

## **NEXT GENERATION ORGANIZATIONAL MODELS FOR IT MANAGEMENT**

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### **OBJECTIVE**

- What insights will guide the organization of the IT function in firms?
  - What will be the strategic role of the IT function?
  - Are there specific organizational models?
  - What is the guiding organizational logic?



## AGENDA

- Earlier thinking on the topic
- Why a fresh rationale is needed
- Research Findings
- Prescriptions

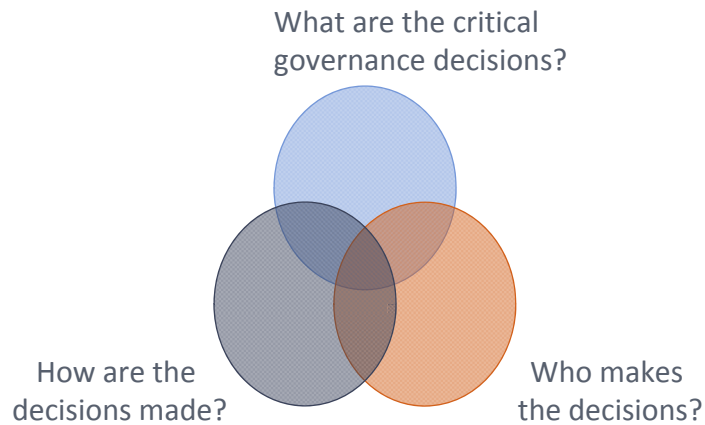


## ORGANIZING THE IT FUNCTION: EARLIER THINKING

- A Governance Perspective
  - Decision rights to direct, oversee, and control firm's investment in and use of IT assets, solutions, and services
  - Allocation of rights across IT and business managers
  - Structures and processes for coordinating the actions of different stakeholders



## DESIGNING IT GOVERNANCE



## CRITICAL GOVERNANCE DECISIONS

- *Strategic IT Principles:* What is the firm's IT strategy?
    - What is the strategic role of IT?
    - What should be the level of investment in IT (assets and capabilities)?
    - What are the legitimate business case development approaches?
    - What are the metrics for assessing IT performance?
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## CRITICAL GOVERNANCE DECISIONS

- *Demand side governance*: What are the priorities for strategic use of IT?
  - How should valuable opportunities for the use of IT be identified?
  - How should strategic IT applications be justified?
  - How should the requests for IT applications be prioritized?
  - What should be the divisional and enterprise portfolio of IT applications?
- *Supply side governance*: How should IT products, solutions, and services be delivered?
  - What should be the nature of the IT infrastructure?
  - What should the nature of the enterprise architecture?
  - What standards should guide the delivery of IT services?
  - How should IT talent be developed, managed, and deployed throughout the enterprise?
  - How should sourcing strategies be developed and managed?
  - How should the risks of IT assets and services be assessed, monitored, and mitigated?


## WHO MAKES THE DECISIONS?

- |                         |  |
|-------------------------|--|
| ○ Corporate management  | ○ Authority for the strategic IT principles                            |
|                         | ○ Oversight of IT risk and value                                       |
|                         | ○ Approval of large scale investments and mission critical IT projects |
| ○ Divisional management | ○ Demand side governance   |
| ○ IT management         | ○ Supply side governance   |
| ○ External partners     | ○ Technical knowledge and skills                                       |
|                         | ○ IT assets and services   |

## HOW ARE DECISIONS ARE MADE: ZONES OF DECISION AUTHORITY

- Corporate IT: an enterprise IT perspective
  - Divisional IT: a business unit IT perspective
  - Corporate management: a CxO level perspective
  - Divisional management: an operating area (business unit, functional department) perspective
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## HOW DECISIONS ARE MADE: BASIC GOVERNANCE STRUCTURES

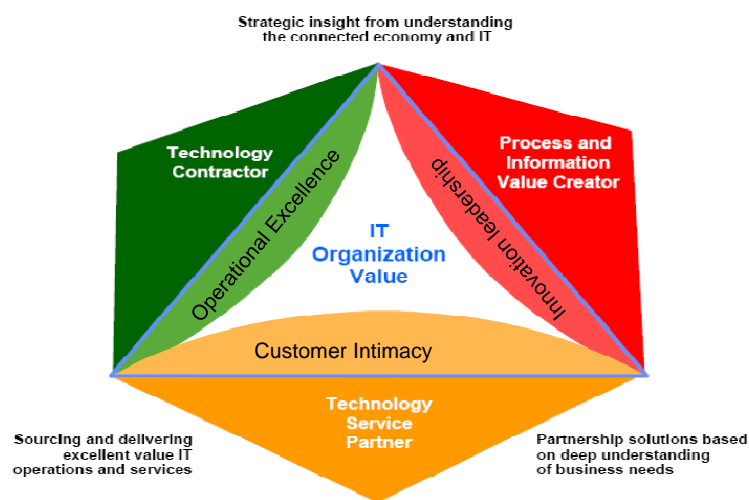
- Centralized: Key governance decisions made from an enterprise-wide perspective
  - Decentralized: Key governance decisions made from an operating area perspective
  - Federal: Some key governance decisions made from an enterprise-wide perspective and others from an operating area perspective
    - Strategic IT principles: Corporate management
    - Demand side governance: Operating area management
    - Supply side governance: Corporate IT and operating area IT
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## A LOOK BACK AT THE GOVERNANCE PERSPECTIVE

- Relevant for positioning the IT function as an effective internal services provider
  - Decentralization of decision rights was a response to internal client responsiveness
- However, most firms today have converged toward two models
  - Centralized, with account management orientation
  - Federal
- Does not provide adequate guidance for a changing role of the IT function
  - Positioning IT as a strategic differentiator and innovation catalyst



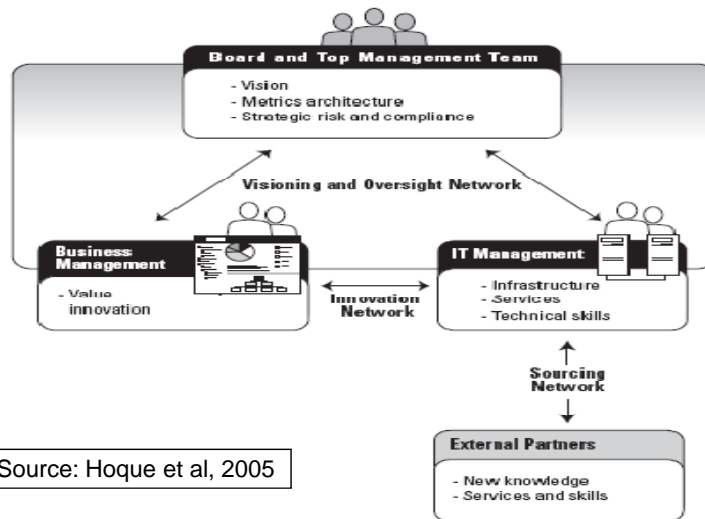
## THE VALUE PROPOSITION OF THE IT FUNCTION



Source: Gartner, 2006



## AN EMERGING NETWORKED MODEL



## EMERGING DESIGNS FOR ORGANIZING THE IT FUNCTION

### Value Creator

The Partner Model

**IT is an active partner in business innovation**

### Service Partner

The Platform Model

**IT provides the assets, services, and resources for business innovation**

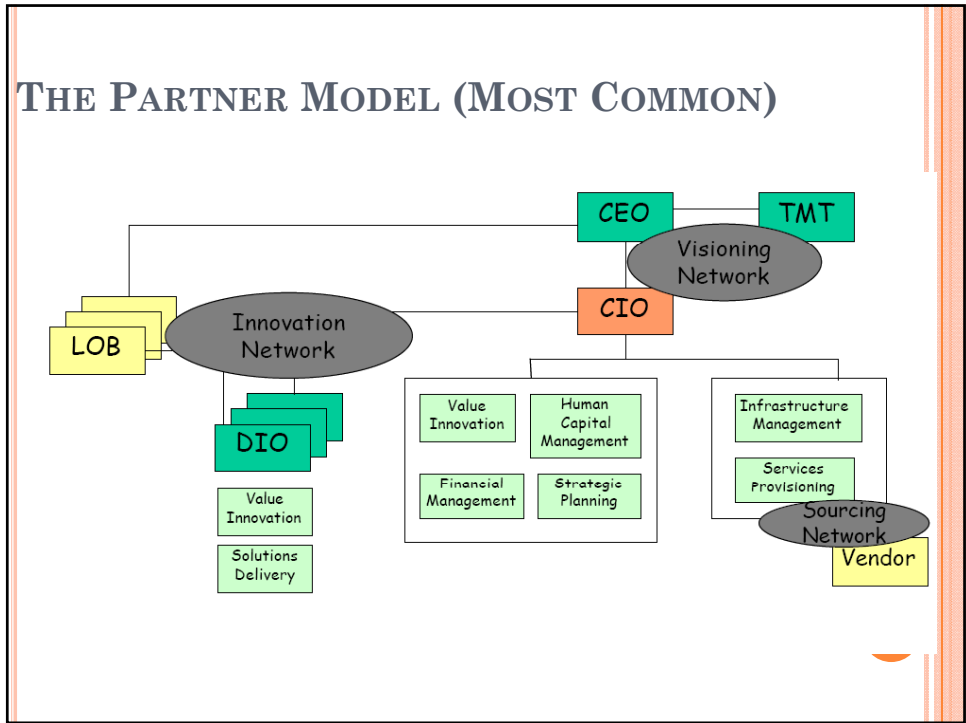
### Technology Contractor

The Scalable Model

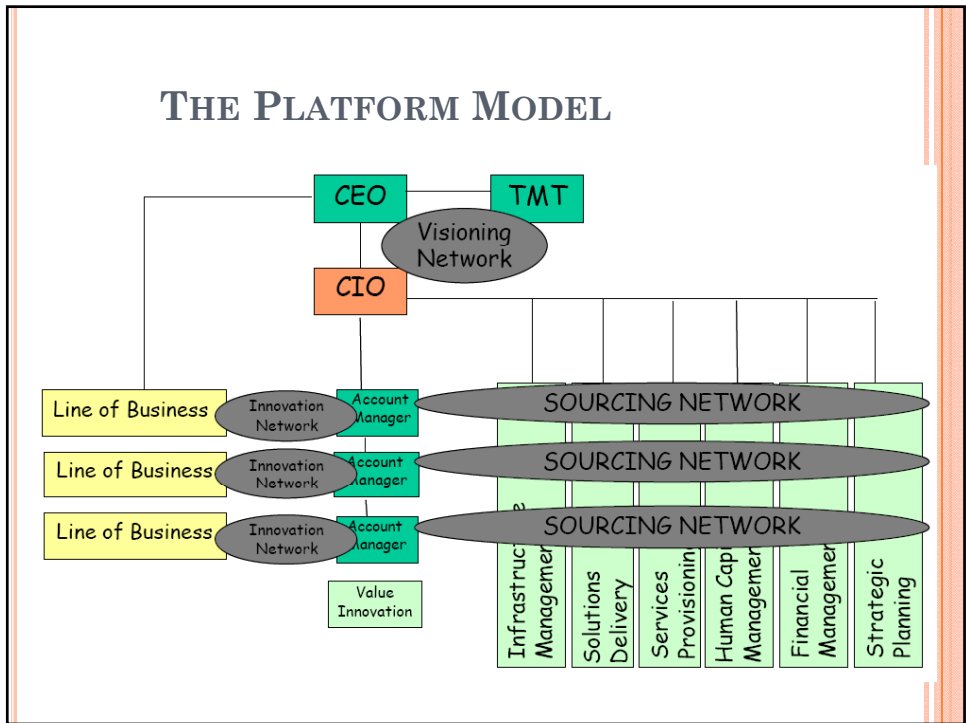
**IT provides flexible and scalable resources for the business**

Agarwal and Sambamurthy, 2002

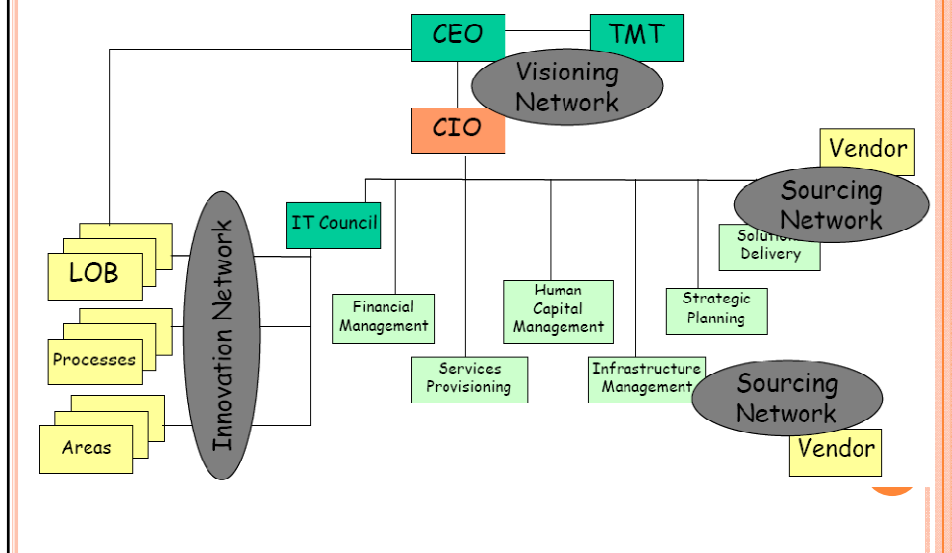
## THE PARTNER MODEL (MOST COMMON)



## THE PLATFORM MODEL



## THE SCALABLE MODEL



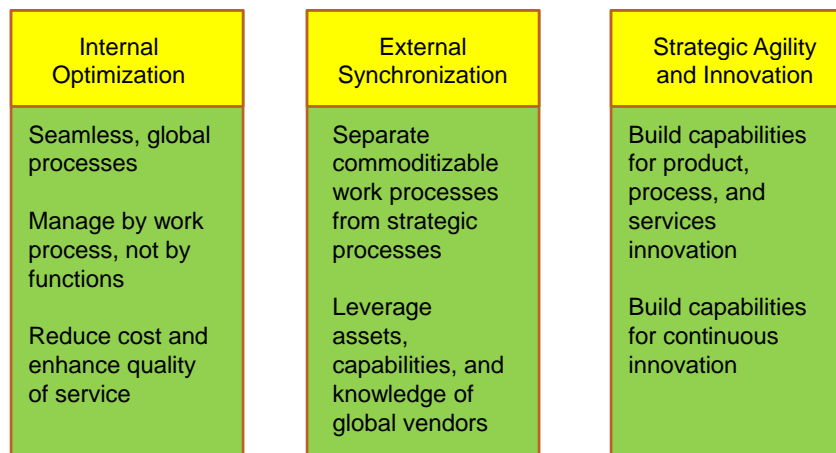
## WHY ARE FRESH INSIGHTS NEEDED?

- Information technologies are the platform for organizational productivity, growth and innovation
  - Digitization of global business processes and operations
  - Enabler of agility, partnership networks, and customer centricity
  - Platform for communication and collaboration
- CxOs and boards are seeking a better understanding of their firm's IT investments, strategies and deployments
  - IT value and risk visibility
- Firms are increasingly leveraging global sourcing options for business processes and IT services
  - Emphasis on solution and services integration
  - Innovative models of IT services delivery
    - SOA
    - Grid, shared service computing, virtualization
- Acceleration in the transformation potential of current and emerging information technologies
  - Consumerization of information technologies
  - Web 2.0

## THE RESEARCH APPROACH

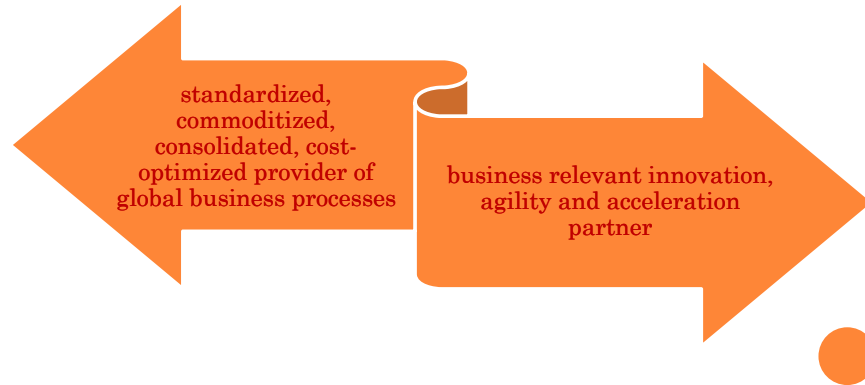
- Case studies of firms across multiple industries
  - Industry leaders
  - Global footprint
  - Demonstrated record of sustained business success and IT leadership
- Interviews with the CIO, senior IT executives and senior business executives

## FINDINGS: THREE STAGES OF CORPORATE TRANSFORMATION



## THE IT IMPERATIVE

*The next generation IT function will seamlessly create complementarities between two vastly opposing forces*



## QUALITATIVE INSIGHTS FROM THE CASE STUDIES

- Each firm is at a different point in the corporate transformation
  - Looking across these three gives a vantage view of key enablers and challenges
1. Company A - \$13.6 billion branded food manufacturer
  2. Company B - \$83.5 billion branded consumer goods leader
  3. Company C - \$120 billion privately held commodities giant
  4. Company D - \$60 billion IT products leader

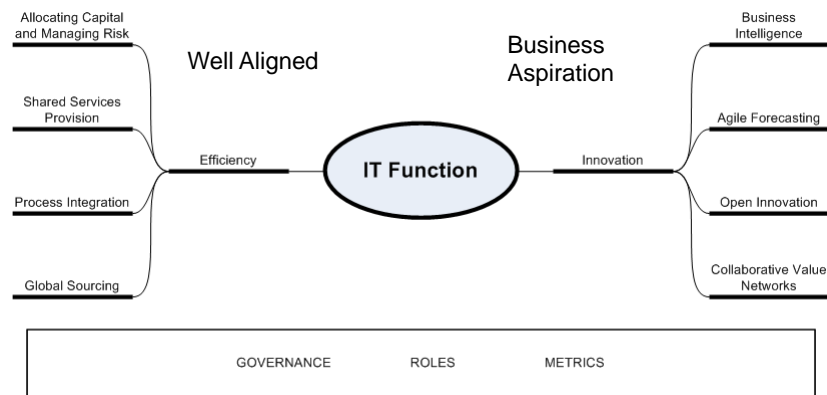
## COMPANY A: STRATEGIC PROFILE

- Global footprint, industry leadership
- Accomplished high level of success with internal optimization
  - Deployed seamless global processes with an ERP platform (early leader in its industry)
  - Highly optimized for cost efficiency
- New strategic priorities are emerging
  - Greater leveraging of business intelligence
  - Greater leveraging of Web 2.0 in consumer marketing



## NEXT GENERATION IT FUNCTION SCHEMATIC MODEL

Stage 1: Internally Optimized



## COMPANY A

- IT function highlights
  - IT budget is 1.6% of revenues
    - Peers at 2.5% plus
  - High quality IT capabilities (e.g., project management)
  - N. America runs on a single instance of SAP
    - Recent blockbuster acquisition of an internationally focused player
    - Global IS seeking increasing attention
  - High degree of standardization in hardware, software and application platform
  - No significant global sourcing
    - Small captive in Mumbai
  - Strong IT-HR practices
    - College recruiter of choice
    - Current year attrition less than 1%



## COMPANY A - GOVERNANCE

- Strategy council meets annually
  - VP, IS + business unit heads
  - Key capital allocation decisions
  - Ensure that technology environment remains business relevant
  - Focus so far has been
    - Reducing costs through process efficiencies
    - Reducing costs through better planning
    - Minimize maverick spend
    - Standards discipline
  - Practice project and portfolio management
- Outgoing CIO came from the Finance function
- Incoming CIO comes from supply side of the business
  - Will shift focus on creating innovation opportunities with suppliers through knowledge and data sharing



## COMPANY A - ROLES

- Business relationship managers
  - Sit with business, closer to needs
  - Report to IS
    - Necessary for career progression of IS folks
- Just added “IT Strategic Planner” role for international expansion
  - Reporting to VP, International Finance and IS
- IT-HR separate from corporate HR
  - Rotation
    - 3 in first five years
    - Pay for continuing education
    - Technologies
    - Business process exposure
- Deep vendor partnerships




## COMPANY A – MOVING FORWARD


- More critical cross-divisional priority setting
  - Not reinforce status quo
- More insights to sales and marketing from real-time integration and analysis of multiple data streams
  - “we need good insights fast...”
- Greater customer-brand intimacy through emerging social web
  - “Can IS unit help marketing build personalized relationships with millions and millions of people,... we have transactional behavioral data on the usage of our brands on our sites and our newsletter, and we have millions of names, and the data that is throwing off is an enormous treasure trove...”
- Value networks
  - Connecting upstream supplier and downstream customers in a real-time transparent manner




## COMPANY B

- Ten year journey to create an exemplary global business services platform
    - IT embedded in GBS since 2004
  - Path of internal process optimization → outsourcing of non-strategic aspects
  - Positioned at Stage 2: External synchronization
  - Key driver of outsourcing is the freeing up of intellectual capacity to provide innovations to global business units
- 


## COMPANY B - GOVERNANCE

- CIO sits on board
    - No strategic council
      - “view it as an abdication of responsibility...”
  - Mindset change
    - From IT being a provider of technology to IT as a provider of solutions
  - Separate investments in reducing costs from operations to investments in innovation
  - Portfolio process focuses on big areas
    - Standardization
    - Virtualization and modeling
    - Rapid scale
- 

## COMPANY B - ROLES

- Client managers
    - IT people that are constant touch with line leaders
    - Rewarded for results in business units
    - Careers within GBS
  - Relationship managers
    - Track and monitor SLAs
    - Initiate new projects
    - Manage contracts
    - Develop scorecards for vendors and partners
      - Results highly correlated with maturity of sourcing scorecards
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## COMPANY B - INNOVATION

- Keep IT relevant to businesses innovation needs
    - Web based personalization services on a global scale to brands
    - Open innovation provision to facilitate rapid, low cost product R&D
    - Prediction market services to forecast demand and ideation evaluation
    - Virtual reality services to reduce product development costs and get products to market faster
- 

## COMPANY B – MOVING FORWARD

- Real time “flow-to-work”
  - Highly fluid resource model that flows towards top corporate priorities
    - “a design shop where people fill up according to needs of the hour”
  - Establish one-on-one connections with customers and suppliers
  - High emphasis on virtualization, modeling and predictive capabilities
    - Future scenarios need to be anticipated, planned for, and influenced!
- *Moving toward Stage 3: Strategic Agility and Innovation*




## COMPANY C

- Highly decentralized 27 global business units
- Aspiring to Stage 1: Internal Synchronization
- IT being used to being define an integrated corporate strategy on a platform of standardized business process
  - *Project Spartan (name changed)*
    - *Across platform ERP implementation and process redesign in progress*
    - *Objective is to “stretch the frontiers of economies of scale”*
    - *2015 expected completion*
- *“Incredible knowledge based company...How can we capture this knowledge and make it flow easily globally?”*




## COMPANY C - GOVERNANCE

- IT currently at business unit level
  - Global budget with costs allocated to business units
  - Strong portfolio and project management practice
    - IT pioneered real-option thinking to R&D and plant openings
    - All had common pain points
    - Stage gating is big
  - Still evolving – the right level to look at portfolio
    - Corporate, function, BU?
  - Portfolio review team is key governance mechanism
    - Helps demand funneling
- 


## COMPANY C - ROLES

- BU IT lead reports to platform leader
  - Two-three business relationship managers in each platform
    - Monitor budgets
    - Project management and delivery
    - Overall SLA responsibility
    - Careers in IT function (matrix reporting), with some inputs from businesses
  - Vendor relationship managers
    - Working closely with system integrator for Project Spartan
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## COMPANY C- MOVING FORWARD

- IT will emerge out of current “comfort zone”
    - More proactive in shaping business
    - Driven by key drivers of cost and future build-out
  - Future growth dependent on
    - Emerging digital infrastructure supporting integrated business processes
    - Greater intimacy with customers
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## COMPANY D – GOVERNANCE

- Historically very decentralized
    - New CIO came in three years ago with a mission to bring in governance discipline
    - Process revealed IT and business process inefficiencies
  - Created a governance council that is functionally aligned with major BUs
  - Application prioritization is key
    - Have eliminated 1000 applications in three years
  - IT investments \$\$ are aligned/allocated to businesses
    - “pro-forma bill for the cost of running HR”
    - Two part tariffs
      - Cost based
        - Infrastructure costs are allocated per person in the BU
      - Consumption based
        - Additional consumption model allows businesses to get above baseline services “on demand” for additional \$\$\$
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## COMPANY D – IT PRODUCTS GIANT

- Highly technologically savvy
  - Great for decentralized innovation
  - However, significant governance challenges
  - 1/3 of overall budget innovation oriented towards new application engineering
- IT function serves as an in-house “dogfooding” partner for stress testing of consumer facing products
- Key services provided by IT function
  - Application engineering
  - Business alignment
  - International expansion
  - Engineering – “run everything”

## GOVERNANCE PROCESS EXAMPLE

- VP-HR has a budget of \$20M for IT
  - Requests 84 projects (clearly exceeding budget)
    - Cost estimation for 84 projects onerous
  - Day long business IT forum resolves this “sitting across the table”
    - Proposed projects are lined up against key strategic initiatives of HR
      - 29 out of 84 projects survive the pruning process
    - Full IT and business costs are estimated for these
    - Leads to further prioritization and pruning
- Only additional projects that are done outside of this process
  - Compliance
  - Across company initiatives that come out of common bucket

## COMPANY D- ROLES

- Each major business unit {Finance, Legal, HR; Licensing and Operations; Sales and Marketing; Services} has IT coverage
  - Relationship manager
    - Ideally would be “at the table” when Bus conduct annual strategic planning
      - Not yet there fully
      - “One throat to choke for BUs”
  - Service manager
    - Constantly prioritizing list of things to be worked on
    - Each manager has her priority list
    - Governance process then applied across services
- Cost based models of engagements
  - Managers report within the IT function
- Consumption based models of engagement
  - Dotted line relationships of service managers to BUs

## COMPANY D – MOVING FORWARD

- Increased role of solutions delivery team as “enabler of corporate strategy”
  - Bridge between BUs and engineers
  - Business process simplification is the biggest ongoing innovation being provided by the IT function
- Outsourcing strategy
  - Very open and constantly looking out for opportunities
  - No big-bang approach
    - Precise || prescriptive || discrete || leveraging other providers’ best practices
  - Internal optimization is necessary first
  - “my mess for less” does not work
- Worry about “un-thought of” risks associated with ever increasing digitization of business processes
  - Cloud -- > blurring boundaries between personal and enterprise computing
  - Rights managed content

## CLOSING THOUGHTS

- A few emerging maxims
  1. IT function is the custodian of corporate business processes
  2. A natural path toward long-term impact is one that emerges from cost-optimization and lean standardization and forges toward front-office innovations in product design, value networks of supplier and customers and data driven analytics
  3. Most companies recognize the need to start with internal optimization as the foundation
  4. A broader set of roles, processes, and organizational units will become the building blocks of the IT function

## EMERGING ROLES AND PROCESSES

### Roles

- Chief Information Officer
- Account manager/Divisional Information Officer
- Chief Technology Officer
- Director, Program/Portfolio Management
- Director, IT Finance
- Director, IT Strategy
- Director, Enterprise Architecture
- Director, Vendor Relationship Management
- Director, IT Risk and Audit
- Director, IT Security
- Director, IT Human Resources
- Manager, IT Communications

### Processes

- Strategic planning
- Budgeting
- Investment approval
- Infrastructure management
- Application portfolio management
- Business solutions development and integration
- Project management
- End user support planning and provisioning
- IT human capital management
- IT product/services procurement
- IT risk assessment and mitigation

## EMERGING ORGANIZATIONAL UNITS

### IT Investment Board

- Head of IT Finance (e.g. CFO of IT)
- CIO
- CFO
- Selected Business SVPs

### Business Technology Council

- Head of IT Strategy
- CIO
- Selected Business SVPs
- Head of IT Applications
- Functional Area Leads
- Client Relationship Managers

### Divisional Project Approval Committee

- Divisional Functional Heads
- Divisional CFO
- Divisional PMO and Finance rep.
- Divisional CIO, Divisional CTO
- Enterprise Functional Leads
- IT Directors

### Corporate Project Approval Committee

- Head of Portfolio & Program Mgt.
- Head of Enterprise Architecture
- Head of IT Strategy
- Business Strategy Analyst
- Finance Representative

### Office of Architecture & Standards

- Head of Enterprise Architecture
- Business Architects
- Technical Architects
- CIO
- CTO

### Office of the CIO

- Chief Information Officer (CIO)
- Chief Technology Officer (CTO)
- Head of IT Security
- Head of IT Risk
- Head of IT Finance
- Head of IT Strategy
- Head of IT HR
- Head of Vendor Management
- Head of IT Application Areas
- Head of Portfolio & Program Mgt.
- Head of Enterprise Architecture
- Head of IT Communications

### Functional Groups

- IT Director
- IT Strategists
- Business Analysts

### Project Teams

- Project Managers
- Business Analysts
- Technical Analysts
- Developers
- Trainers

## CLOSING THOUGHTS

- External IT vendors and services providers are going to be more prominent in the effectiveness of the IT function
- However, external partners will primarily complement the internal IT capabilities
- CIOs increasingly seek to own
  - Development of the business architecture (internally optimized process architecture)
  - “we need to clean our own mess, not depend on an external partner”

## CLOSING THOUGHTS

- Where can IT services firms add value in the corporate transformation?
  - Capabilities for enterprise systems implementation (program management)
  - Capabilities for provisioning of commoditizable processes, services, and solutions
  - Capabilities for business innovation (web 2.0, personalization)



**THANKS**  
*BAPNA AND SAMBAMURTHY*

