



# Outsourcing Infrastructure Services

Ing. Vladimír Vágner



# About the lecturer

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- Graduated – Vysoká Škola Báňská, Ostrava 1987
- Career
  - Production Operations manager
  - AT&T Complex Solutions mngr
  - HP European Configuration center mngr
  - IBM IT Service management Manager



# Agenda

- Outsourcing business
- IT Outsourcing
- Delivery models
- Service Level Agreement



# Outsourcing business

The outsourcing is the process of engaging the services of a provider to manage essential tasks that would otherwise be managed by in-house personnel.



# Reason for outsourcing

- **Cost saving**
- **Focus on Core Business**
- **Access to Skills**
- **Access to Technology**
- **Flexibility**
- **Accountability**

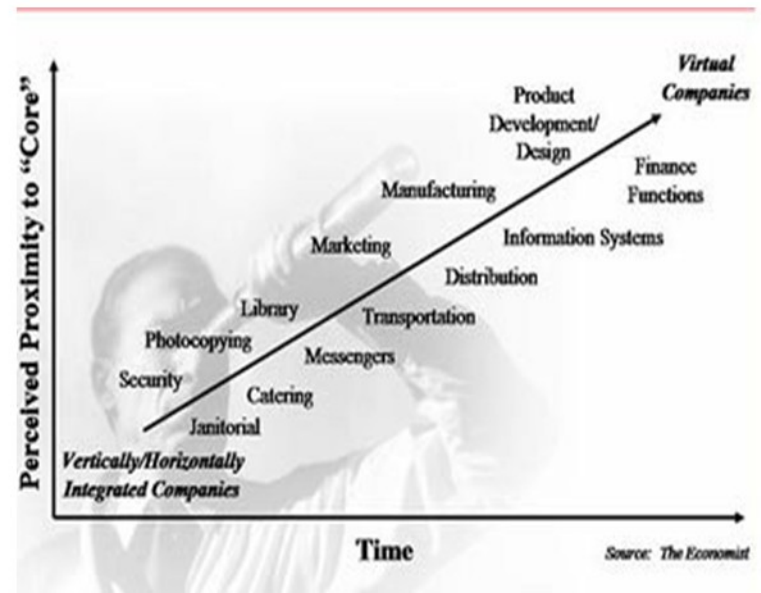
**Top Reasons for Outsourcing**



# Outsourcing decision criteria

Decision criteria	For traditional outsourcing
Primary driver	Cost reduction driven by economies of scale
Measures of success	Performance results, predictability, service level agreements (SLAs)
Client-provider relationship	Technology-based relationship
Risk/reward model	Risks predominantly borne by client; rewards shared by client and provider
Service delivery model	Local resources and partners
Outsourced processes	Non-core, back-office and customer support functions
Skill access	Access to a broad array of skills and services from a single or few providers
Contract	Long duration; rigid terms
Pricing	Fixed cost structures tied to IT performance

## Evolution of outsourcing





# Outsourcing IT

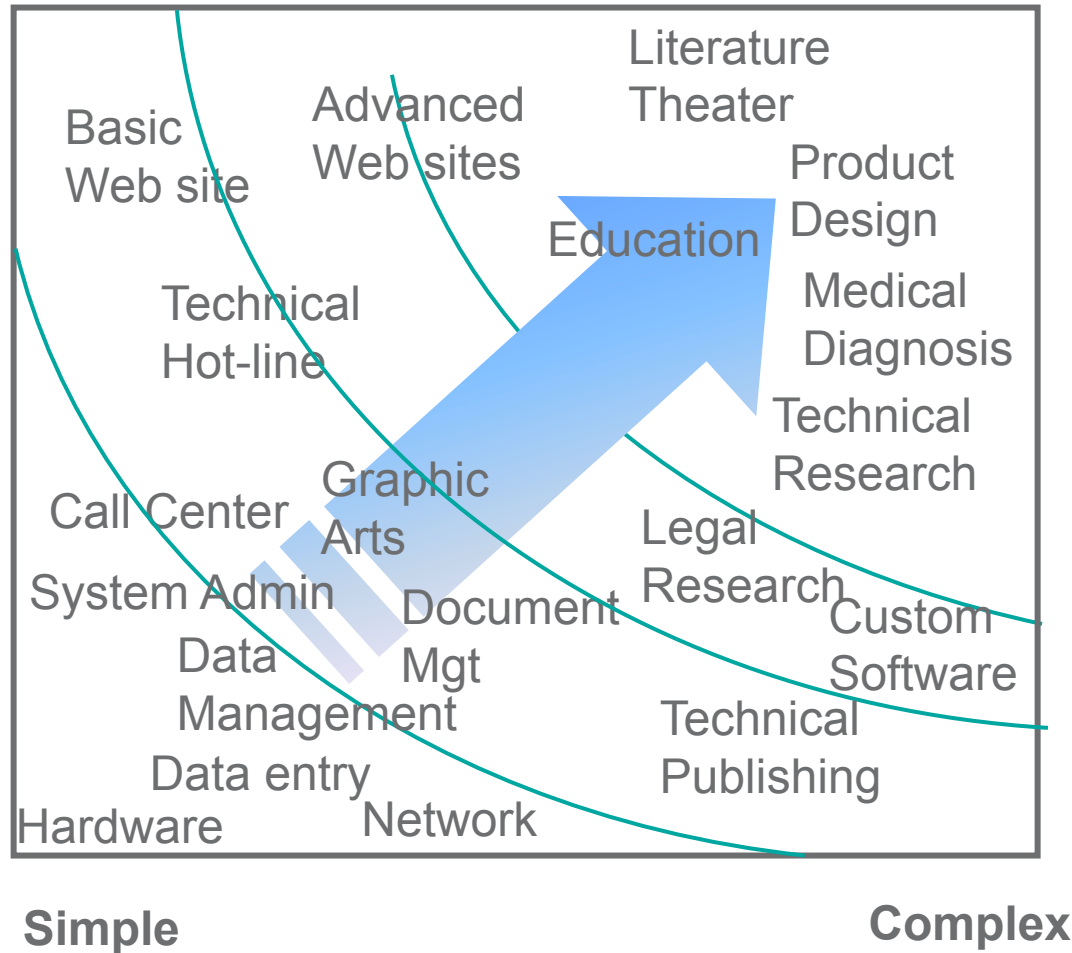


- The concept "outsourcing" came from American Glossary 'outside resourcing' and it dates back to at least 1981.
- The term itself is an artificial construction composed of the words "outside", "resource" and "using"
- IT/IS Outsourcing is the ITC operations, management and development delegation
- IT/IS Outsourcing is the basic requirement for the services industrialization/standardization

# Outsourcing map

**Client**  
**Special**  
**Interactive**  
**Cultural**

**Comodity**  
**Standards**  
**Technology**  
**Off-line**





# A bit of history ...

- Old model – IT Organization centralized, locally outsourced – EDS early 60s ( *Frito-Lay, Blue Cross & Blue Shield*).
- IBM – step into in late 80s – ISSC division => 1989 Eastman Kodak deal = IBM “invented” Strategic Outsourcing.
- 80s and 90s – many new big deals – industry prospers with globalization of the world economy
- In 2005, the IT services outsourcing market was beginning to show signs of maturing: growth was flattening and margins were narrowing as new low-cost competitors from India were proving themselves both nimble and aggressive. At the same time, clients looked to traditional vendors like IBM to offer top value, but at competitive prices.
- IBM, Accenture, EDS, HP as traditional vendors faces new global competition – e.g. TCS, Wipro, Infosys and HCL.



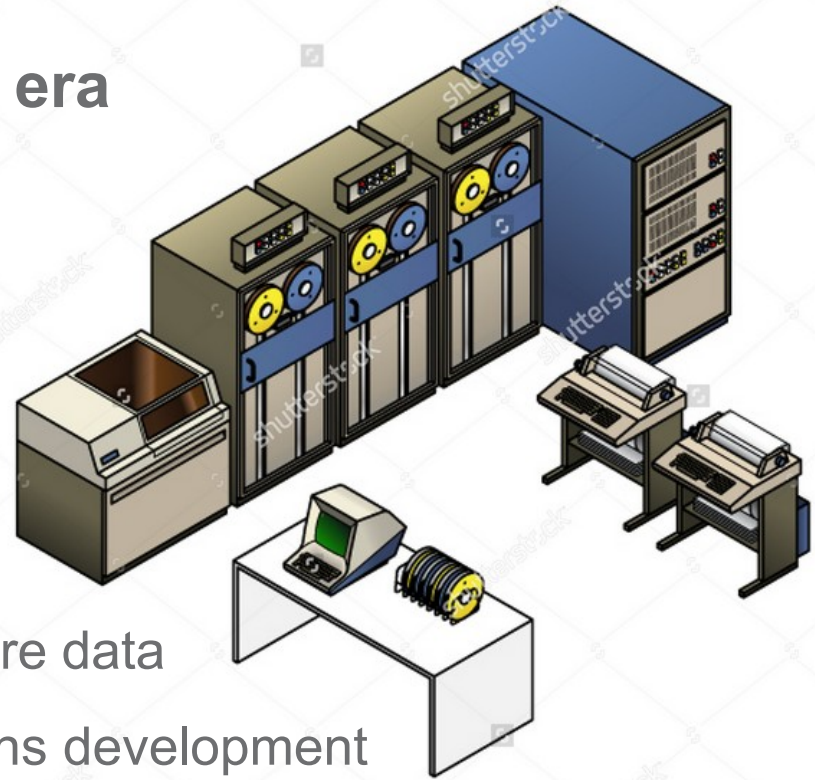
- **0 – 1982 The proprietary solutions era**
- **1982 – 1999 The standard solutions era**
- **1999 – The outsourcing solutions era**



# 0 – 1982 The proprietary solutions era

## Characteristics

- Mainframes and terminals
- Data centers to input, collect and store data
- Batch processing, internal applications development



## “The Era of Fixed Costs”

- High costs of the application development and maintenance
- High dependence on qualified and deficient labor force
- High availability costs

# 1982 – 1999 The standard solutions era

## Characteristics

- PC and PC Servers
- Standard interactive applications
- Data entered by single users



“The Era of Internal and external cost (variable and fixed costs)”

- High investment to HW a SW
- Low return on investment (ROI)
- High availability and security costs



## 1999 – The outsourcing solutions era

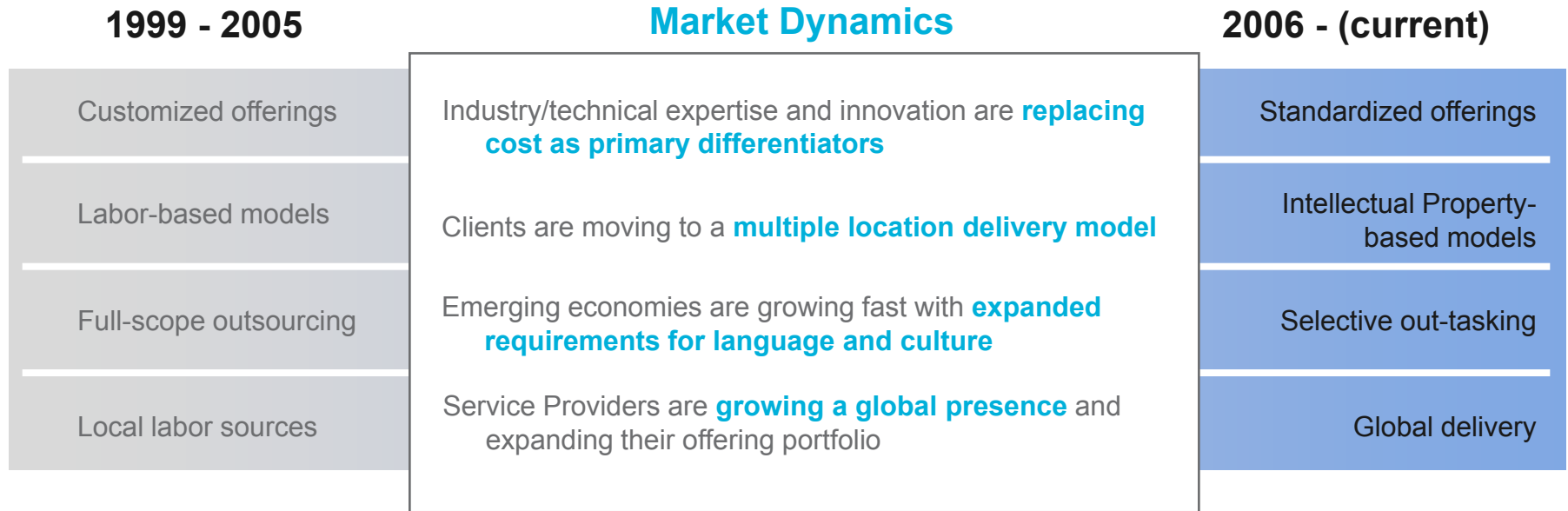
### Characteristics

- HW independence (shared data centers)
- Standard services introduction
- Distributed infrastructure

### “The External costs (variable costs) era”

- Variable costs only – pay for “delivery”
- Independence on qualified and deficient labor force
- High availability and security

Market dynamics are changing and we continue to adapt our business model to execute on our strategy



**Innovation and insight as key differentiators**



## Provider profile for the globally integrated enterprise

- ✓ Global maturity, expertise and resources aligned to clients' aspirations
- ✓ Global governance structure to help ensure consistent quality of service worldwide and the ability to work within local laws, regulations and politics
- ✓ Global delivery model capable of adapting to local differences, changing business conditions and market dynamics
- ✓ Shared technologies and business standards to facilitate worldwide communication and collaboration
- ✓ Proven ability to help clients manage the complexity of the global world





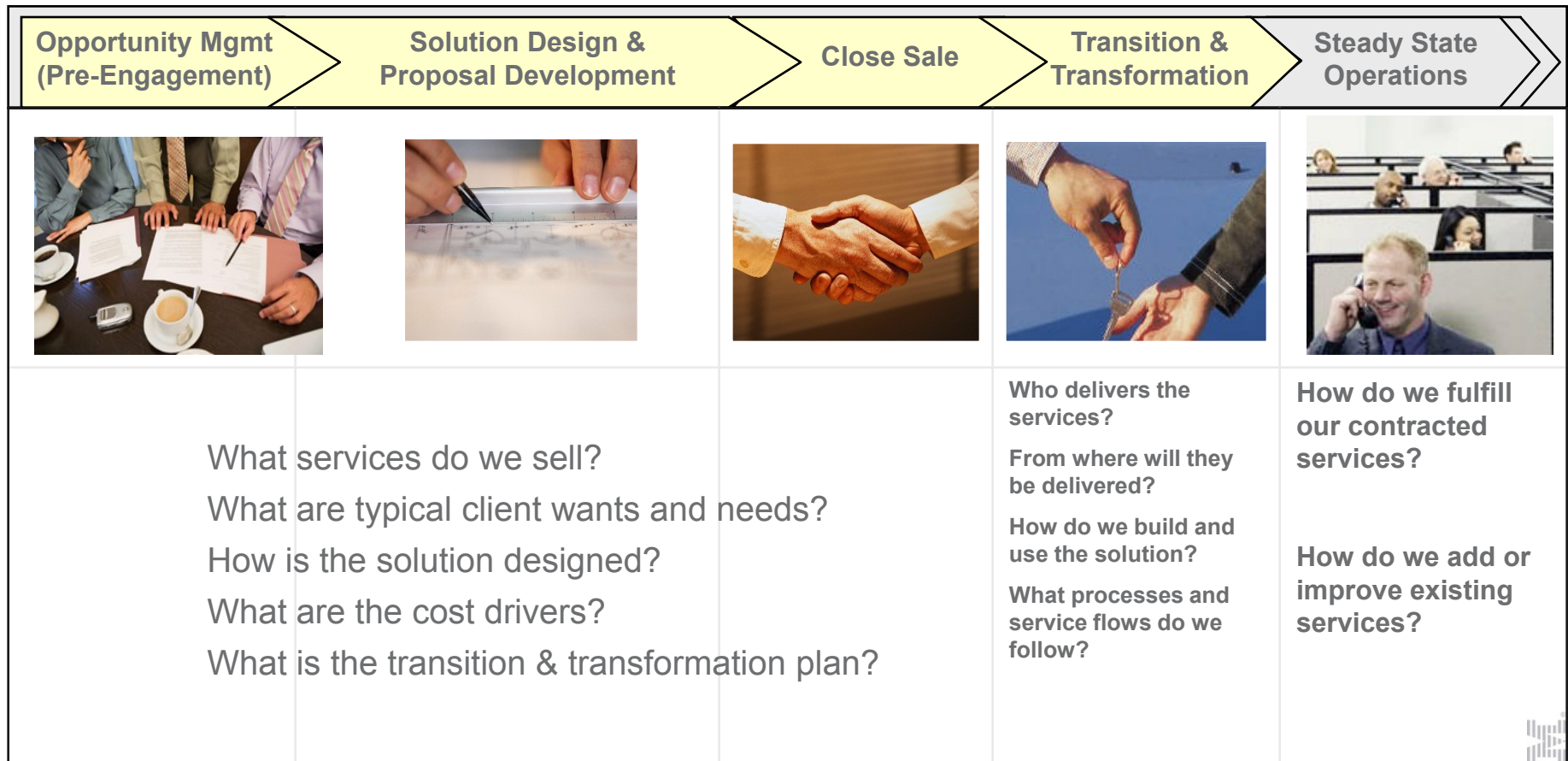
# Outsourcing business models



1. **Staff augmentation** - This model provides specialized resources, cost flexibility and satisfies short-term time-to-market demands.
2. **Out-tasking** - This model is suitable for short-term business needs, to fill skill gaps. However the integration of different out-tasked outcomes may not be a seamless one.
3. **Project-based outsourcing** - Vendors and clients share risks and rewards through this collaborative model. This model has high client benefits as it holds the vendor accountable for an entire project, and allows the application of industry best practices in the outsourcing process. On the other hand, working from project-to-project is a *piecemeal approach to outsourcing*. A more consolidated view of the outsourcing initiative is required, within a unified governance framework. This is provided by the multi-year managed services model.
4. **Managed services model** - This model fosters the development of long-term, multi-year, SLA-based relationships to provide integrated solutions across the enterprise. The service provider takes responsibility and accountability for agreed-upon strategic business outcomes. Projects typically have a large scope and scale and the knowledge gained by the vendor is invested back into the system so that the client's benefits increase year on year. These partnerships allow the sharing of risks and rewards, encourage innovation, embrace business change and contribute significantly to the strategic goals of both partners.

# Basic steps of the managed services model

## Outsourcing is not just the delivery



We differentiate on the basis of HOW we deliver services and apply IBM assets, data, and insights to client's challenges

**Standardize through Process and Work Design:**

- ITIL consistent processes componentized and described in a services catalog
- Embed dispatching that routes work to the right pool of skilled resources
- Defect prevention and best practice sharing across pools

**Globally Integrate through Flexible Skill Deployment:**

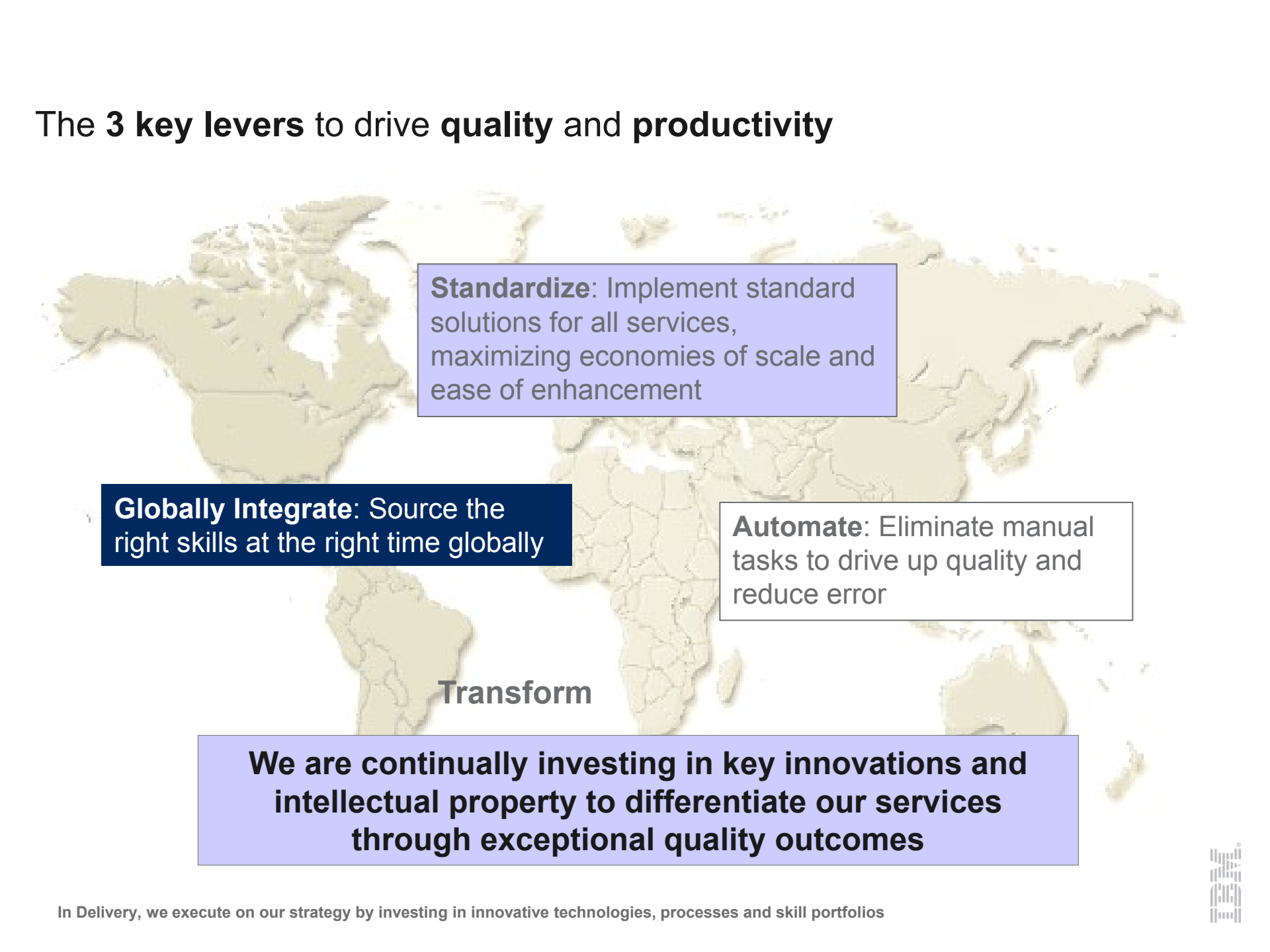
- Labor and skills sourced globally at optimal performance and cost to match client needs
- Scalable pools to meet demand changes
- Strong management systems in place to drive continuous improvement

**Automate through Applied Assets and Tools:**

- Assets from other parts of GTS and IBM integrated in our delivery (SPL offerings, virtualization, Systems Technology Group, Software Group)
- Incorporate our Research capabilities
- Invest in world-class data center capabilities



## The 3 key levers to drive **quality** and **productivity**



**Standardize:** Implement standard solutions for all services, maximizing economies of scale and ease of enhancement

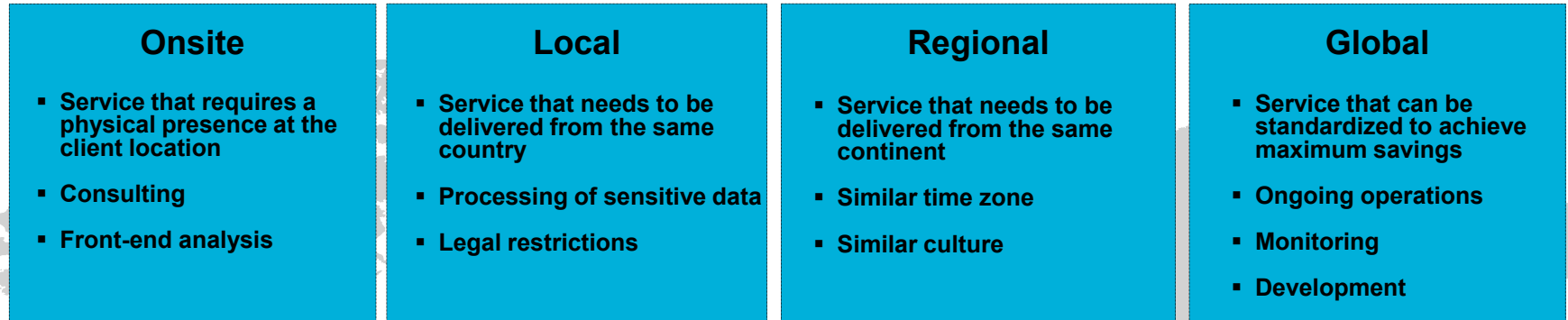
**Globally Integrate:** Source the right skills at the right time globally

**Automate:** Eliminate manual tasks to drive up quality and reduce error

**Transform**

**We are continually investing in key innovations and intellectual property to differentiate our services through exceptional quality outcomes**

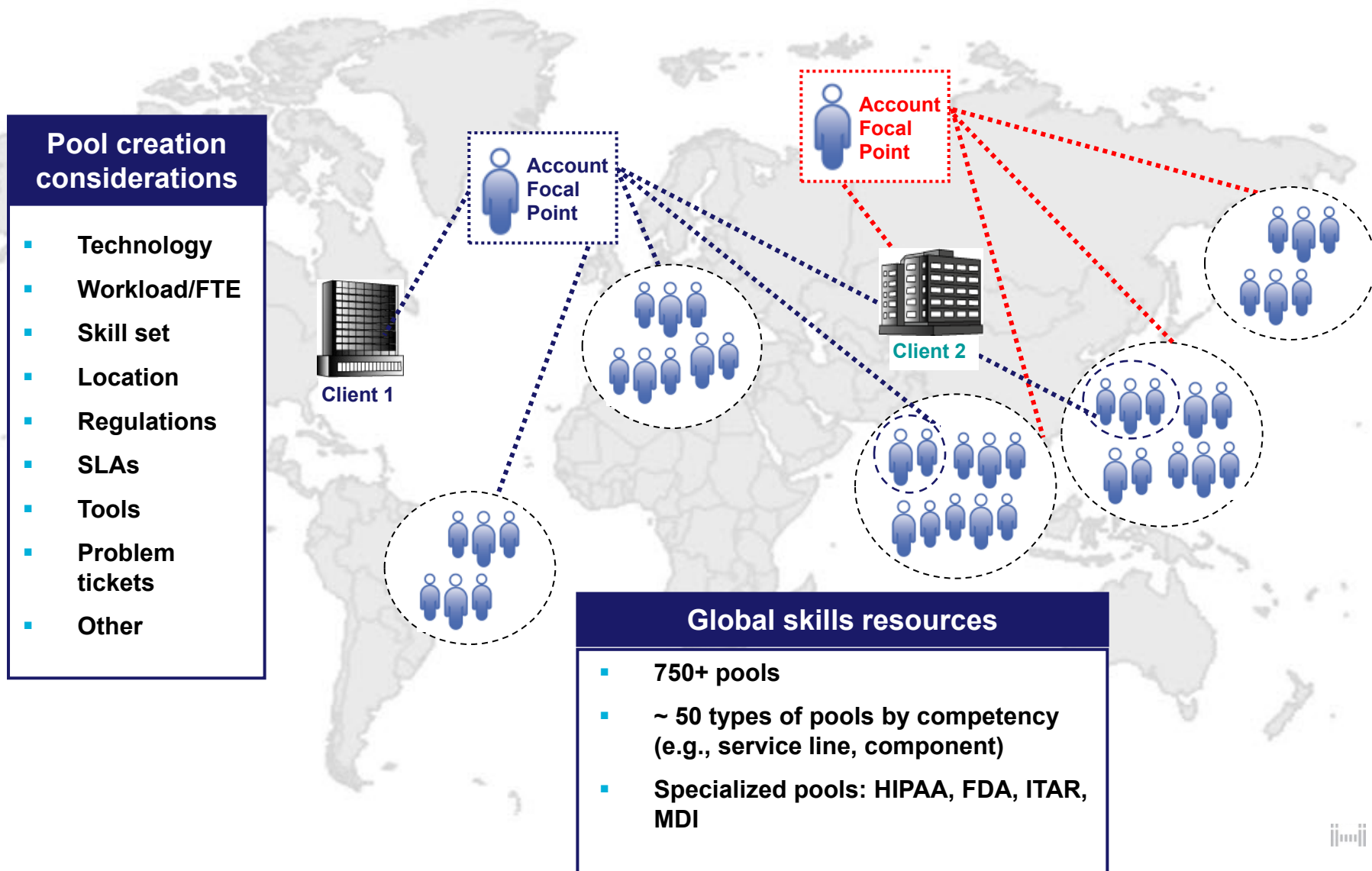
# We have the broadest and deepest talent in the business working together to fulfill our client delivery commitments



*All follow uniform, best-practice service management processes*



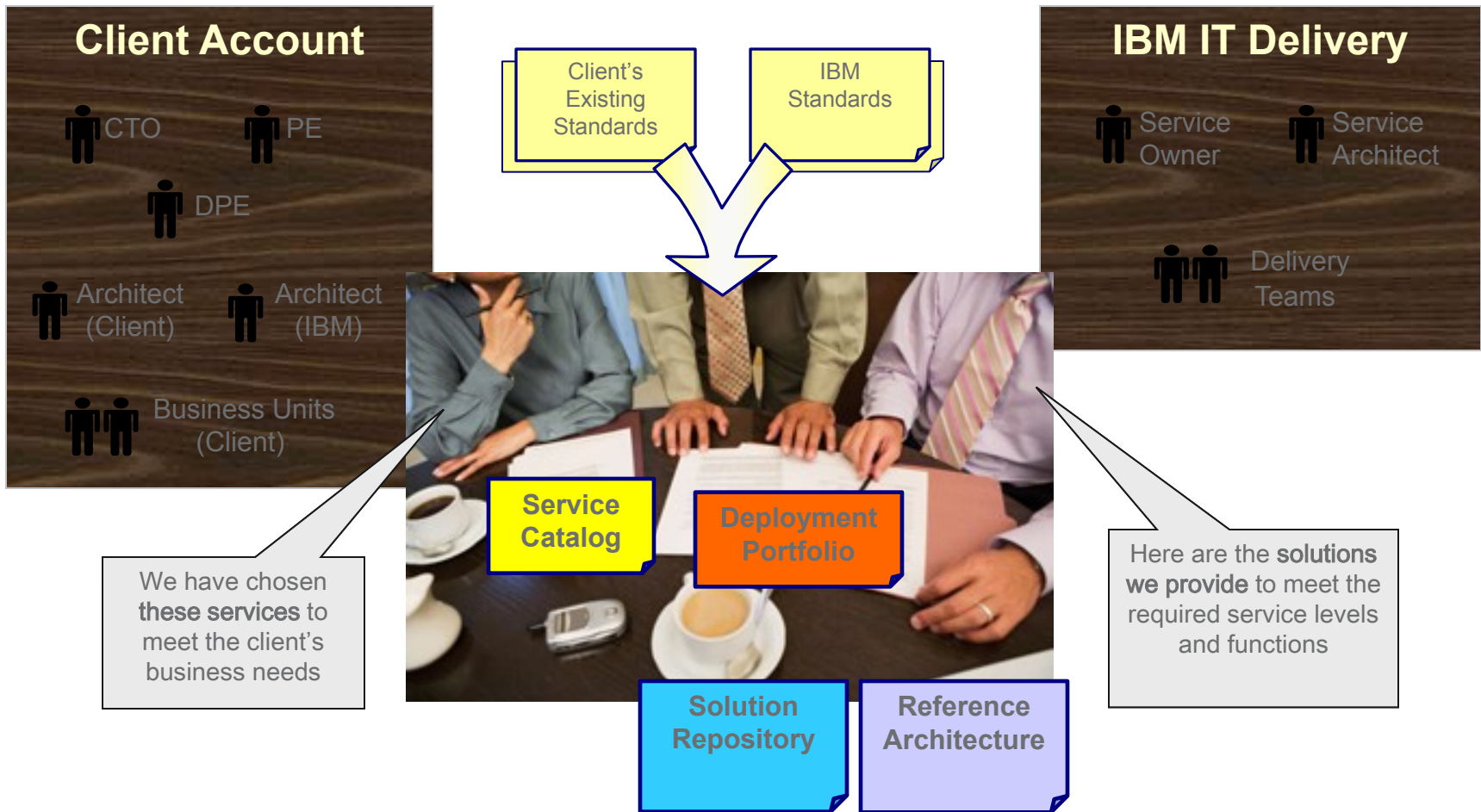
# We can dynamically create work groups/pools across the globe to best meet clients' business needs





# The outsourcing relationships

Accounts and delivery providers benefit most from an IT transformation based on shared, reusable assets. The message here is how important our standardization strategy is in our outsourcing relationships.



Clear and specific roles, processes and proven solutions are essential to the success of these relationships.



# What is the Service Level Agreement (SLA)

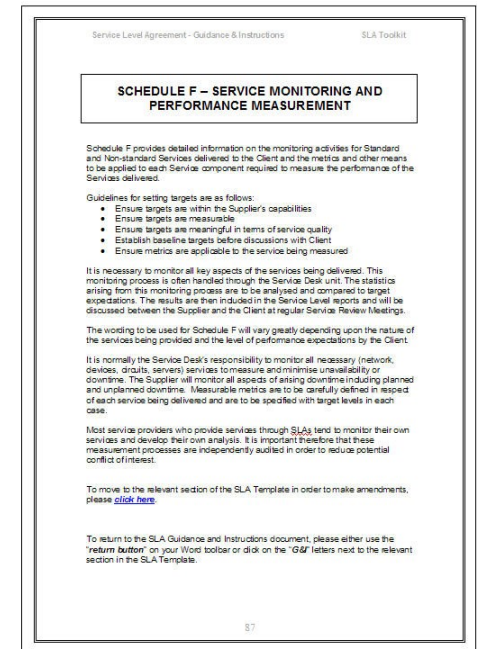
An SLA is a negotiated agreement between two or more parties designed to create a common understanding about the service

It is :

- ❖ A communications tool
- ❖ A conflict resolution tool
- ❖ A living document
- ❖ A method for gauging service effectiveness



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# Service Elements and Management Elements

Service Elements cover the

„WHATs“

WHAT?



Management Elements  
cover the „HOWs“

# Service Elements

Quality of service report

External Services

Time : Tuesday,10,June,2008 - 11 Hours 45 Minutes 24 Seconds

Time : Wednesday,11,June,2008 - 11 Hours 45 Minutes 24 Seconds

Host Name	Service	Availability	Performance	Abs accuracy	Rel accuracy
www.loriotpro.com	Ping/Snmp	100.00%	99.99%	5.35%	0.00%
SMP1 1	TCP[25]	100.00%	99.99%	1.39%	0.00%
Messaging POP	TCP[110]	100.00%	99.99%	1.39%	0.00%

... been created with the LORIOTPRO software solution, Copyright 2005 LUTEUS SARL. All ...  
 ... on of this report is defined in the XSLReportFile.xml file. [www.loriotpro.com](http://www.loriotpro.com)

Service

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# Management Elements



checked

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will be resolved

the agreement



# Seven Key Steps to Establishing a Service Level Agreement



- Review and clarify service/ customer needs and priorities
- Baseline current performance
- Identify performance limitations
- Communicate expectations to staff

- Identify affected customers
- Agree on expectations
- Discuss customer concerns
- Hold open discussions

- Establish ground rules
- Discuss division of responsibilities
- Discuss scheduling issues and constraints
- Discuss communication styles and preferences
- Identify potential roadblocks

- Create SLA structure
- Discuss and negotiate structure
- Create SLA content
- Solicit input / feedback on content
- Finalize draft agreement

- Have all stakeholders review draft
- Address stakeholders questions
- Implement changes
- Gain approval from all stakeholders
- Finalize buy-in

- Develop performance tracking mechanisms
- Establish reporting processes
- Reinforce roles / responsibilities for cross-functional services
- Provide necessary training

- Establish POCs to:**
- Resolve problems related to the SLA
  - Maintain ongoing contact with the other party
  - Conduct service reviews
  - Coordinate and implement modifications to SLA

# Factors that Affects The Timeline of SLA Implementation

- The service environment
- The proximity of the parties
- The span of impact of the SLA
- The relationship between the parties
- The availability of a model
- Prior SLA experience





# The SLA should address the following ...

- A brief service description
- Validity period and/or SLA change control mechanism
- Authorisation details
- A brief description of communications, including reporting
- Contact details of people authorized to act in emergencies, to participate in incidents and problem correction, recovery and workaround
- Business or service hours (e.g. 08:00 to 17:00), date exceptions (e.g. weekends, public holidays), critical business definitions, ..
- Scheduled and agreed service interruptions, including notice to be given and number per period
- Customer responsibilities (e.g. security)



# The SLA should address the following ...

- Service provider liability and obligations (e.g. security)
- Impact and priority guidelines
- Escalation and notification process
- Complaints procedure
- Service targets
- Workload limits (upper and lower), e.g. the ability of the service to support the agreed number of users/volume of work, system throughput
- High level financial management details, e.g. charge codes etc.
- Actions to be taken in the event of service interruption
- Housekeeping procedures
- Glossary of terms
- Supporting and related services
- Any exceptions to the terms given in the SLA



# SLA Objectives example

Service Level	Objective	Common Metric
Web Availability	Measures the availability of the Web-hosted application. This provides the organization with the percentage of time that the applications were available for use in a specific month.	99.96% availability.
Disaster Recovery (DR) Systems	In the event of severing of business services due to a man-made or natural disaster event, the time to restoration of normal business activity.	4 hours.
Storage Area Network (SAN) Availability	The percentage of time the SAN will be available for normal business operations. The goal is often 99.99% uptime.	99.90%
Call Time to Answer	90% of calls will be answered less than 30 seconds by a person after call is front-end-directed by automatic call distribution (ACD).	85% of calls are answered within 30 seconds.
Customer Satisfaction	80% "very satisfied" or "satisfied" for ticket surveys and total user group surveys (customer satisfaction process will not start until six months after contract initiation and project/activity initiation).	80% (4.0 on a scale of 5.0).
Messaging Availability	The percentage of time that messaging infrastructure is available for normal business operations.	99.00% availability.
Application Availability	The percentage of time that the application is available for normal business operations.	99.50% availability.
Variance to Application Budget	Total cost to complete program requirements will come in at the budgeted cost.	Total cost or workload estimates will +/-10% of budget for projects.
Data Network Availability	The percentage of time that the data network is available for normal business operations.	99.5% availability.
Internet Availability	The availability of the Internet to the customer. The percentage of time that the Internet is available for normal business operations.	99.80% availability.
Response Time – Network	Time required for a packet to go between an end-user demarcation point and the host site front-end processor (FEP) or similar device.	0.5 seconds.
WAN Availability	The percentage of time that the WAN is available for normal business operations.	99.90% availability.
LAN Availability	The percentage of time that the LAN is available for normal business operations.	99.90% availability.

Source: Adapted, in part, from Gartner's "Negotiating Effective SLAs for IT Infrastructure, Applications, IaaS and Business" Feb, 2014.



# Example : IT Help Desk SLA

Your Company, Inc. IT Help Desk

Service Level Agreement

Provider of Service  
XXX IT Help Desk staff

Type of Service  
IT Help Desk primary first level support

Service Period  
January 1, 20.. through December 31, 20..

Performance

In order to provide optimal first level support service to all departments, all problem and repair calls must be received by the Help Desk.

The company XXX IT HELP DESK will provide (Customer Name/Department Name) with the following support:

First level problem determination where

1. All problems will be recorded.
2. Problems will be resolved or assigned to the appropriate specialist.
3. Problems will be monitored.
4. Users will be notified of commitment times and any problems that occur in meeting the established commitment.
5. Problem resolution will be documented and available in report status.
6. Monthly reports will be provided.

A single point of contact with the XXX department for

1. Orders for new equipment.
2. Equipment moves, adds, and changes (Equipment includes personal computers, printers, and telephones).
3. Services such as data entry, building access authorizations, new computer user IDs and passwords, voice mail, Centrex lines, mainframe connections, file server connections, reports, and application program problems and requests.

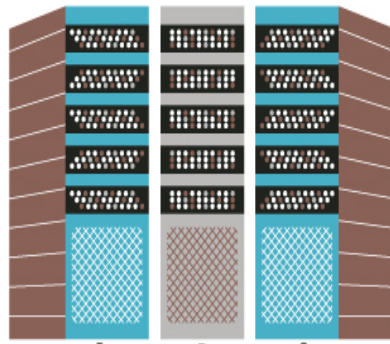
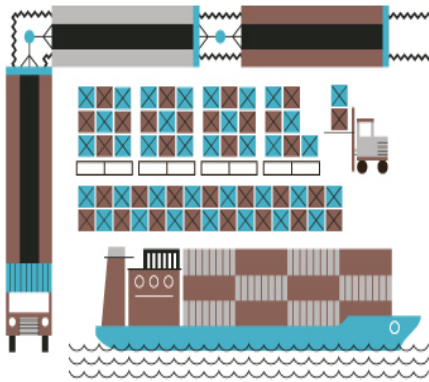


# Will IT Outsourcing Continue to Grow in the Years to Come?

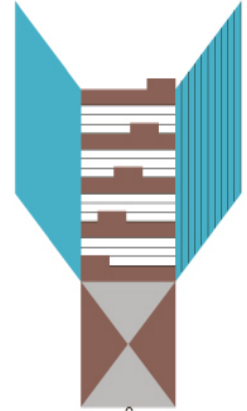
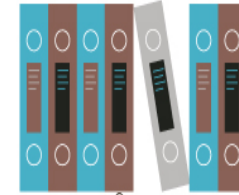
Outsourcing will definitely survive in the future.

To know more come next week again.

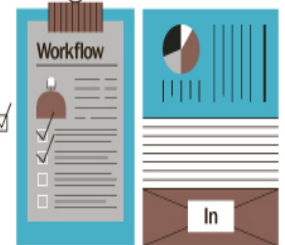
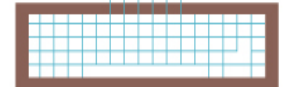
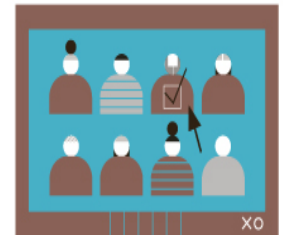
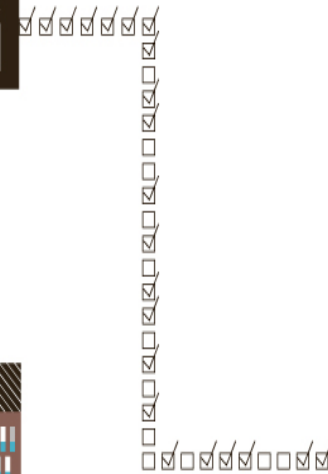
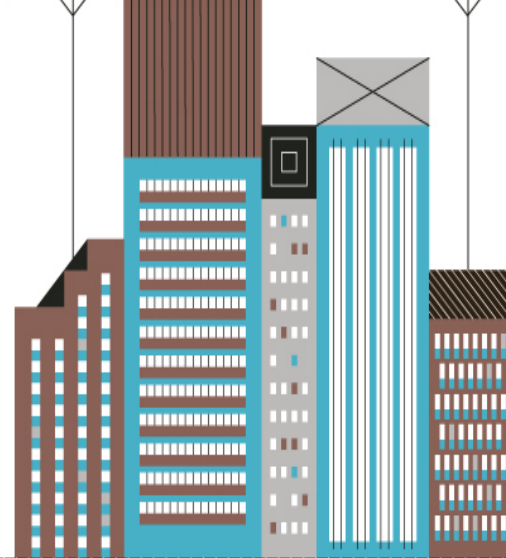
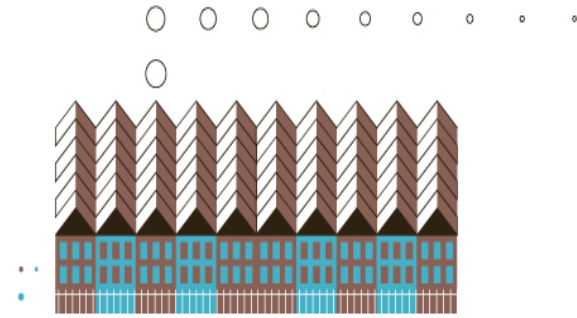




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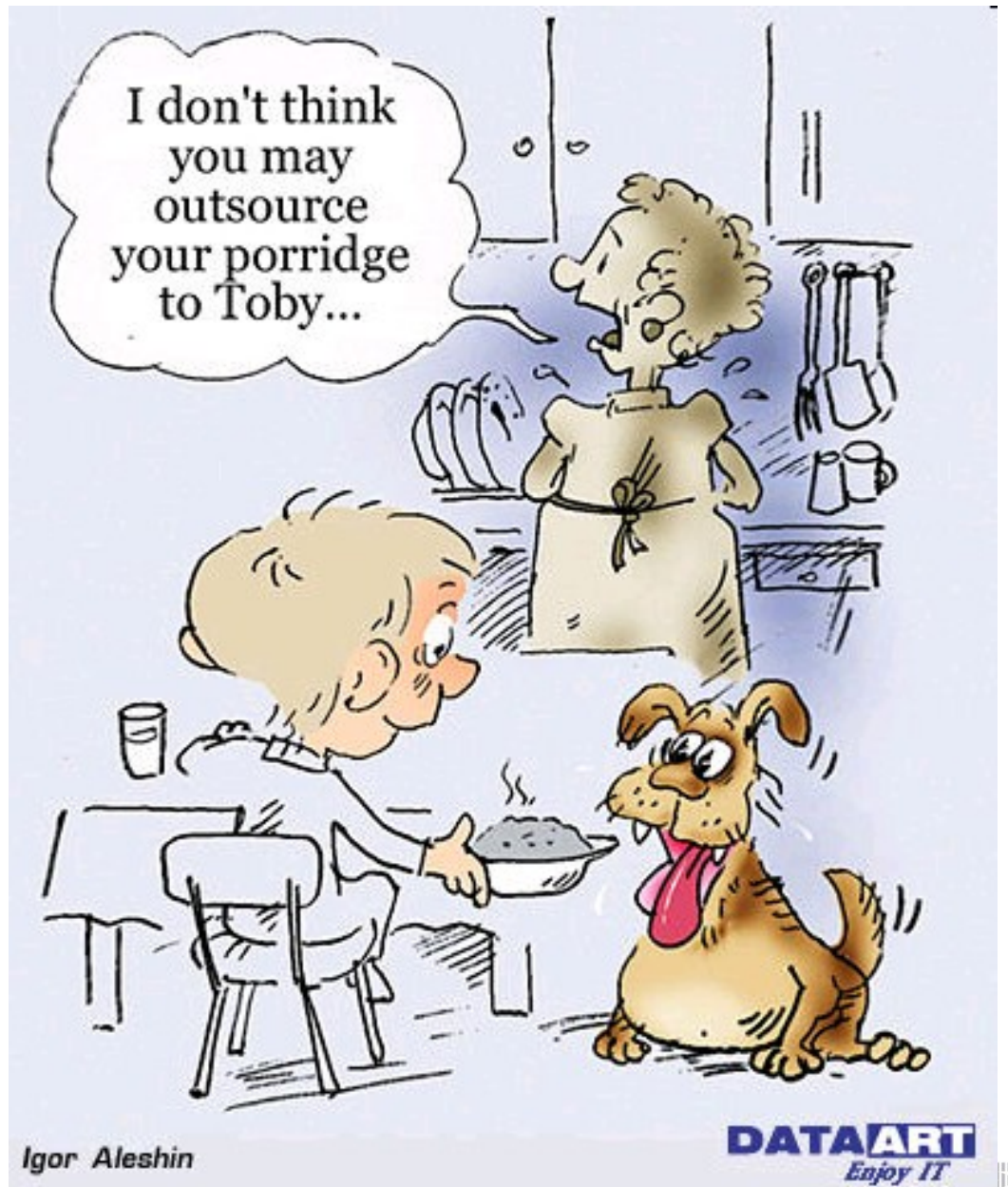


# FUTURE OF OUTSOURCING





**Thank you.**





IBM's strategy to deliver this value is through differentiation with innovation and insight – for GTS this means delivery of the highest quality services to clients.

## IBM's Strategy

➤ Focus on open technologies and high-value solutions

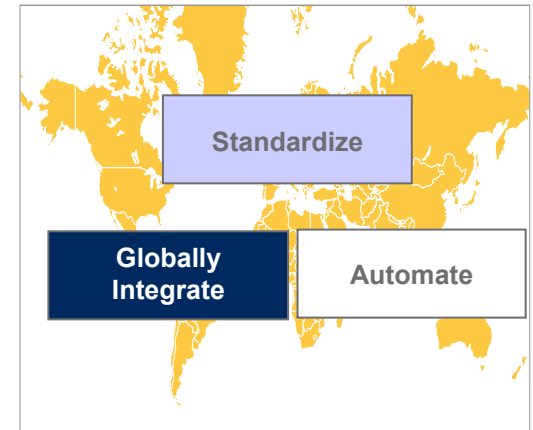
➤ Deliver integration and innovation to clients

➤ Become the premier Globally Integrated Enterprise

## GTS Strategy

Sustain the position of the world's premier IT services provider by delivering the **highest quality solutions at the most competitive prices.** We'll differentiate IBM with our integrated, IP-based solutions.

## Delivery Strategy

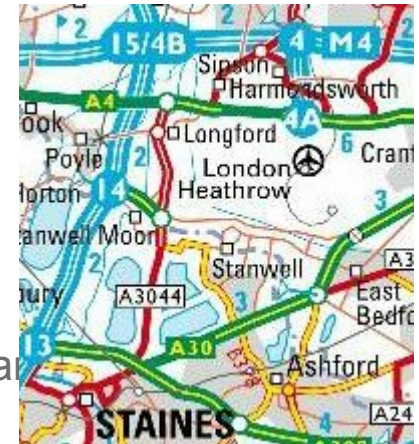


*Drive increased value to customer through high quality delivery*

# MOTIVATIONS:

## Why... a process model?

- Think of a process model as being like a map of your country.
  - The places
    - In a process model, processes and activities
  - The connections between them – roads, paths, railways, rivers, canals
    - Representing the inputs and outputs between activities
- Without a map, you can still establish – by trial and error, or from a set of directions – a reasonably efficient journey routing between point A and point B ... and then between point B and point C
- What happens if you now need to travel between point A and point C?
- You **can not** build the map from a collection of journey directions BUT you **can** build the directions for many journeys from a map.
- Remember, though, that every map is limited by its scale. What is your purpose?

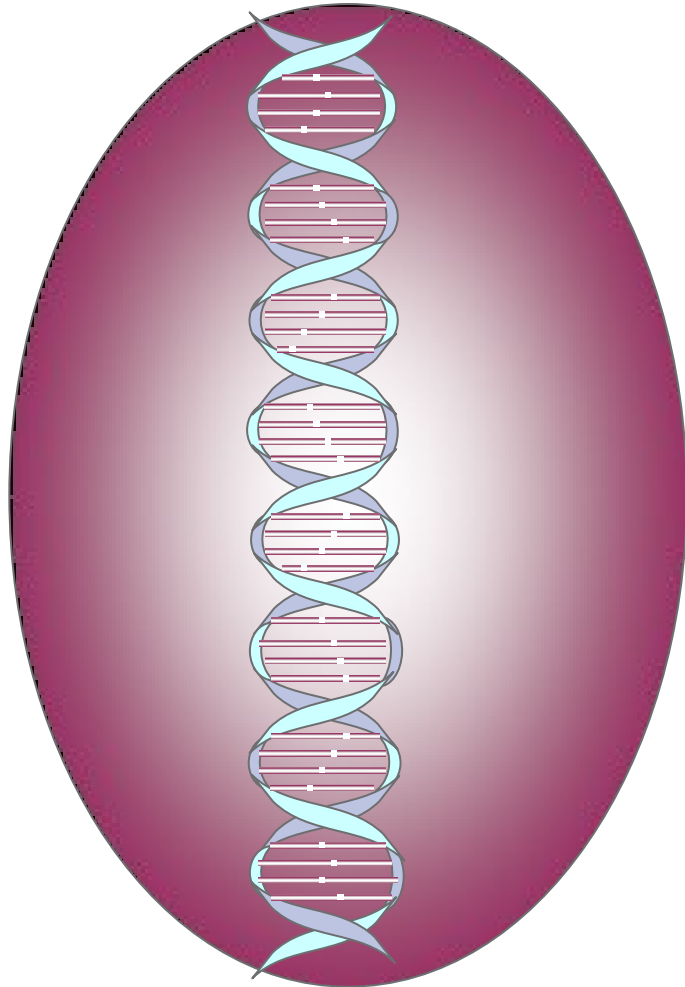


# MOTIVATIONS (2005): Why... this process model?

- Market
  - There are a number of industry-based developments in IT Management topics, which have achieved (or are close to) the status of *de facto* “standard”
    - ITIL® has significant following in the area of service management
    - Control Objectives for Information and related Technology (COBIT) and Capability Maturity Model Integration (CMMI) can be seen as complementary, covering related aspects
- Content
  - Previous IT Process Model (ITPM) was created early in the distributed computing era
  - The reach and range of “IT” activities has grown
  - “On demand” IT introduces new activities and changes the emphasis and priorities of existing ones
- Capability
  - The direction is towards “model-driven architecture and design”
  - The goal is choreographed workflows which directly link processes with technology, using a “packaged application” approach

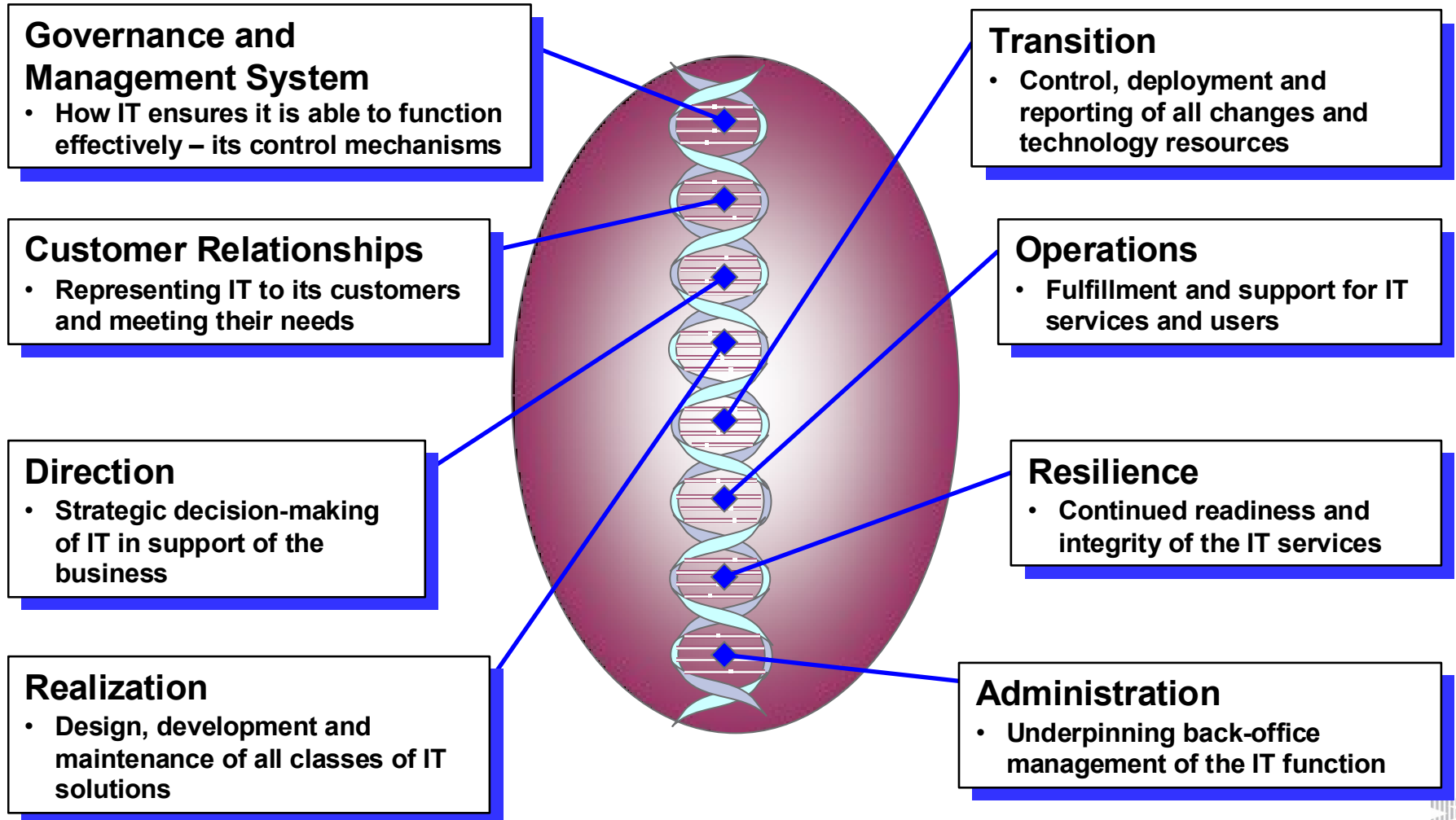


# IBM Process Reference Model for IT (PRM-IT) : Sequencing the DNA of IT management

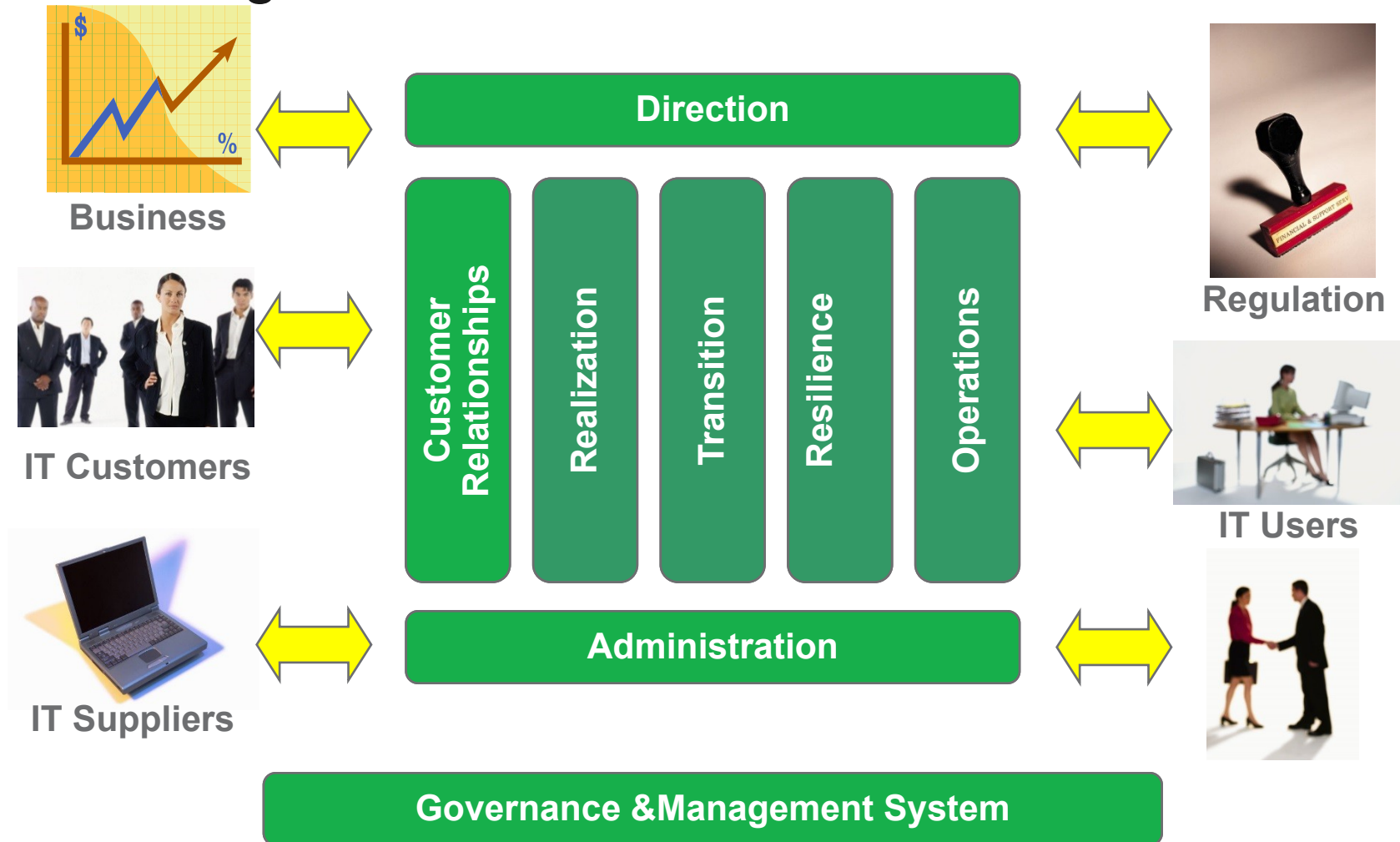


- Purpose
  - Provide an integrated collection of the processes involved in using IT to help businesses carry out many or all of their fundamental purposes
  - Be the basis for process assessment, design and implementation
    - But is not itself directly implementable
- Viewpoint
  - Consider the processes for all IT activities – so equivalent to the CIO's vantage point:
    - Control over IT's activities
    - Represent IT to the owning business(es) and to other stakeholders
- Packaging
  - A rigorously engineered IDEF0 process model  
IDEF0 = [Integration Definition for Function Modeling](#)

# THE PRM-IT MODEL: Categories – high-level groupings of related processes, covering everything within the CIO's scope



THE PRM-IT MODEL: The CIO and IT function do not operate in isolation; there are interactions with “external agents.”



# THE PRM-IT MODEL: Processes – 46 processes across eight categories

## Governance and Management System

- IT Governance and Management System Framework
- IT Governance and Management System Capabilities
- IT Governance and Management System Operation
- IT Governance and Management System Evaluation

## Customer Relationships

- Stakeholder Requirements Management
- Service Marketing and Sales
- Service Catalog Management
- Service Level Management
- Demand Management
- IT Customer Transformation Management
- Customer Satisfaction Management

## Direction

- IT Strategy
- IT Research and Innovation
- Architecture Management
- Risk Management
- Product Management
- Portfolio Management
- Program and Project Management

## Realization

- Solution Requirements
- Solution Analysis and Design
- Solution Development and Integration
- Solution Test
- Solution Acceptance

## Transition

- Change Management
- Release Management
- Deployment Management
- Configuration Management
- Asset Management

## Operations

- Request Fulfillment
- Service Execution
- Data Management
- Event Management
- Incident Management
- Problem Management
- Identity and Access Management

## Resilience

- Compliance Management
- Security Management
- Availability Management
- Capacity Management
- Facilities Management
- IT Service Continuity Management

## Administration

- Financial Management
- Supplier Management
- Service Pricing and Contract Administration
- Workforce Management
- Knowledge Management

**PRM-IT V3**