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People, Process, Technology: The IT Opportunity for Profitable Growth

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- PepsiCo International
- Pfizer Inc.
- PNC Global Investment Servicing
- Procter & Gamble Co.
- Raytheon Company
- Schneider Electric Industries SAS
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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

2010 CISR Research Projects

The World is Changing—Now What?

- Agile IT Decision-Making with Accountability
- Adopting Business Applications in the Cloud
- IT's New Look
- Innovating the Future of the Enterprise

Working Smarter with IT

- Building the Information-based Organization
- Digital Intelligence: Capturing the Value of Unstructured Data
- Collaboration Platforms: Managing the Opportunities of Web-based Business Practices
- Increasing Reuse to Improve Enterprise Performance

What Works? Surveying Best Practices

- The MIT CISR Value Framework—How Firms Achieve Superior Business Value from IT
- Transparency: A Critical IT Management Competency
- What we Measure Matters: Key Measures for Digitization

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Agenda

- Business Agility
  - **Distinguishing agility from innovation**
  - **Designing a digitized platform for business agility**
- UPS: Building a platform for package delivery
- Campbell Soup: Installing a platform for enterprise business processes
- Procter & Gamble: Evolving a shared services platform
- Toyota Europe: Building an information-based platform
- 7-Eleven Japan: Making a long-term commitment to profitable growth
- Recommendations for creating business agility

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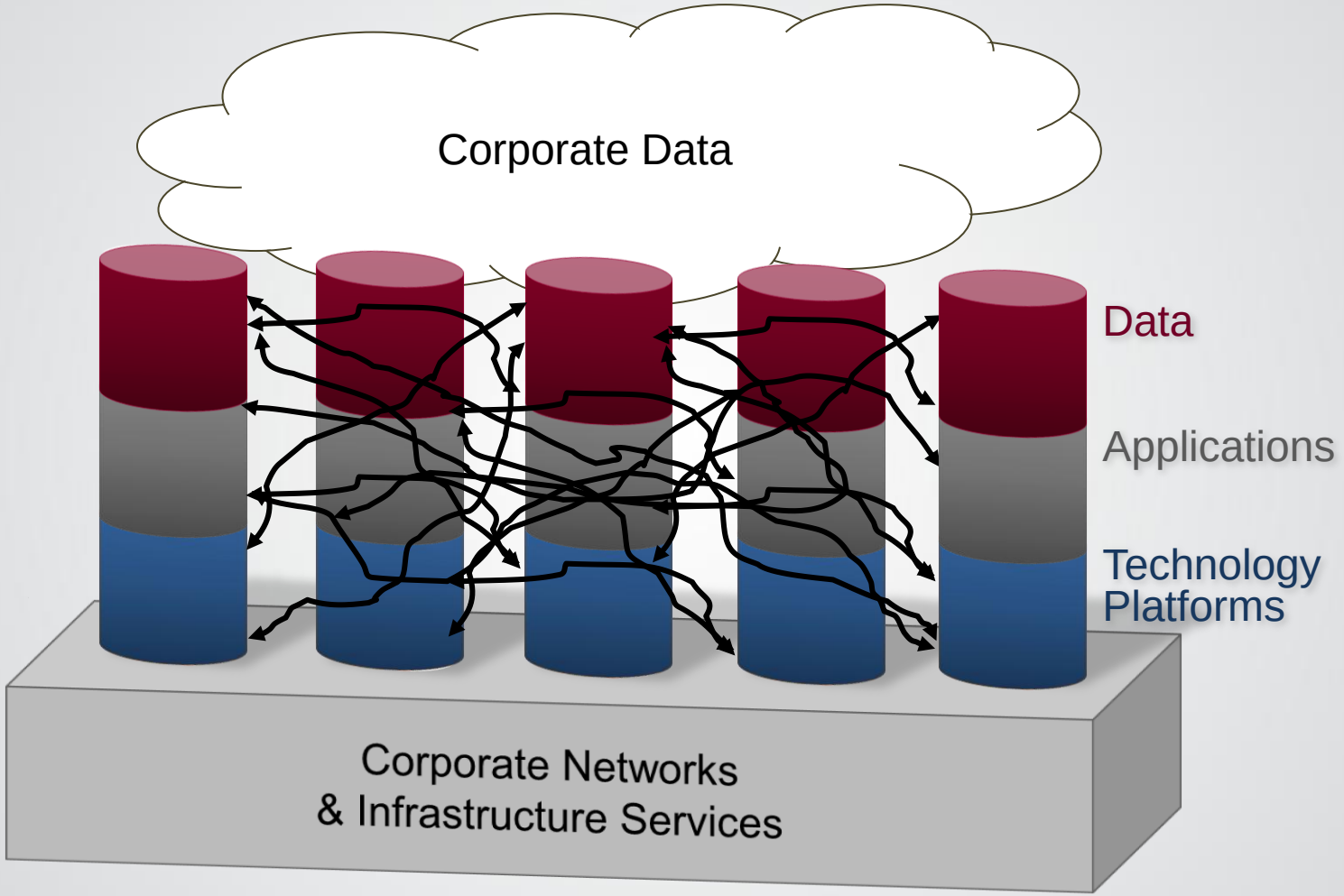
For Many Years IT Focused on Innovation



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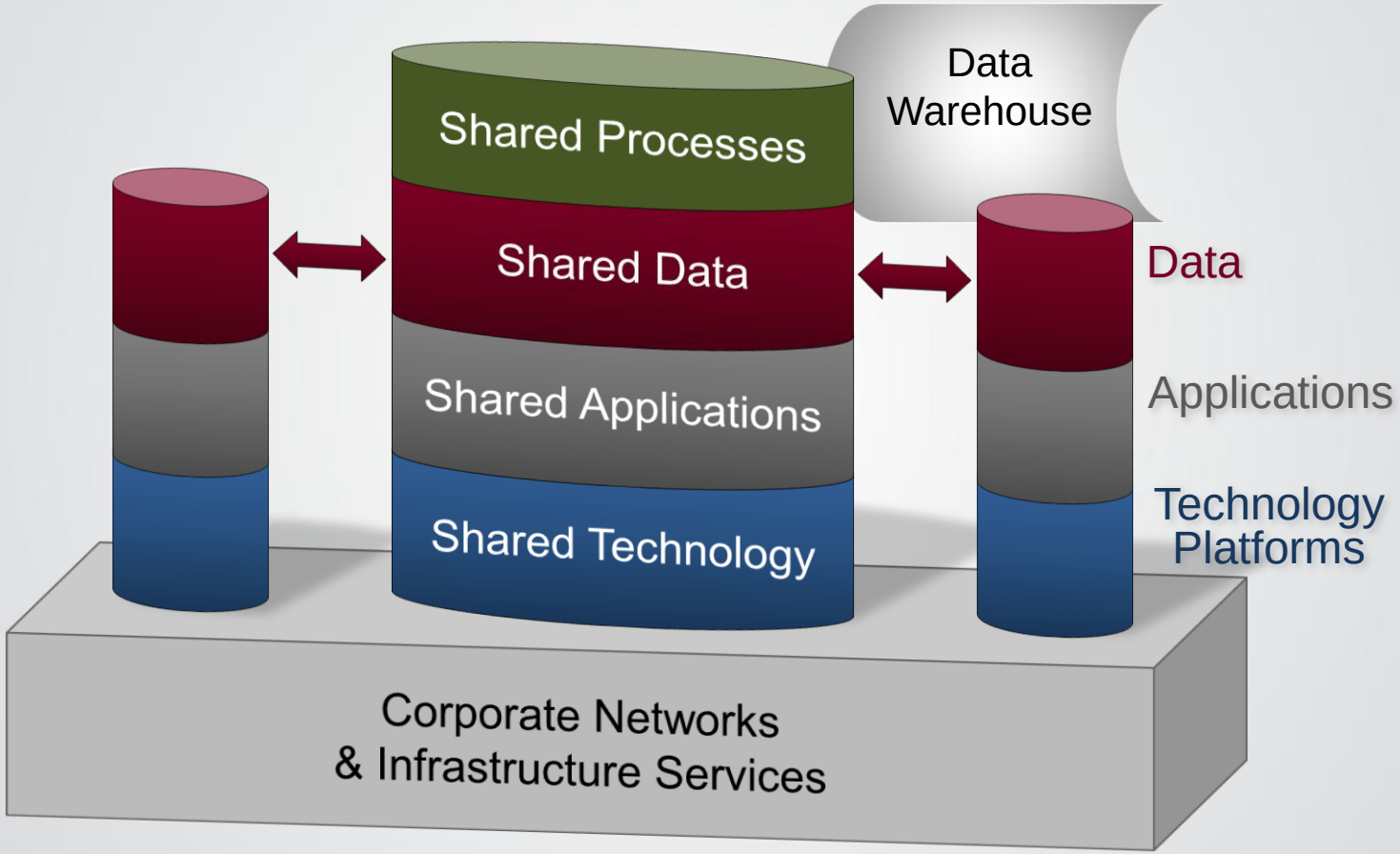
A Digitized Platform:
The desired result of a firm's IT innovations



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Business Agility and the Role of IT

- Business Agility: *The use of existing IT and business process capabilities to rapidly generate new business value while limiting costs and risks.*
- The goal of business agility is profitable growth.
- The Agility Paradox: Standardization is essential to sustained agility.
- Firms create opportunities for business agility by building and leveraging one or more digitized process platforms.
- Digitized process platform: *A coherent set of standardized business processes along with supporting infrastructure, applications and data, intended to ensure the quality and predictability of core transactions.*

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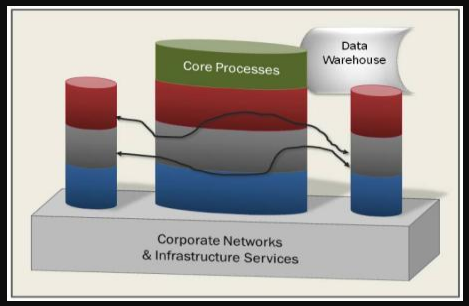
Innovation and Agility Present Tradeoffs

Architecture

The Digitized Platform



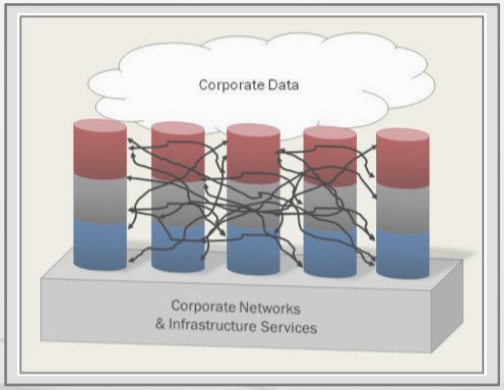
- Standardized technology, processes and data
  - Accurate, predictable, world class

Innovation

- Adding business value by doing something new with IT

Agility

- Rapid response to market opportunity
- Reuse of existing capability



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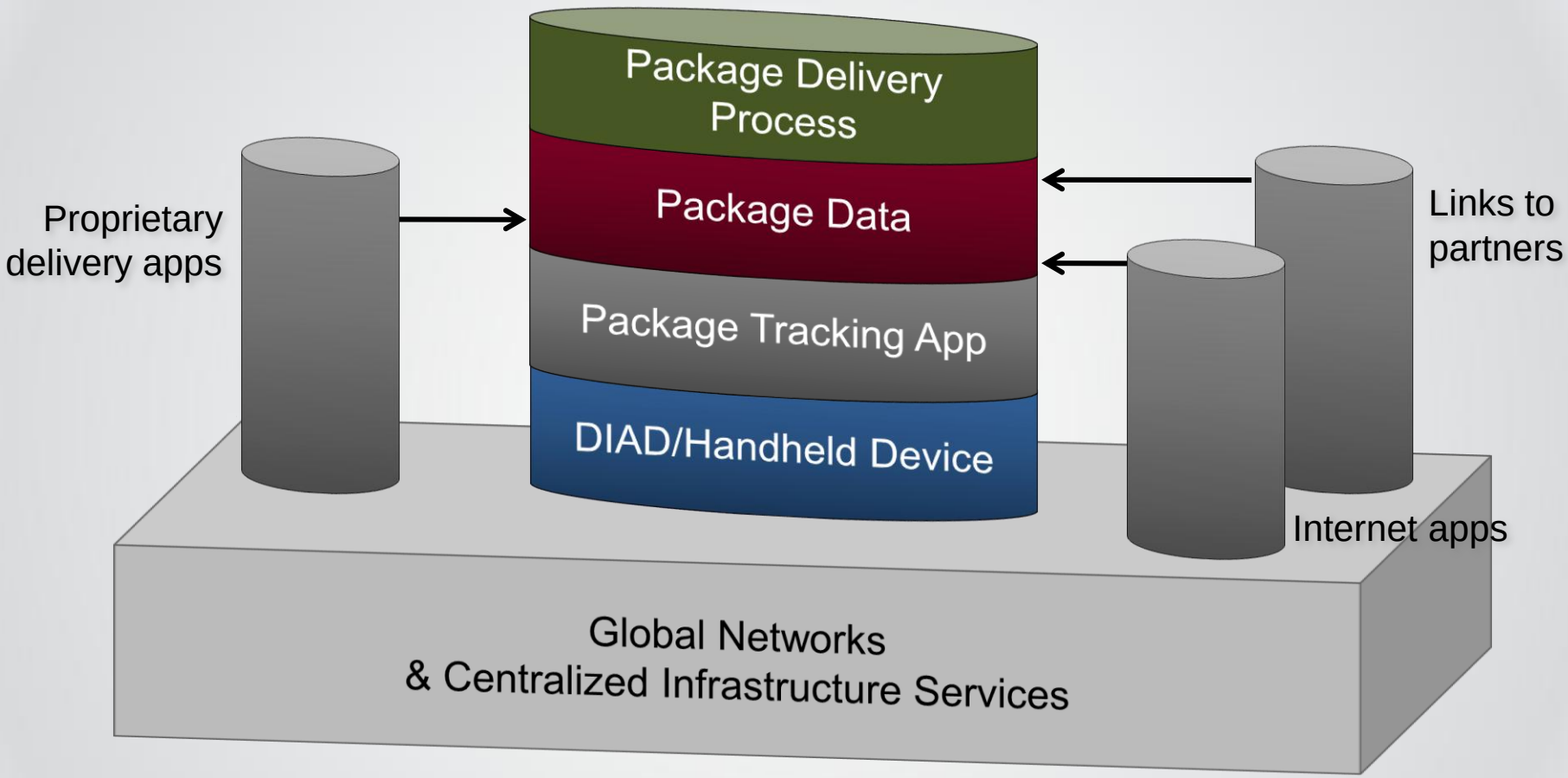
UPS's Digitized Platform for Package Delivery



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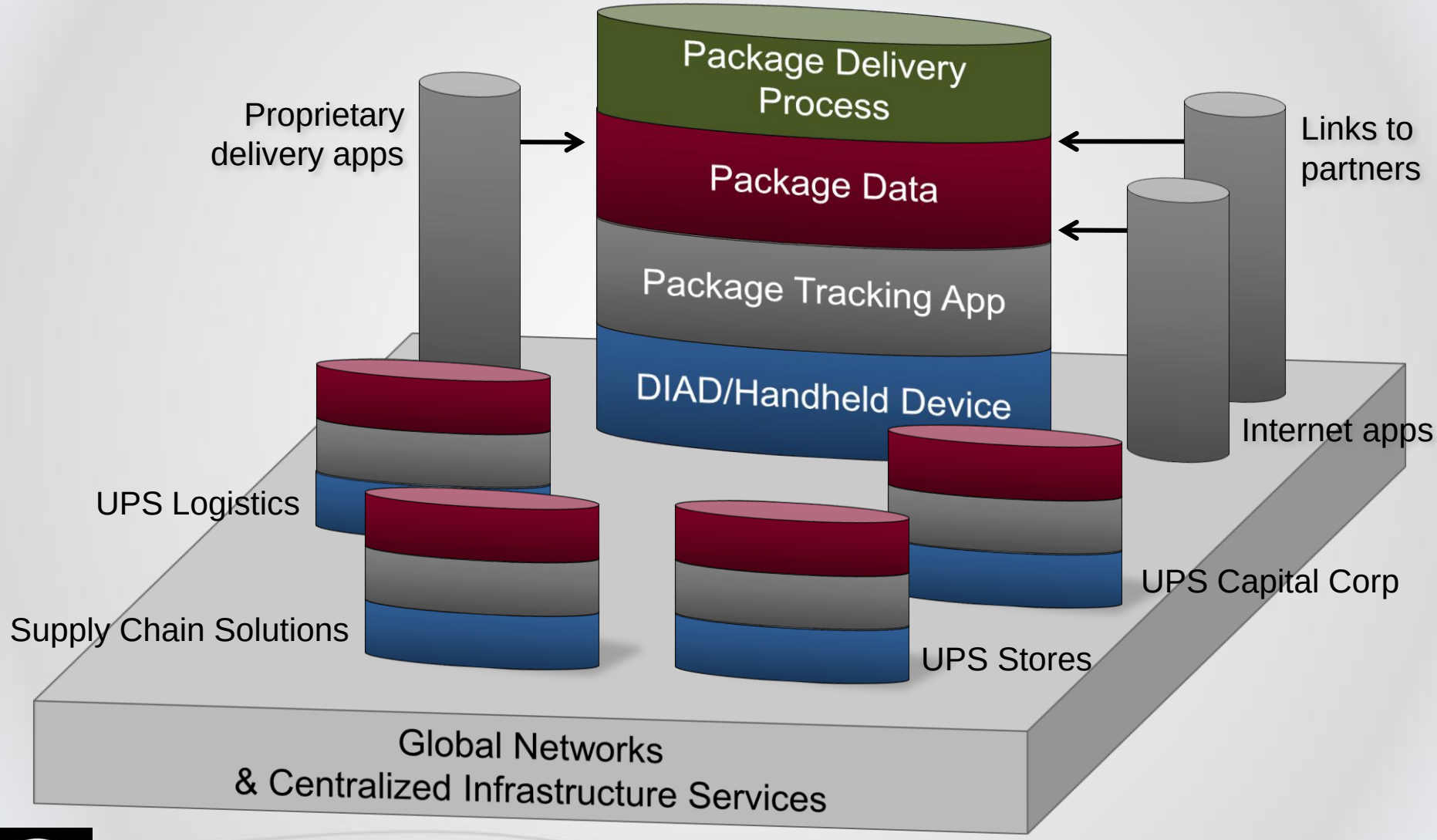
Diversified Firms Build Multiple Platforms



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Creating Agility at Campbell Soup Company

- $8 billion global manufacturer of soups, baked snacks, beverages and chocolates (e.g., Campbell Soup, Arnott's, Prego, V8, Pepperidge Farm, Godiva).
- In 2004 Senior executives approved Project Harmony: SAP R3 and related systems forming backbone for three enterprise processes: Account to Report, Order to Cash, Make to Ship
- Four senior leaders serve as project sponsors: CIO, CFO, SVP for Supply Chain, and EVP for North America.
- Focus on Total Delivered Cost (TDC)
- Campbell generated returns of 13.7% in FY2008 compared to the less than 8% earned by companies in the S&P's packaged food index

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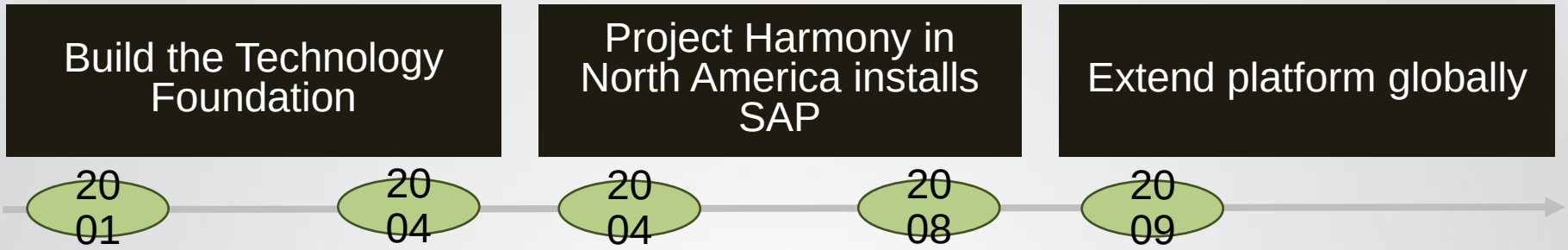
Source: "Campbell Soup Company: Harmonizing Processes and Empowering Workers," by Jeanne W. Ross and Cynthia M. Beath, MIT Sloan CISR Working Paper No. 374, June 2008.

Development of Campbell Soup's Digitized Platform



- Centralize IT unit under global CIO
- Outsource operations to IBM
- Introduce disciplined internal IT processes
- Benchmark performance against prior performance and external standards

- Define 3 global work processes
- Implement SAP R3 one site at a time in 25 North American locations
- Manage changes in roles, structures, and business processes
- Assign process owners and drive benefits

- Review unique requirements of businesses outside North America
- Implement Project Harmony one site at a time across Campbell sites

Source: "Campbell Soup Company: Harmonizing Processes and Empowering Workers," by Jeanne W. Ross and Cynthia M. Beath, MIT Sloan CISR Working Paper No. 374, June 2008.

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Toyota Motor Marketing Europe

- 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

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Source: Presentation by Peter Heinckiens, Chief Architect, Toyota Motor Marketing Europe to IMD OWP Program, June 30, 2005.

Developing Toyota's Information-Centric Platform

- Resisted urge to install single ERP and focused instead on sharing inventory data across 28 businesses
- Designed product master file. First initiative (12 months) involved daily file transfer to headquarters with inventory data.
- Each business received daily report of inventory data across Toyota Europe
- General managers used report voluntarily

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Toyota Europe's Outcomes

	Performance			Business Changes
	Units Sold	Revenue (¥)	Operating Income (¥)	
2002	727,000	1,266B	(9.9B)	▪ 28 autonomous marketing companies ▪ 9 manufacturing facilities
2004	898,000	2,164B	72.5B	▪ 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	▪ Reorganized as a single business: Toyota Europe

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Building a Shared Services Platform at Procter & Gamble

- 170 year-old company. A $85 billion MNC. Products sold to more than 180 countries, marketing over 250 brands to nearly five billion consumers.
- Largest CPG company in the world
- Strong and consistent business performance*
- Nearly one-third of sales from developing countries; growing sales in developing countries 16% per year

	2008 ($000s)	2007 ($000s)	2006 ($000s)	2005 ($000s)
Net sales	83,503	76,476	68,222	56,741
Net earnings	12,075	10,340	8,684	6,923

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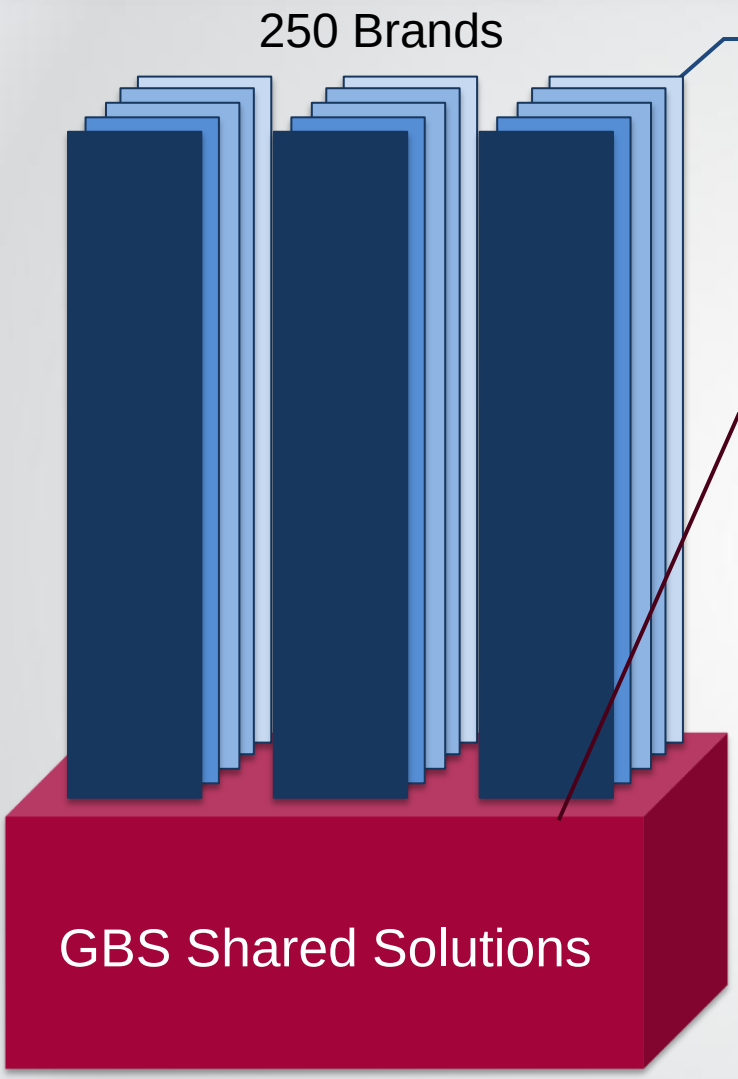
* Source: P&G Annual Reports and interviews of P&G executives in Asia and the U.S. by C. Soh, S. Kien Sia (Nanyang Technological University – NTU) and P. Weill.

Procter & Gamble's Shared Services Platform



- Brand marketing
- Product and service innovation
- Service delivery

- Employee services (pay, benefits, policies)
- People management (compensation, relocation)
- Facilities (office moves, mail, fitness centers)
- Meetings (rooms, technology support)
- Travel (booking, expense accounting, credit cards)
- Purchasing (strategic sourcing, supplier relations)
- Financial Services (purchase-to-payment, financial reporting)
- Consumer Solutions (prime prospect research, CRM systems)
- Customer Solutions (shopper intelligence, in-store action planning)
- Initiative management (technical package and materials design, package artwork process

Source: "Governance of Global Shared Solutions at Procter & Gamble," P. Weill, C. Soh, and S. Kien Sia, MIT Sloan CISR Research Briefing, Vol. VII, No. 3A, December 2007; P&G 2006 Annual Report and interviews of P&G executives in Asia and the U.S. by C. Soh, S. Kien Sia (Nanyang Technological University—NTU), and P. Weill.

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7-Eleven Japan — An IT Savvy Next Gen Retailer

- Highly evolved IT–enabled business model
  - Most profitable Japanese retailer
- 12,034 stores in Japan, 33,913 stores worldwide
- 70% of all products sold are new each year in each store
- Each store clerk makes local decisions based on centrally designed systems and processes—hypothesize and test new product selections
  - Counselors visit each store twice weekly
- Total information system: 70,000 nodes
  - Links stores, head office, suppliers, distribution centers
- Digitized processes allow stores to order and receive fresh foods three times a day
- Emphasis on training and mentoring all employees
- Gross margins per store have increased from 5% to 31% from 1977 to 2008 and stock turnover has decreased from 25.5 to nine days
- *"It's not enough to exchange information. The information has no value unless its properly integrated by the franchisees and makes them work better."*

  —Toshifumi Suzuki, CEO

Source: K. Nagayama and P. Weill, "7-ELEVEN Japan Co., Ltd.: Reinventing the Retail Business Model," Working Paper #338, MIT Sloan Center for Information Systems Research, Cambridge, January, 2004, *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution*, J. Ross, P. Weill and D. Robertson, HBS Press, 2006 and Seven Seven & i Holdings Corporate Outline 2008.

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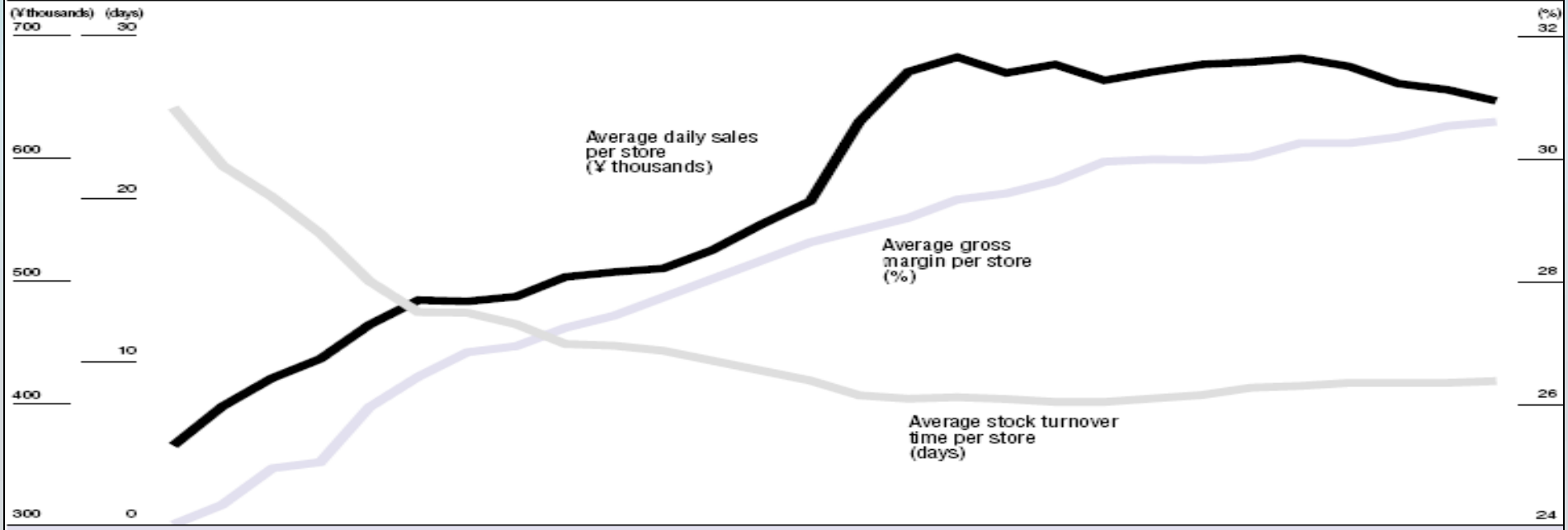
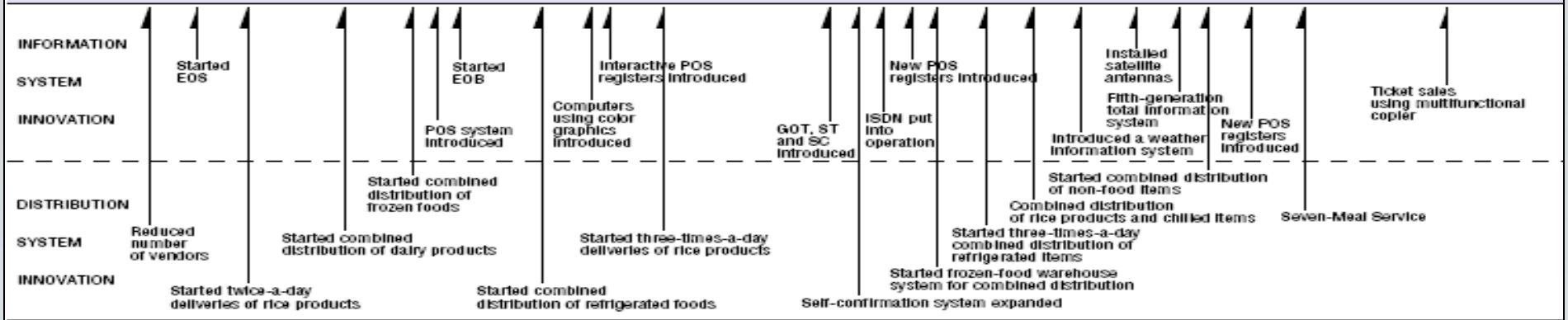
Average Stock Turnover Time, Daily Sales and Gross Margin per Store



Period ended	77.2	78.2	79.2	80.2	81.2	82.2	83.2	84.2	85.2	86.2	87.2	88.2	89.2	90.2	91.2	92.2	93.2	94.2	95.2	96.2	97.2	98.2	99.2	00.2	01.2	02.2	03.2	04.2
Average stock turnover time*	25.5	22.0	20.1	17.8	14.9	13.0	12.9	12.2	11.1	10.9	10.6	10.0	9.4	8.8	7.9	7.7	7.8	7.7	7.5	7.4	7.7	8.0	8.3	8.4	8.7	8.7	8.7	8.8
Average daily sales*	366	396	419	435	463	483	482	486	502	506	508	524	545	564	629	669	682	669	676	662	669	676	678	681	675	661	656	647
Average gross margin*	24.0	24.3	24.9	25.0	25.9	26.4	26.8	26.9	27.2	27.4	27.7	28.0	28.3	28.6	28.8	29.0	29.3	29.4	29.6	29.9	29.9	29.8	30.0	30.3	30.3	30.4	30.5	30.6



* Per store figures

Source: Seven Eleven Japan, “Corporate Outline 2004.”

How Top Firms Build Business Agility

- Define sacred transactions—what's not changing.
- Debate the architectural implications of every significant IT investment decision.
- Articulate measurable benefits of every major business initiative and assign accountability for achieving those benefits.
- Remember to leverage the platform for business agility (short-term growth) while innovating off the platform for long-term growth.
- Invest in your people!

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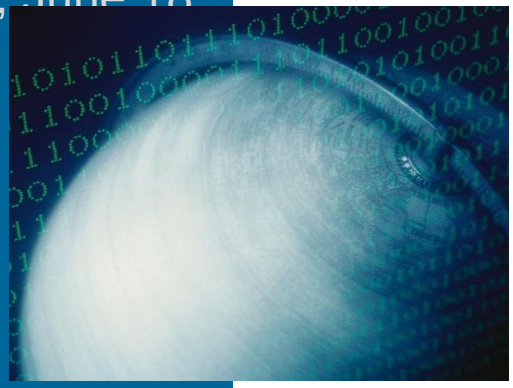
MIT CISR Summer Session 2010

Generating Business Value from IT: Leadership Challenges in a Digitized World

~ A series of five one-day workshops on how to make IT a strategic asset

Monday, June 14 – Friday, June 18, 2010



Workshop Location:
MIT Sloan School of Management

Monday, June 14
Maximizing Business Value in IT Savvy Firms

Tuesday, June 15
IT Leadership in a Business Transformation

Wednesday, June 16
Driving Competitive Advantage Through Agility and Innovation

Thursday, June 17
The IT Unit of the Future: New Technologies, New Designs

Friday, June 18
Engaging All Executives in IT Decision Making

For more information or to apply to attend, please go to http://cisr.mit.edu/events/calendar/cisr-summer-session/

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