15.571 Generating Business Value from Information Technology
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Generating Business Value
From Information Technology

Jeanne W. Ross
Director & Principal Research Scientist
Center for Information Systems Research (CISR)
MIT Sloan School of Management

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Today's agenda

- Introduction to MIT Sloan's Center for Information Systems Research (CISR)
- Overview of research on IT and business value
  - **Problem/opportunity we're addressing**
  - **Three keys to business value**
- Course expectations
- Getting settled in and looking ahead

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- State Street Corp.
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- TD Bank
- Time Warner Cable
- Trinity Health
- TRW Automotive, Inc.
- Unibanco S.A. (Brazil)
- VF Corporation
- Wal-Mart, Inc.
- World Bank

CISR's Mission

- Founded in 1974; CISR has a strong track record of practice based research on how firms manage & generate business value from IT
- Research is disseminated via electronic research briefings, working papers, research workshops & exec. ed. programs including http://mitsloan.mit.edu/cisr/education.php

2008 CISR Research Projects

IT and Business Strategy:
- **Achieving Superior Business Value from IT —A Single Framework of What Matters**
- **Managing IT for Efficiency and Growth**
- **Benchmarking and Building Risk Management Capabilities***
- **Business Models***
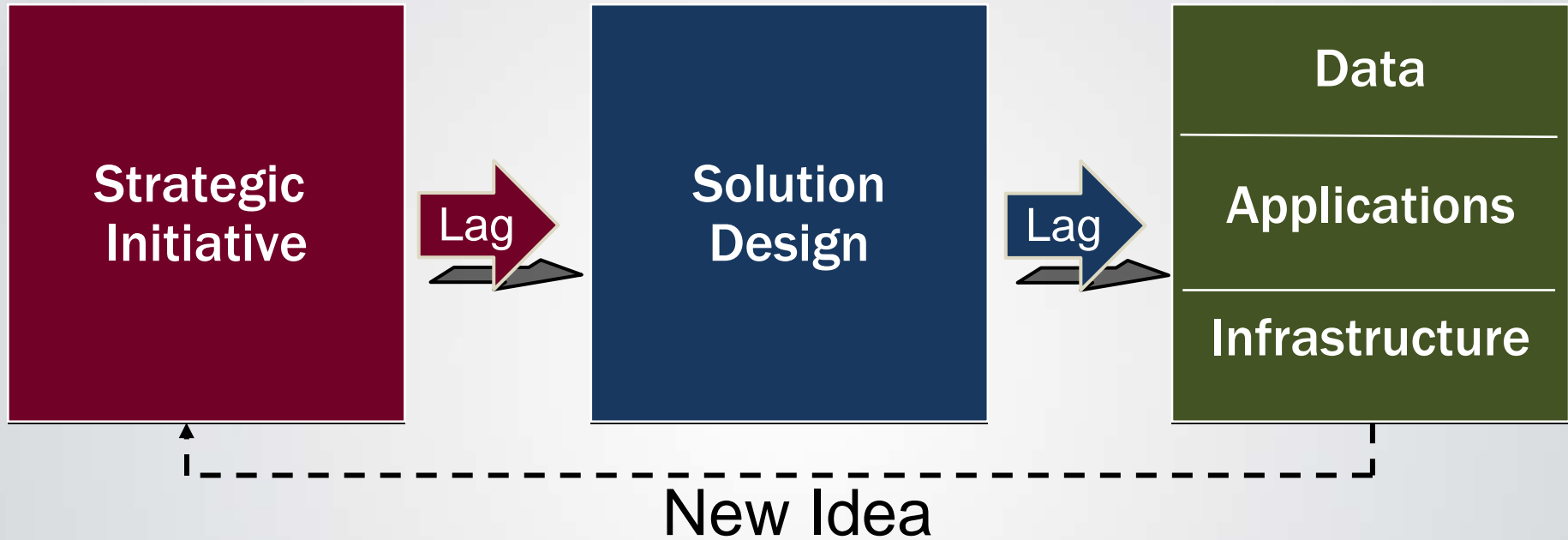
The Digitized Business:
- **Distributed Collaboration**
- **Building Innovative Capabilities through IT**
- **Building a Platform for Agility**
- **Enterprise Architecture as Strategy***
- **IT-Enabled Business Change***

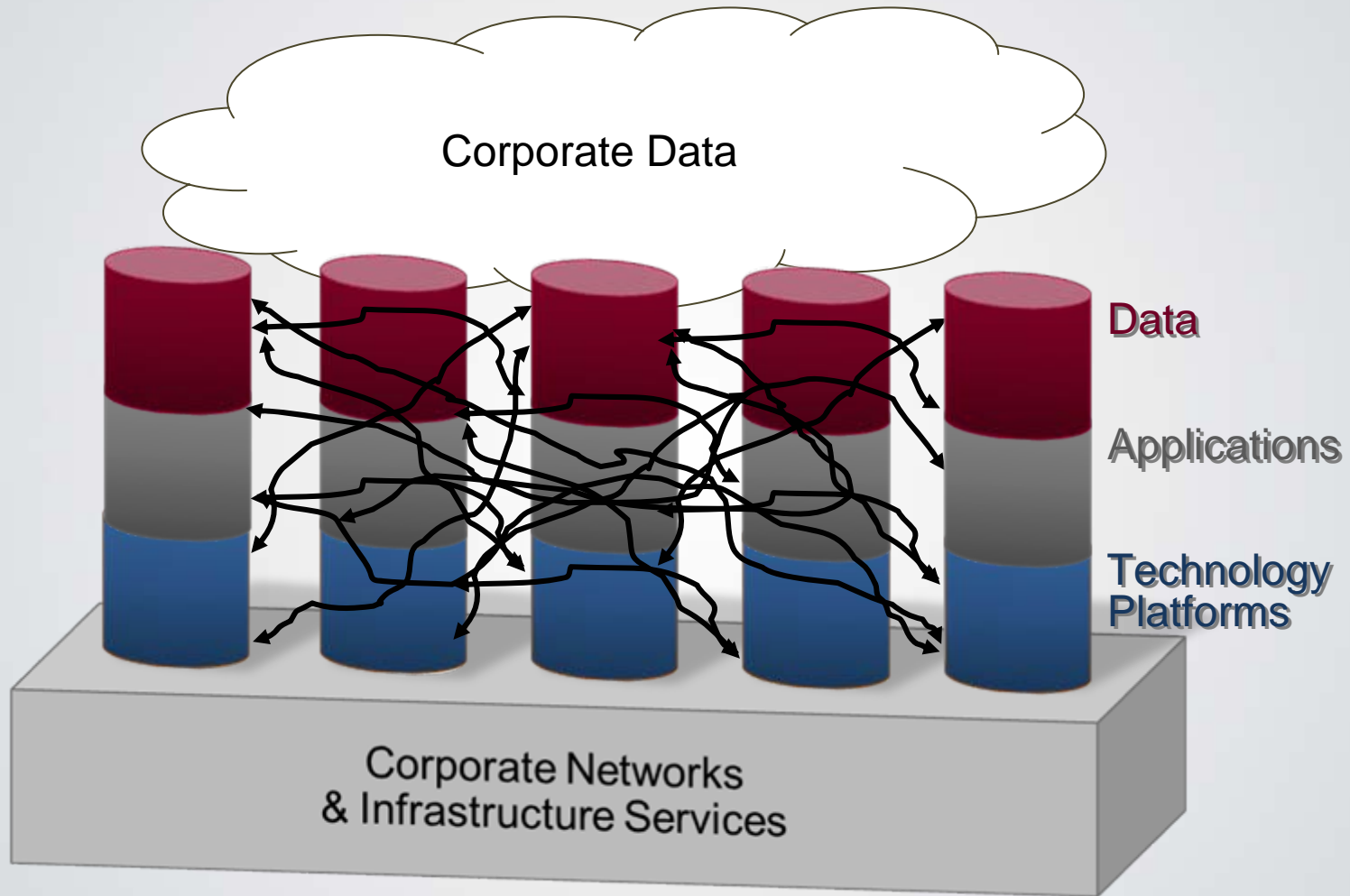*IT Governance and Leadership*
- **Maturing and Globalizing IT Governance**
- **Redefining the CIO; Introducing the SEO**
- **Enhancing Engagement**
- **IT Portfolio Investment Benchmarks, IT Savvy & Links to Firm Performance***
- **Strategic Outsourcing***

* Projects previously conducted by MIT CISR that are regularly updated to include new data and publications.

The problem with IT

Source: *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution*, J. Ross, P. Weill, D. Robertson, HBS Press, 2006.

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The IT landscape at most firms

Corporate Data

Data

Applications

Technology
Platforms

Corporate Networks
& Infrastructure Services

4

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The nature of the problem

- IT invariably provides a long-lived solution to an immediate business problem or opportunity and thus becomes an inhibitor rather than enabler of change.
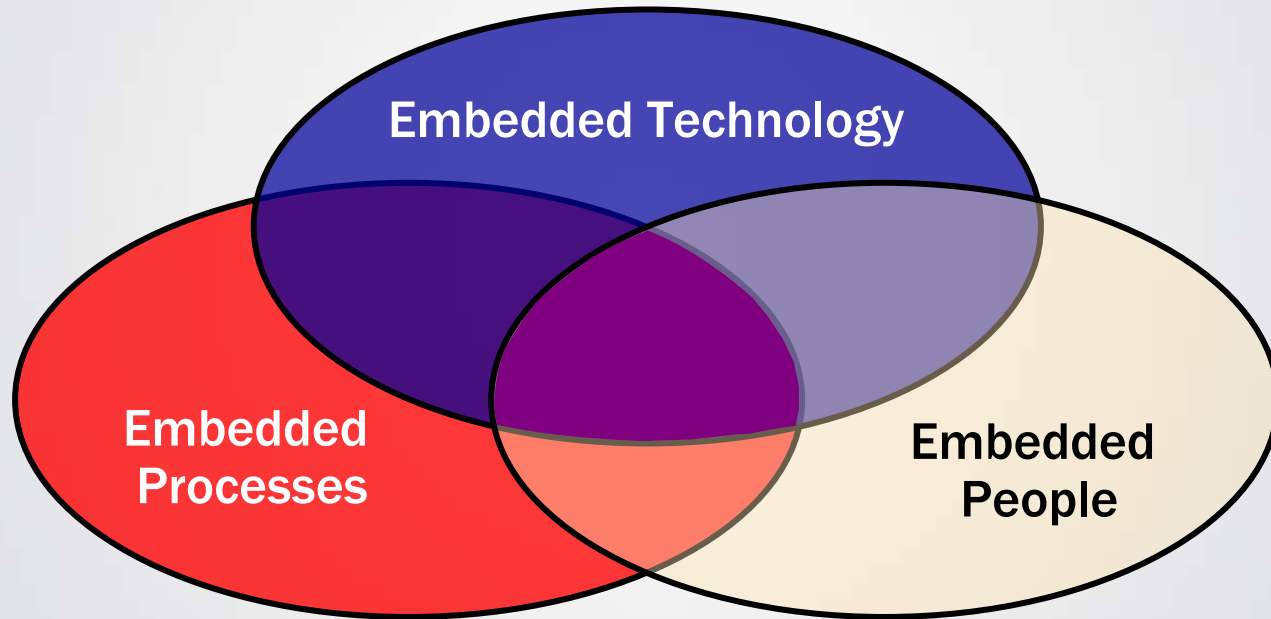
How do we make IT a strategic asset instead of a liability?

Three things to get right

1. Operating model
2. IT governance and decision making processes
3. Development and management of a digitized platform

The operating model…

- *the desired level of business process integration and business process standardization for delivering goods and services to customers.*

- The operating model describes how a firm will profit and grow.

There are four operating models

9

There are four operating models

	Low	**High**
High	**Coordination** ■ Unique business units with a need to know each other's transactions ■ Examples: Merrill Lynch GPC, PepsiAmericas, MetLife ■ Key IT capability: access to shared data, through standard technology interfaces	**Unification** ■ Single business with global process standards and global data access ■ Examples: Delta Air Lines, Dow Chemical, UPS Package Delivery ■ Key IT capability: enterprise systems reinforcing standard processes and providing global data access
Low	**Diversification** ■ Independent business units with different customers and expertise ■ Examples: Johnson & Johnson, GE, ING ■ Key IT capability: provide economies of scale without limiting independence	**Replication** ■ Independent but similar business units ■ Examples: Marriott, CEMEX, ING DIRECT ■ Key IT capability: provide standard infrastructure and application components for global efficiencies

Business Process Integration (vertical axis)

Business Process Standardization (horizontal axis)

9

IT governance...

- *Framework for decision rights and accountability to encourage desirable behavior in the use of IT.*

- Governance complements organizational structure to enable a firm to meet conflicting objectives.

10

Five key IT decisions need to be governed

Principles for IT	High level statements about how IT is to be used. Driven by business principles (e.g., operating model)
Enterprise Architecture	Organizing logic for data, applications, and infrastructure captured in a set of policies, relationships, and technical choices to achieve desired business and technical standardization and integration
IT Infrastructure Strategies	Strategies for shared IT capability (both technical and human) delivered as reliable services (e.g., network, help desk, shared data)
Business Application Needs	Specifying the business need for purchased or internally developed IT applications
IT Investment and Prioritization	Decisions about how much and where to invest in IT including project approvals and justification techniques

11

State Street's IT Governance on One Page

Digitization		Architecture		Strategies		Application Needs		Prioritization	
Input Rights	Decision Rights	Input Rights	Decision Rights	Input Rights	Decision Rights	Input Rights	Decision Rights	Input Rights	Decision Rights
	•Info Technology Executive Committee					•Info Technology Executive Committee			•Info Technology Executive Committee
•CIO Staff			•CIO Staff		•CIO Staff	•Enterprise-wide IT Budget Mgmt		•Enterprise-wide IT Budget Mgmt	•CIO Staff
		•Office of Architecture		•Office of Architecture				•Service Delivery Agreements & Chargeback •Activity Tracking System	
•IT Leadership Group •Federated IT Organization (Vertical & Horizontal Units) •Business Leaders				•Federated IT Organization (Vertical & Horizontal Units) •Business Leaders	•IT Leadership Group		•IT Leadership Group •Federated IT Organization (Vertical & Horizontal Units) •Business Leaders	•IT Leadership Group	

More
Centralized
Less

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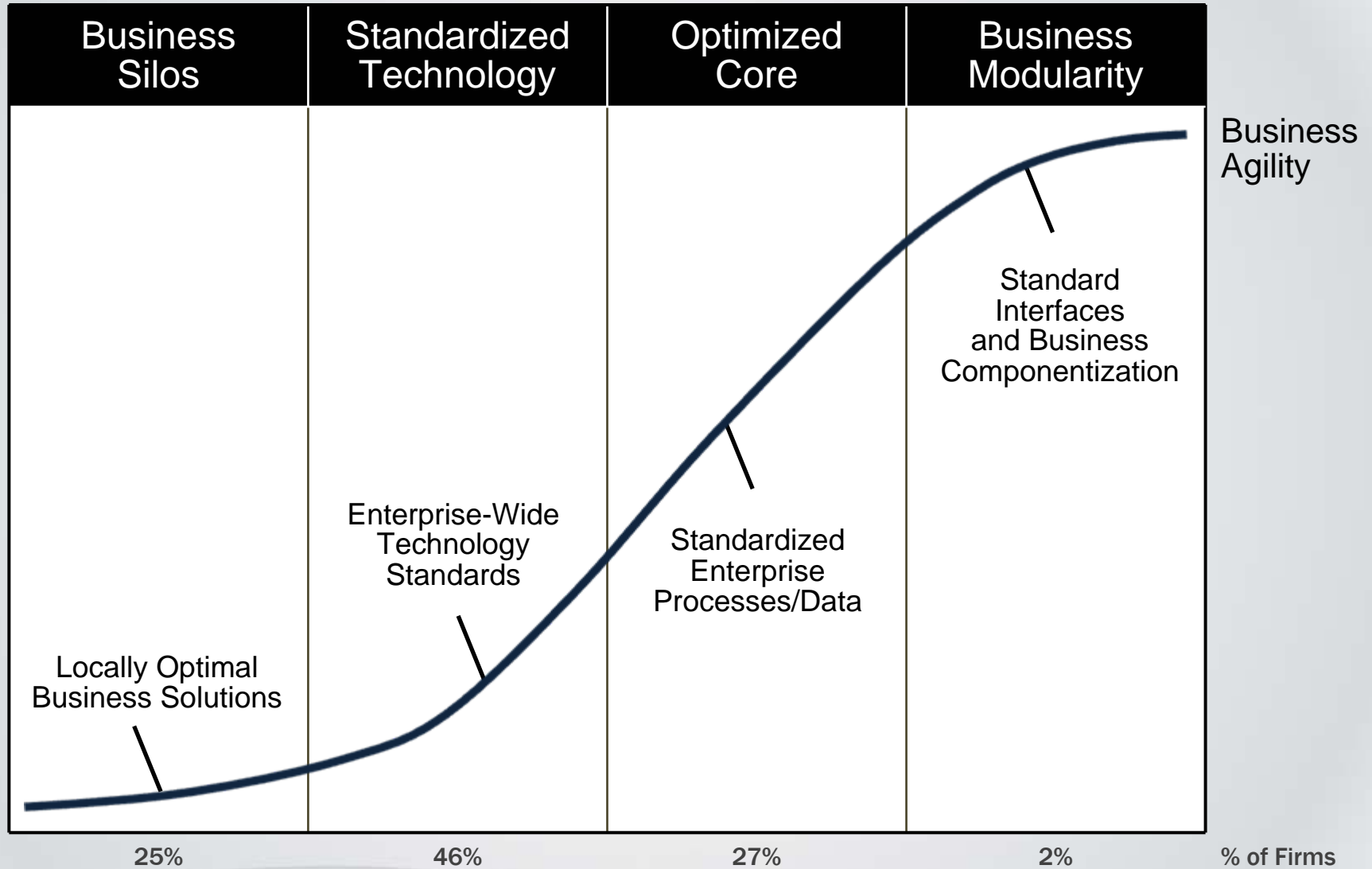
The digitized platform…

- *The set of standardized technologies, systems, processes and data that "wire in" a firm's essential transactions.*

- The digitized platform provides predictability, high quality, and low cost for repetitive and basic activities.

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Companies gradually build out digitized platforms.

Business Silos	Standardized Technology	Optimized Core	Business Modularity

Business Agility

Standard Interfaces and Business Componentization

Enterprise-Wide Technology Standards

Standardized Enterprise Processes/Data

Locally Optimal Business Solutions

25%	46%	27%	2%	% of Firms

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14

Companies make critical design and sourcing decisions
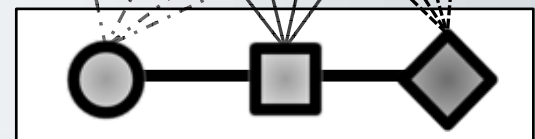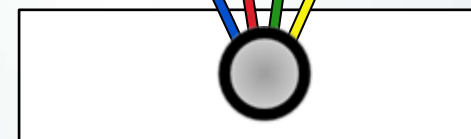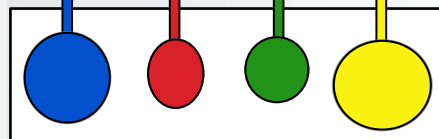
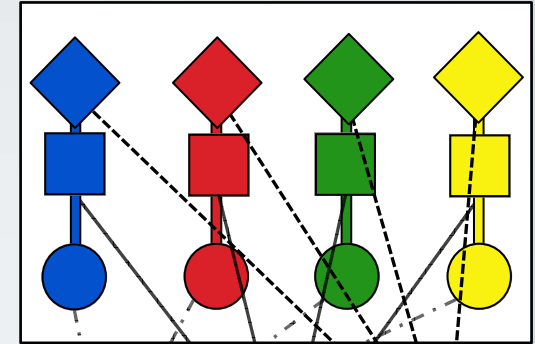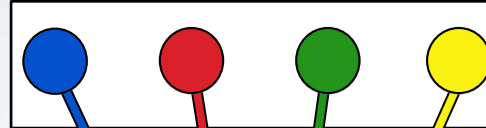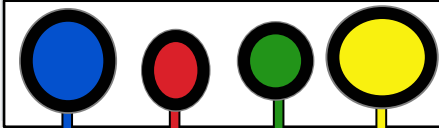| Form	RELOCATION	CONSOLIDATION	PLATFORM INTEGRATION
CLIENT Process(es) locally implemented	London, New York, Sydney, Singapore	London, New York, Sydney, Singapore	London, New York, Sydney, Singapore
PROVIDER Shared Service/ Joint Venture/ Business Process Service Provider			
Distinguishing Characteristics	▪ Same process in each client location are different ▪ Provider runs processes as-is	▪ Like processes standardized ▪ Compare metrics across processes	▪ Platform provide unified customer experience ▪ Platform components shared across multiple clients with different SLAs
Efficiencies from	▪ Relocating work to lower cost location ▪ Streamlining and digitizing process	▪ Shared optimized process ▪ Comparing processes across locations	▪ Platform capabilities ▪ Sharing data and business agility
Who Specifies Process? (**bold** circles)	Client	Jointly	Provider
Who Operates Process?	Provider	Provider	Provider
Who Uses Process?	Client	Client	Client