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

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Agenda

- Defining an Operating Model
 - Four alternatives
 - Differing requirements of the four operating models
- Visualizing Operating Model Requirements in a High Level Graphic
- The Multiple Operating Models of Complex Organizations
- An Evolutionary Approach to Changing Operating Models
- Operating Model Lessons from Top Performers

An operating model provides long-term IT requirements

- A firm's operating model is: *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.

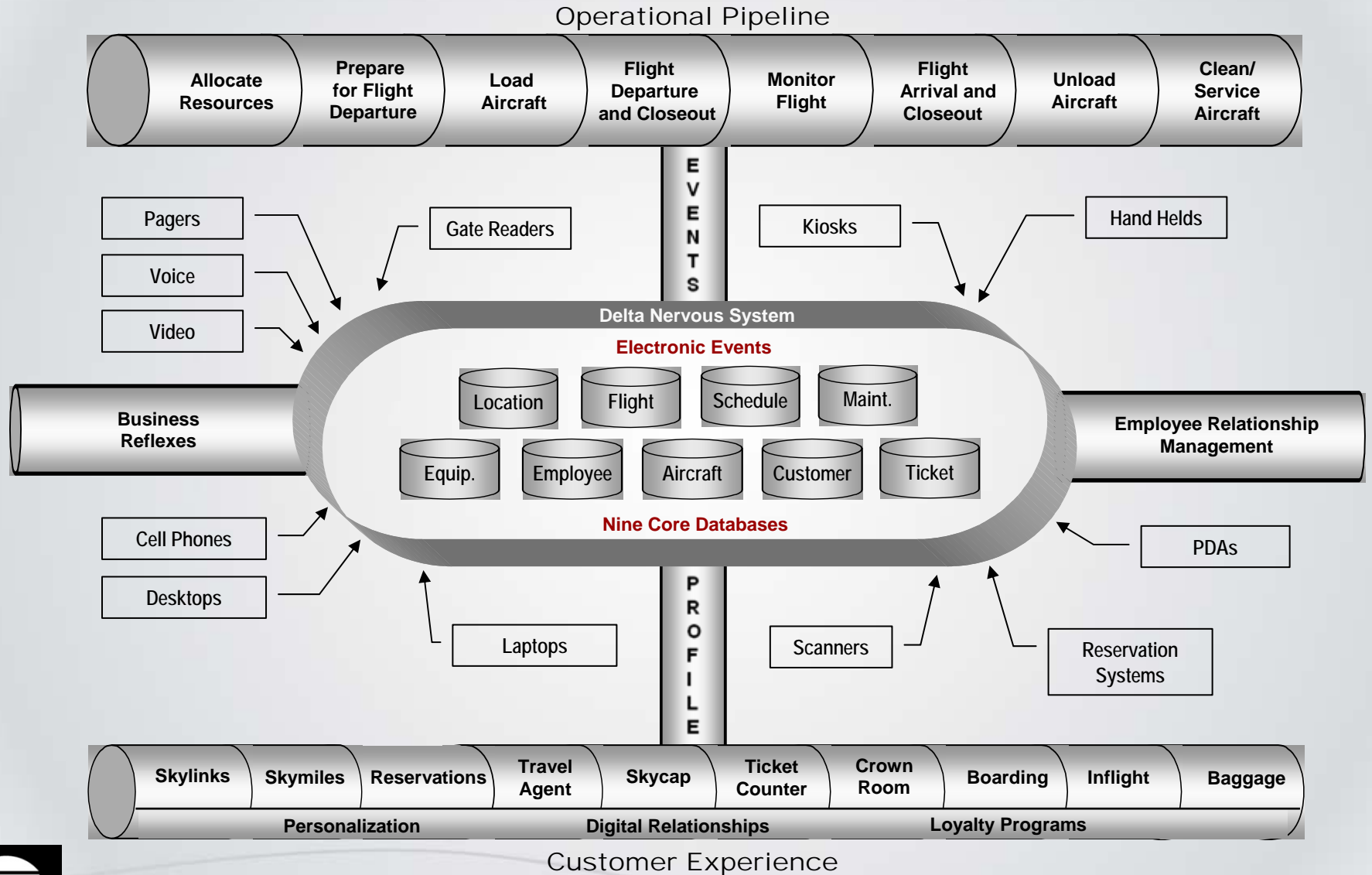
There Are Four Operating Models

Business Process Integration	High	<p style="text-align: center;">Coordination</p> <ul style="list-style-type: none"> ■ 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 	<p style="text-align: center;">Unification</p> <ul style="list-style-type: none"> ■ 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	<p style="text-align: center;">Diversification</p> <ul style="list-style-type: none"> ■ Independent business units with different customers and expertise ■ Examples: Johnson & Johnson, GE, ING ■ Key IT capability: provide economies of scale without limiting independence 	<p style="text-align: center;">Replication</p> <ul style="list-style-type: none"> ■ Independent but similar business units ■ Examples: Marriott, CEMEX, ING DIRECT ■ Key IT capability: provide standard infrastructure and application components for global efficiencies
		Low	High
Business Process Standardization			

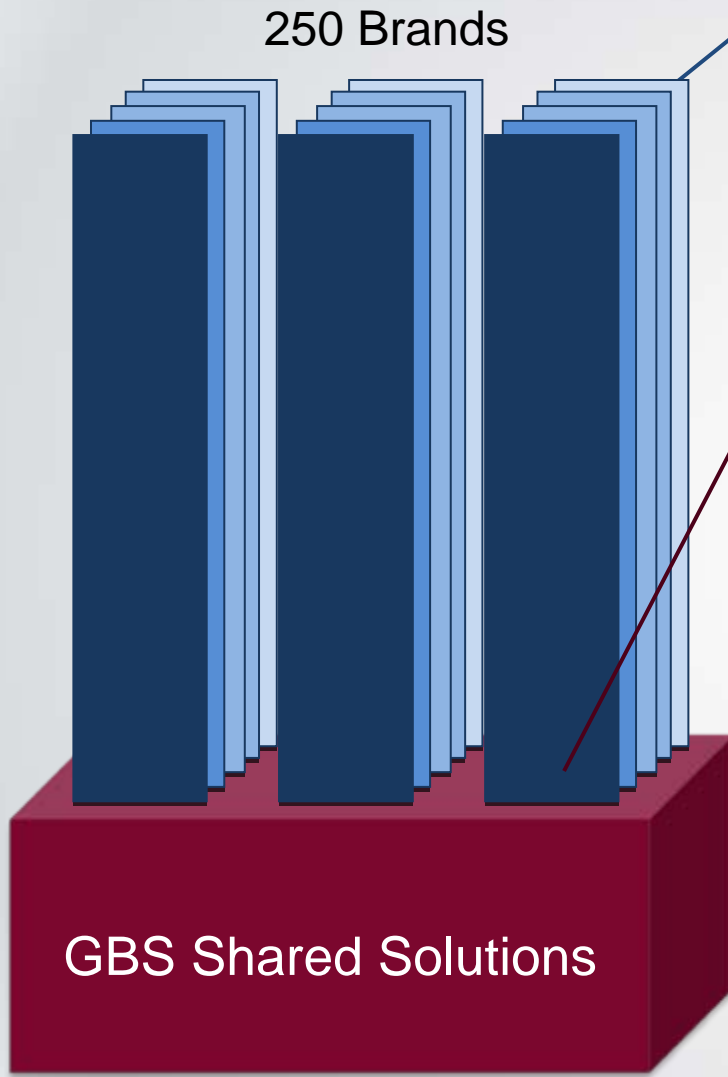
Different Standardization Requirements of the Four Operating Models

Business Process Integration	High	<p style="text-align: center;">Coordination</p> <ul style="list-style-type: none"> ■ Customer and product data ■ Shared services ■ Infrastructure, portal, and middleware technology 	<p style="text-align: center;">Unification</p> <ul style="list-style-type: none"> ■ Operational and decision making processes ■ Customer and product data ■ Shared services ■ Infrastructure technology and application systems
	Low	<p style="text-align: center;">Diversification</p> <ul style="list-style-type: none"> ■ Shared services ■ Infrastructure technology 	<p style="text-align: center;">Replication</p> <ul style="list-style-type: none"> ■ Operational processes ■ Shared services ■ Infrastructure technology and application systems
		Low	High
Business Process Standardization			

Delta's Unification Operating Model



P&G's Diversification Operating Model



250 Brands

- Strong marketing and customer focus
- Ownership of unique business processes
- Product and service innovation and delivery

- Catalogue of services—some mandatory, some optional
- Marketing approach to build “brand” awareness and loyalty to GBS services
- Ownership of shared solution business processes
- Unit price management with guaranteed reductions over time
- Scorecard of GBS performance with variable compensation
- Architecture interconnecting the different solutions to be building blocks for innovation
- New product development group to add new solutions
- Management of outsourcing partners

GBS Shared Solutions

P&G's Diversification Operating Model (cont'd)

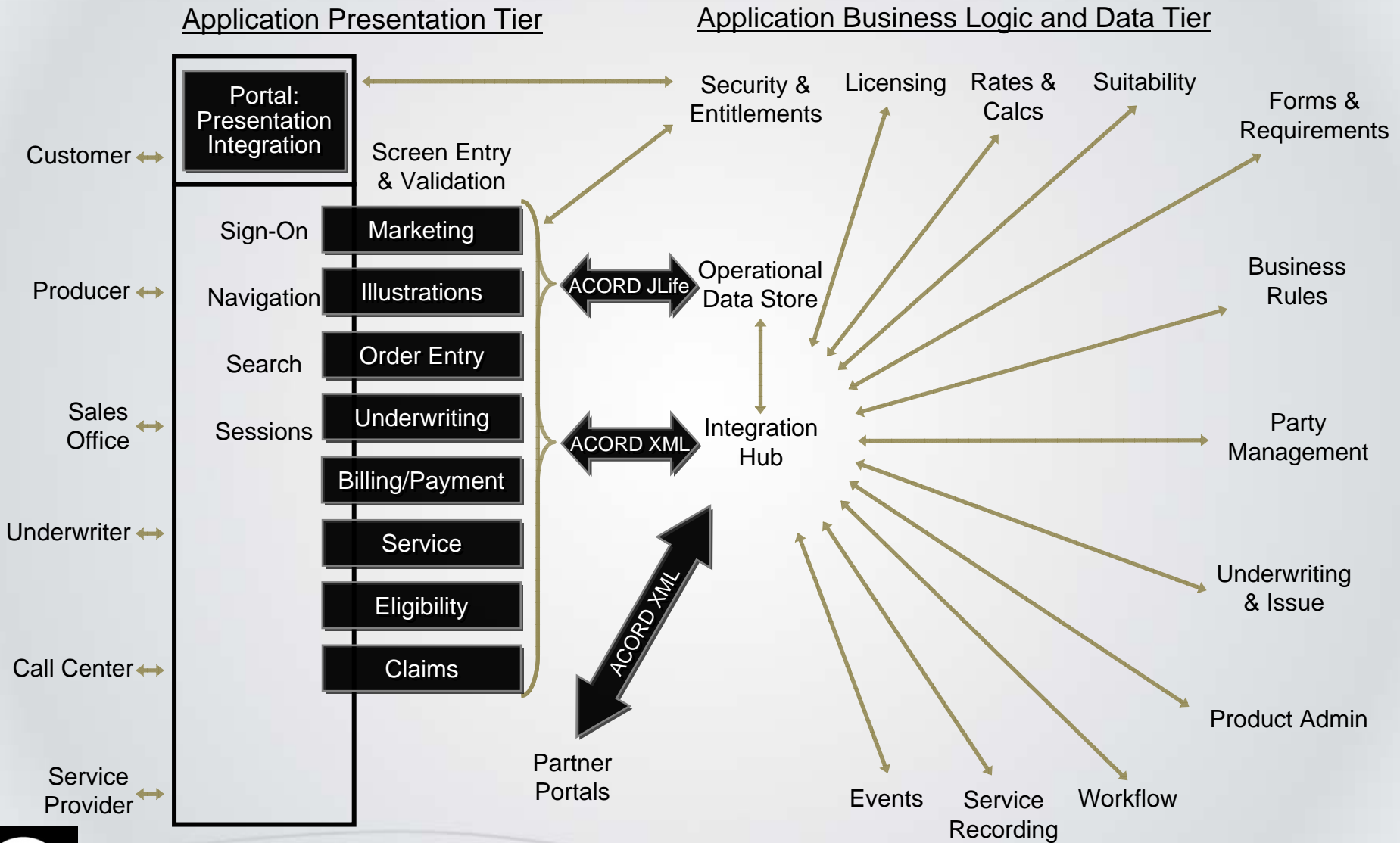
P&G Global Business Services—Employee Services & Solutions

Employee Services	Pay, benefits, policies, career development, work plans
People Management	Compensation planning, relocation, employee management tools
Facilities	Office moves, conveniences: banking, dining, fitness centers, mail & documents
Computers & Communications	PCs, e-mail, mobile phones, Intranet, service support
Meetings	Rooms, technology & scheduling, audio & video conferencing, events
Travel	Booking, expense accounting, credit cards, group meetings

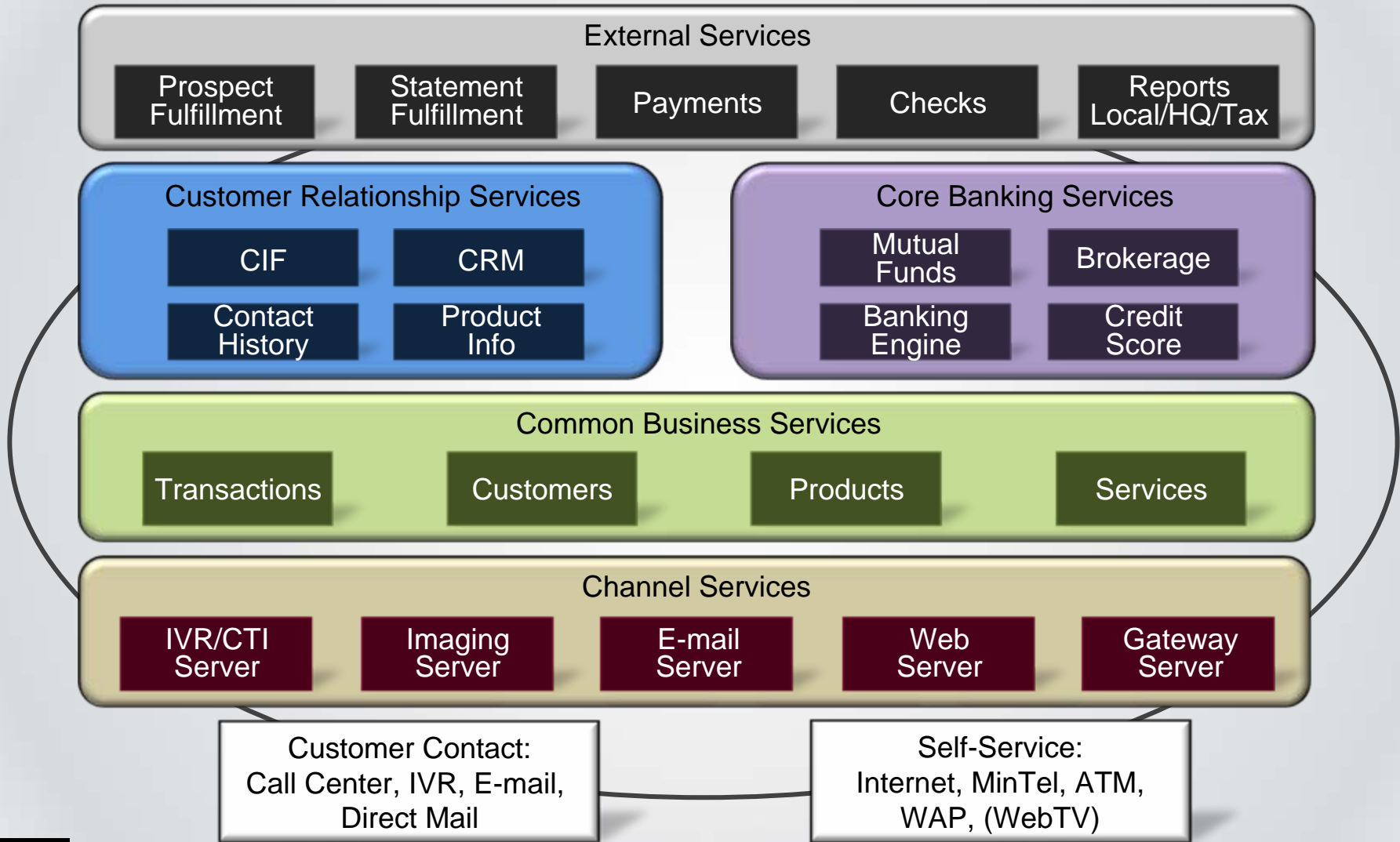
P&G Global Business Services—Business Services & Solutions

Purchases	Strategic sourcing, supplier relationship management, procurement service
Financial Services & Solutions	General ledger, affiliate accounting, product/fixed asset accounting, expense, sales/marketing accounting, purchases-to-payment (include accounts payable), banking, financial reporting
Product Innovation	Bioinformatics systems, product imaging & modeling systems
Supply Network Solutions	Demand planning systems, total order management, physical distance systems
Consumer Solutions	Prime prospect research, CRM systems, advertising & media measurement
Customer Solutions	Shopper intelligence, in-store action planning, trade fund management systems
Initiative Management	Technical package & materials design, package artwork process, portfolio tracking & reporting
Business Performance Solutions	Decision cockpits, market mix modeling, competitive intelligence, ad-hoc business analyses

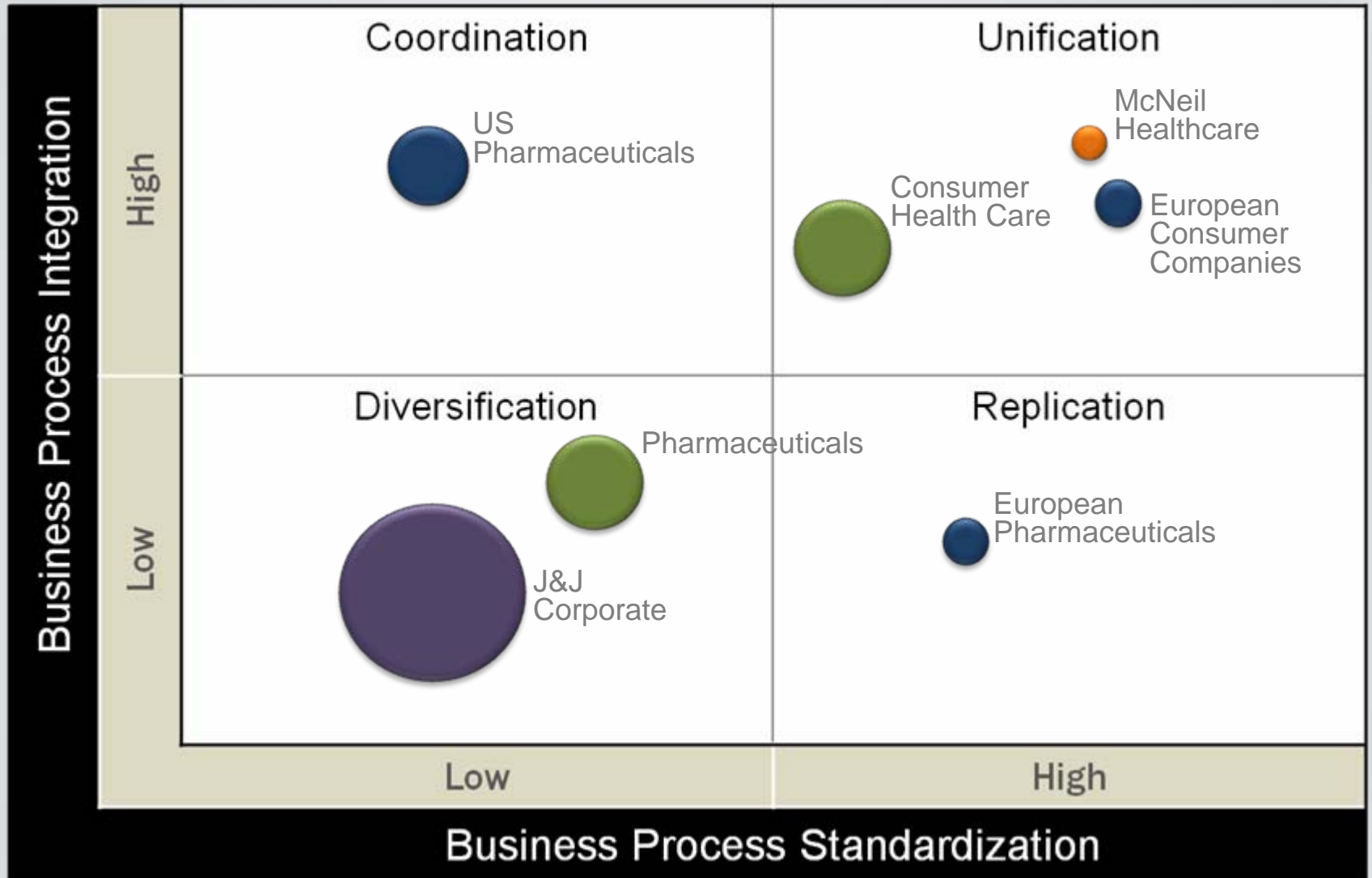
MetLife's Coordination Operating Model



ING DIRECT's Replication Operating Model



Johnson & Johnson's Multiple Operating Models¹

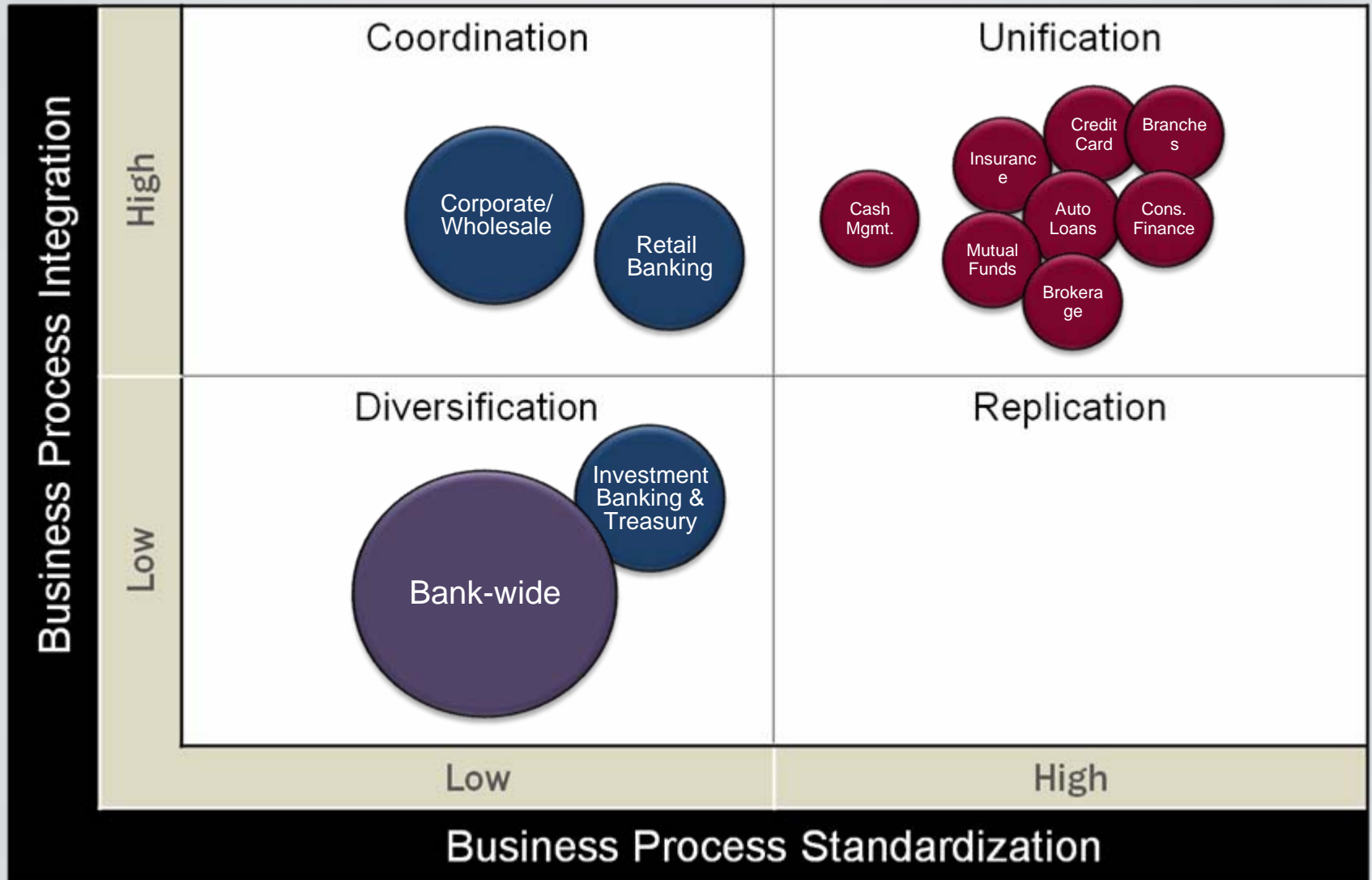


Legend ● Corporate ● Business Segment ● Regional Business ● Operating Company

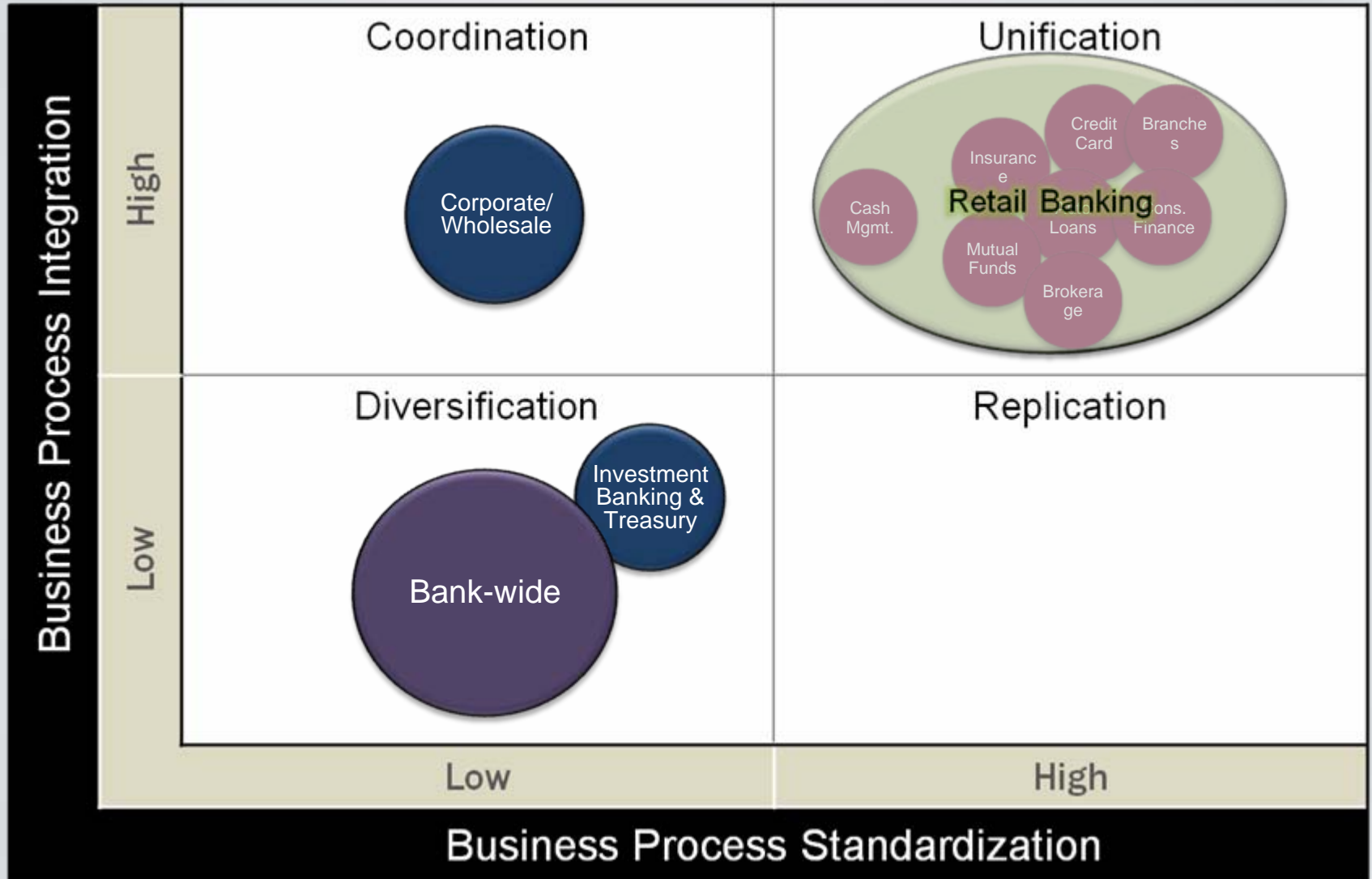
Center for Information Systems Research (CISR) ¹ Source: Researcher approximation based on historical data.

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Target Operating Model of One Full-Service Bank



Aspirations of the Retail Banking Head at the Full-Service Bank

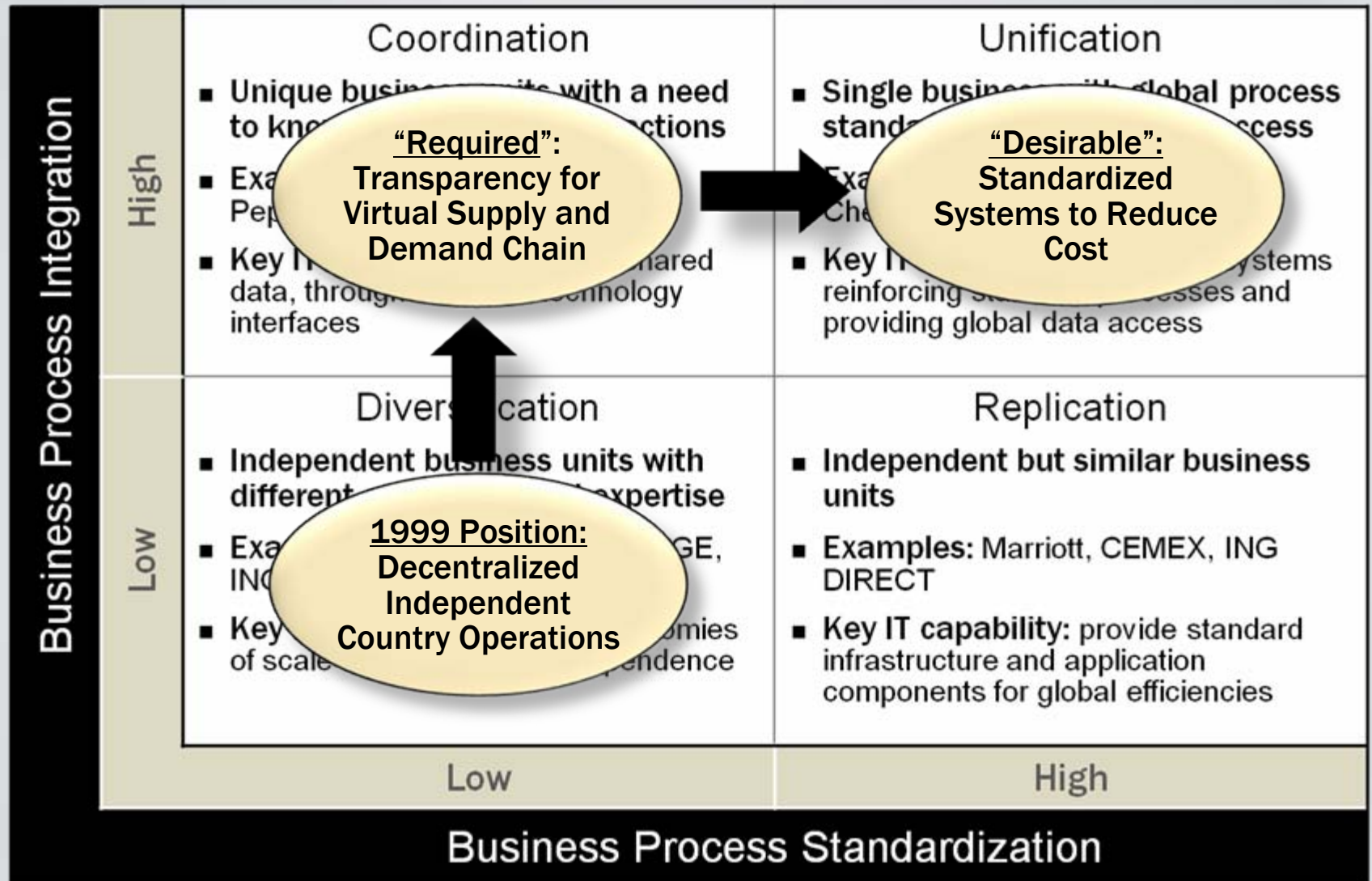


Business Transformation at Toyota Europe

Toyota Motor Marketing Europe 2002

- Sales growing dramatically:
 - 384,000 units in 1995
 - 727,000 units in 2002
- Toyota Europe structured as 28 independently managed country operations:
 - Cars and parts ordered from 9 European manufacturing plants
 - All product and spare parts inventories managed within countries
 - Little transparency of supply and demand
 - Different systems and processes in each country
- Operating loss FY 2002 ¥9.9B

Toyota's Operating Model Transitions



Toyota Europe's Transformation

Performance			Business Changes	
Units Sold	Revenue (¥)	Operating Income (¥)		
2002	727,000	1,266B	(9.9B)	<ul style="list-style-type: none"> 28 autonomous marketing companies 9 manufacturing facilities
2004	898,000	2,164B	72.5B	<ul style="list-style-type: none"> European delivery lead time for vehicles reduced 35% Inventory of spare parts reduced by almost 50% Operating income: 3.5% of sales
2008	1,284,000	3,993B	141B	<ul style="list-style-type: none"> Reorganized as Toyota Europe

Target Operating Models

Business Process Integration	High	<p style="text-align: center;">Coordination</p> <ul style="list-style-type: none"> ■ 28% of business executives ■ 16% of IT executives 	<p style="text-align: center;">Unification</p> <ul style="list-style-type: none"> ■ 39% of business executives ■ 57% of IT executives
	Low	<p style="text-align: center;">Diversification</p> <ul style="list-style-type: none"> ■ 21% of business executives ■ 16% of IT executives 	<p style="text-align: center;">Replication</p> <ul style="list-style-type: none"> ■ 12% of business executives ■ 11% of IT executives
		Low	High
Business Process Standardization			

Source, Business Executive Percentages: 107 Senior Executives—Attendees of MIT Sloan's "IT for the Non IT Executive Program" December 2007 and April 2008 - typical titles: CEO, CFO, BU Heads, EVP operations, President, CIOs, VP Business Services.

Source, IT Executive Percentages: Survey of 70 IT executives—mostly CIOs and CIO reports from Fortune 500 companies, Spring 2006.

Center for Information Systems Research (CISR)

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

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Operating Model Lessons from Top Performers

- **Make Tough Choices**
An operating model is a commitment to a way of doing business. It involves eliminating some strategic options in order to better deliver on others.
- **Consider the Off-Diagonals**
As firms seek more integration and standardization the Coordination and Replication models allow for more rapid implementation and payback than the Unification model.
- **Prepare for a Transformation**
Transitioning from one operating model to another will always involve a transformation. Small steps toward the targeted operating model can make changes more evolutionary than revolutionary.
- **There is No Substitute for Strong Senior Management Leadership**
Firms getting strategic business benefits from an operating model have senior business leaders who are actively involved in its design, management and implementation.