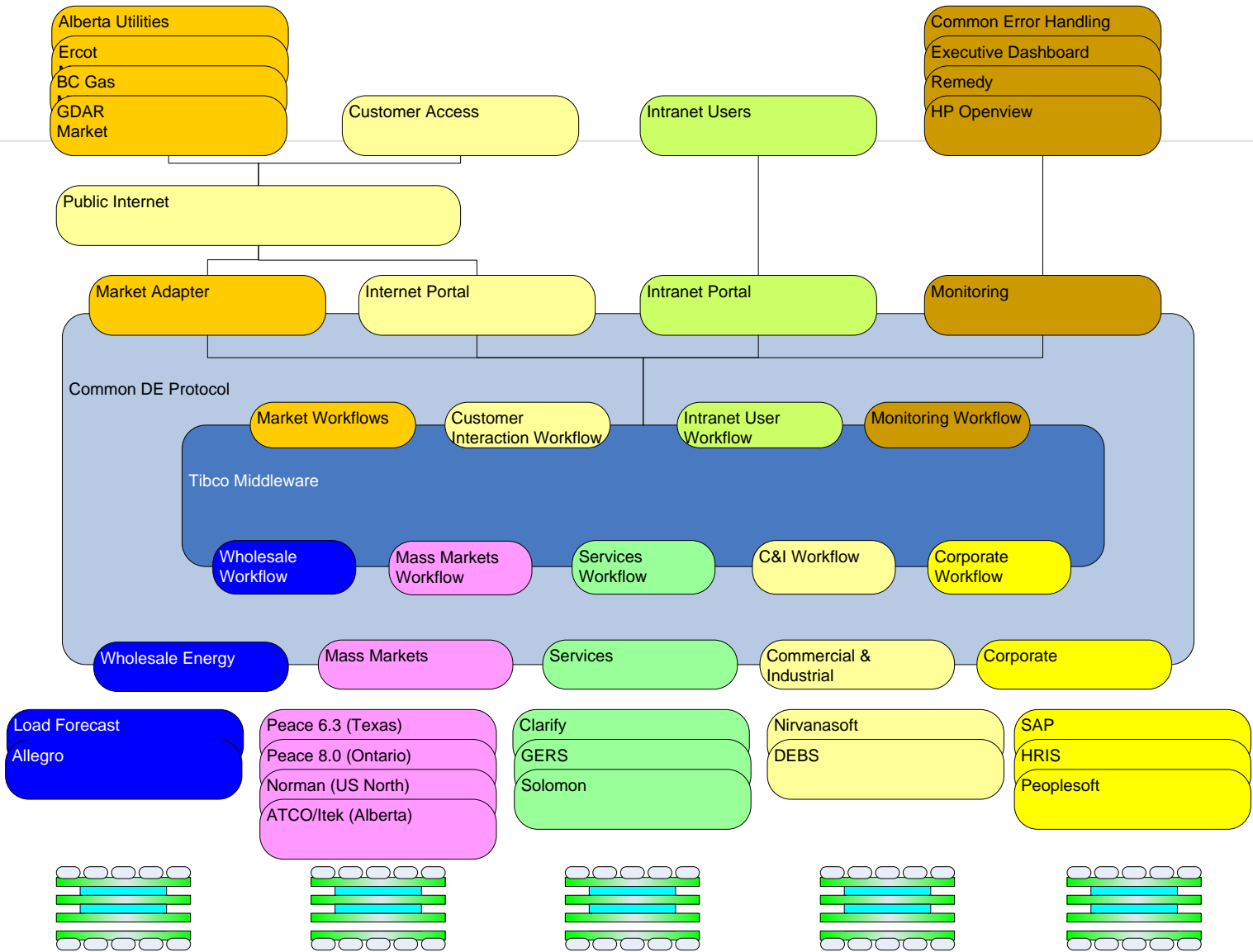
# MIT/Sloan/CISR – Four Operating Models

## Different Standardization Requirements of the Four Operating Models

<b>Business Process Integration</b>	<b>High</b>	<p style="text-align: center;"><b>Coordination</b></p> <ul style="list-style-type: none"> <li>■ Technology</li> <li>■ Customer and Product Data</li> <li>■ [Shared Services]</li> </ul>	<p style="text-align: center;"><b>Unification</b></p> <ul style="list-style-type: none"> <li>■ Technology</li> <li>■ Customer and Product Data</li> <li>■ Shared Services</li> <li>■ Core Processes such as Operations, Customer Service, Logistics [R&amp;D, Marketing/Sales]</li> </ul>
	<b>Low</b>	<p style="text-align: center;"><b>Diversification</b></p> <ul style="list-style-type: none"> <li>■ Technology</li> <li>■ [Shared Services]</li> </ul>	<p style="text-align: center;"><b>Replication</b></p> <ul style="list-style-type: none"> <li>■ Technology</li> <li>■ Shared Services</li> <li>■ Core Processes such as Operations, Customer Services, Logistics [R&amp;D, Marketing/Sales]</li> </ul>
		<b>Low</b>	<b>High</b>
		<b>Business Process Standardization</b>	







# Products and Customers: Issues and TOGAF Response



## Complexity Pitfalls:

- Assuming that you can survive in IT without knowing the business.
- Assuming that a large organization can survive by asserting only one operating model.
- Assuming that any architecture will last forever. ([M&A Impact](#))

## TOGAF Response:

- Focus on business architecture.
- Focus on governance and metrics to ensure that the architecture is keeping pace.

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**people**

# Understanding that “Man Behind the Curtain”



# Complexity Characteristics People

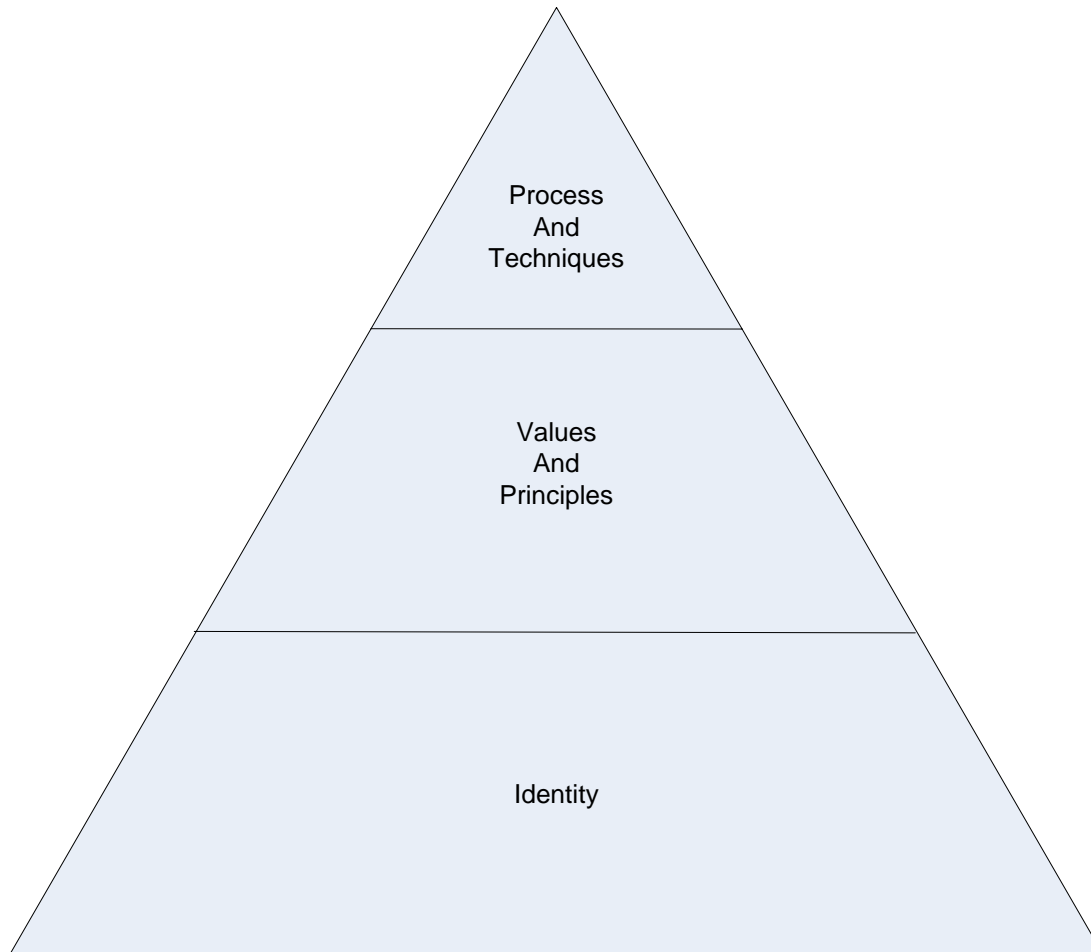
## Small/Non-Complex:

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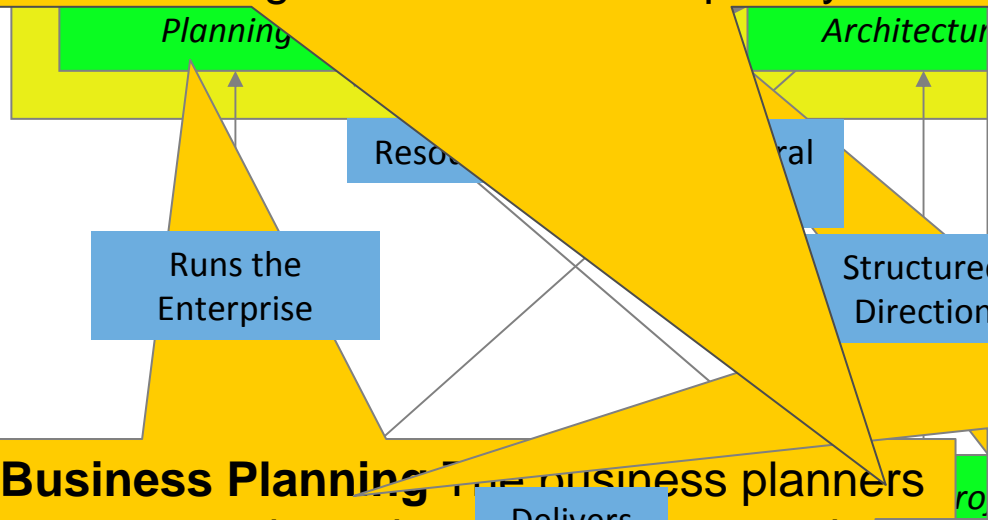
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# Identity is “Really” important



**Portfolio/project management** is the delivery framework that receives the structured, detailed direction that enables them to plan and build what is required, knowing that each assigned deliverable will be in context (i.e., the piece of the puzzle that they deliver will fit into the corporate puzzle that is the enterprise architecture). Often this framework is based upon the Project Management Institute or UK Office of Government Commerce (PRINCE2) project management methodologies. Project architectures and detailed out-of-context design are often based upon systems design methodologies



**Operations Management Methods** that describe how a company runs its day-to-day operations, including IT. Operations management receives the deliverables and then integrates and sustains them within the corporate infrastructure. Often the IT service management services are based upon ISO 20000 or BS15000 (ITIL).

**Business Planning** The business planners are present throughout the process and are in a position to support and enforce the architecture by retaining approval for resources at the various stages of planning and development.

**Business Capability Management** (Business Direction and Planning) that determines what business capabilities are required to deliver business value including the definition of return on investment and the requisite control/performance measures.

# People: Issues and TOGAF Response



## Complexity Issues:

- Assuming that individual skills and capabilities are a reflection of the size of the organization they work for. (People follow on)
- Assumptions around communication. (Discoveries)

## TOGAF Response:

- Promote understanding of TOGAF 9 management framework.
- Focus on TOGAF stakeholder analysis and skills understanding.
- Focus on TOGAF governance as a measurable entity.



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**systems**

# Systems: A Horse of a Different Color



- Systems, regardless of location and level of automation, reflect the combination of stimulus, events, applications and technologies used to support the operation of a business. (number of systems)

# Complexity Characteristics Systems

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# Systems: Issues and TOGAF Response

## Complexity Issues:

- Assuming that a large organization can survive by asserting only one application system for all their functions/markets.
- Minimizing the impact of mergers and acquisitions.

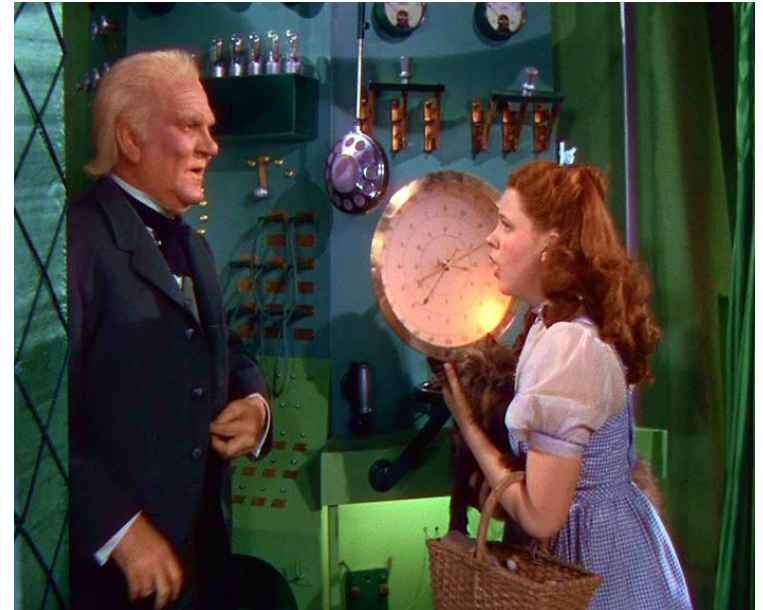
## TOGAF Response:

- Introduce ADM as a framework of understanding of systems.
- Introduce M&A Governance model.
- Use of governance model/architecture repository to track technology policies and best practices

## IT / Technology

# IT / Technology

- The evolution of technology introduces both opportunities for market innovations as well as liabilities for late adapters.
  - Early adapters – early market opportunity.
  - Late adapters - understanding the industry and business drivers as hygiene.



# Complexity Characteristics IT / Technology

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# IT / Technology: Issues and TOGAF Response

## Complexity Issues:

- Assuming that IT maturity is a reflection of the size of the organization.
- Impact of M&A on technology landscape.

## TOGAF Response:

- Use TOGAF maturity models as a reflection of technology maturity.
- Use ADM process to ensure technology consideration are balanced holistically.
- Use of governance model/architecture repository to track technology policies and best practices.



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**observations, conclusions and questions**

# Observations

- Disorder is a positive thing ... just misunderstood. .



# Conclusions

- Size:
- Multi-national:
- Political (internal & external):
- Centralized vs de-centralized:



# Bibliography

- ***Wizard of Oz:***
  - 1939 - Metro-Goldwyn-Mayer
- ***TOGAF 9:***
  - 2009 - The Open Group
- ***Leadership and the New Science:***
  - Discovering Order in a Chaotic World
  - 2006 - Margaret Wheatley

# Questions???

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No architects were harmed in the making of this presentation