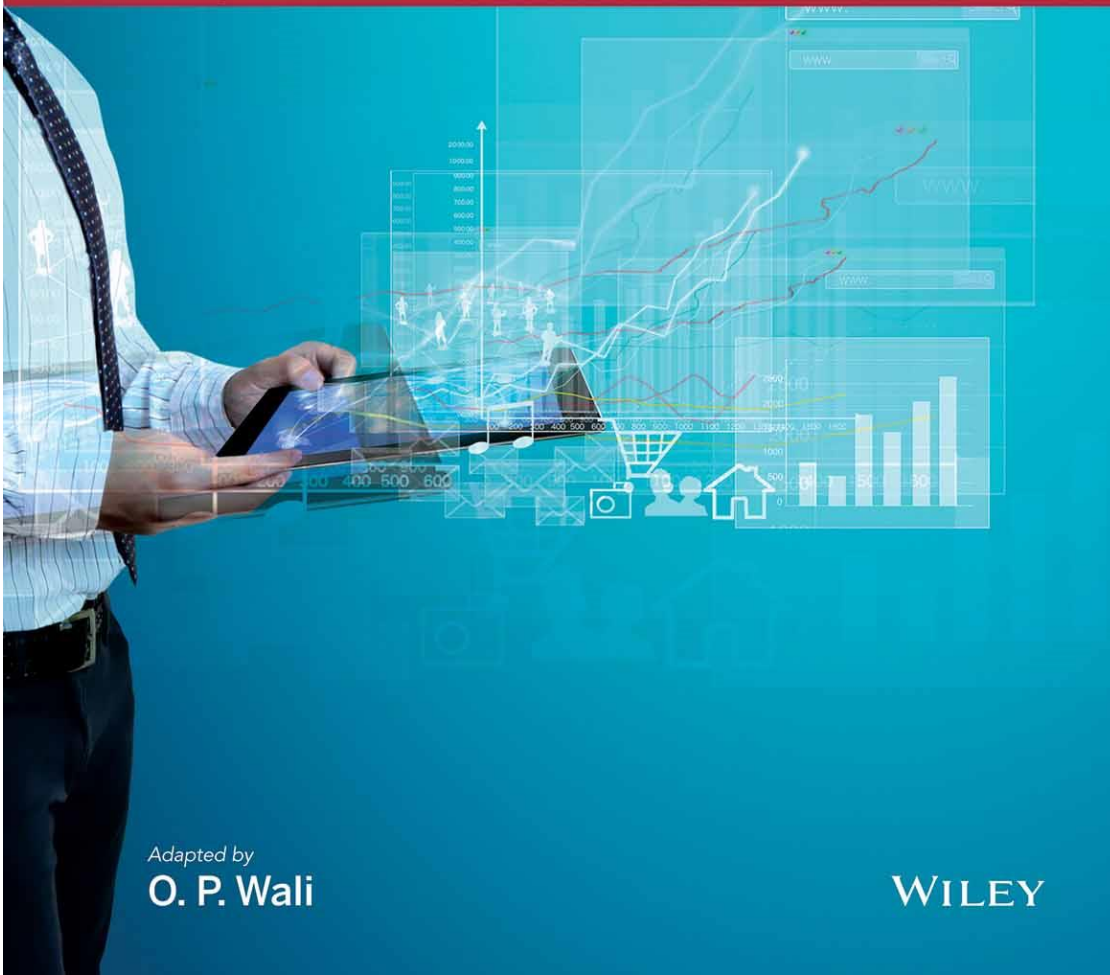


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Information Technology for Management

Advancing Sustainable, Profitable Business Growth



Adapted by
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ns, Inc.

Chapter 12

IT Strategy and Balanced Scorecard

Chapter Outline

1. [IT Strategies](#)
2. [IT-Business Alignment](#)
3. [Balanced Score Card Method](#)
4. [Cloud and Vendor Strategies](#)

1. IT Strategies

IT Strategy and Strategic Planning Process

- Value Drivers
 - Enhance the value of a product or service to consumers, creating value for the company (such as advanced IT, reliability, and brand reputation).
 - Three general types of Business Value Drivers:
 - Operational Shorter-term factors
 - Financial Medium-term factors
 - Sustainability Long-term factors

TABLE 12.2 Three General Types of Business Value Drivers

Type of Business Value Drivers	Definitions	Examples
Operational Shorter-term factors	Factors that impact cash flow and the cash generation ability through increased efficiency or growth.	Cost of raw materials, cost of providing service, cost per mile, sales volume, sales revenue
Financial Medium-term factors	Factors that minimize the cost of capital incurred by the company to finance operations	Debt level, working capital, capital expenditures, day's receivables, bad debt expense
Sustainability Long-term factors	Survival factors; factors that enable a business to continue functioning consistently and optimally for a long time	Government regulations, industry standards, federal and state environmental laws, privacy and security regulations

IT Strategy and Strategic Planning Process

- IT Strategic Planning
 - A systematic process for determining what a business should become and how it can best achieve that goal.
- Reactive Approaches Fail
 - Fail to align IT to real business needs.
and, as a result
 - Fail to deliver value to the business.

IT Strategy and Strategic Planning Process

IT Strategies Support the Business Strategy

- Four IT Strategic Plan Objectives:
 1. Improve management's understanding of IT opportunities and limitations
 2. Assess current performance
 3. Identify capacity and human resource requirements
 4. Clarify the level of investment required

IT Strategy and Strategic Planning Process

IT Deployment Strategies

- In-house development
 - Systems are developed or other IT work is done in-house, possibly with the help of consulting companies or vendors.
- Sourcing
 - Onshore: sourced to consulting companies or vendors that are within the same country.
 - Offshoring: work sourced to other countries.

IT Strategy and Strategic Planning Process

- IT and Business Strategy Disconnect
 - Survey PwC
 - IT is critical 87%
 - IT function is not involved in strategic planning 50%
 - 3/4 of companies abandoned at least one IT project
 - 1/3 of companies abandoned 10% IT projects
 - Reasons
 - Business strategy changed
 - Time and or budget overrun
 - Dysfunctional teams
 - Change I IT strategy

IT Strategy and Strategic Planning Process

- IT and Business Strategy Disconnect
 - IT strategy should be changed when there is a change in business strategy.
 - Both should be dynamic to adapt to opportunities and threats.

IT Strategy and Strategic Planning Process

- Ongoing IT Planning Process
 - IT must stay aligned with the business strategy.
 - Organizational goals change over time.
 - CIOs undertake IT strategic planning on a yearly, quarterly, or monthly basis.
- Annual planning cycles to identify
 - potentially beneficial IT services,
 - to perform cost-benefit analyses, and
 - to subject the list of potential projects to resource allocation analysis.
- IT steering committee does this job.

IT Strategy and Strategic Planning Process

IT Steering Committee

- Set the direction
 - Links corporate strategy with the IT strategy,
- Allocate scarce resources
 - Approves the allocation of resources for and within the information systems organization including outsourcing policy.
- Make staffing decisions
 - Key IT personnel decisions involve a consultation and approval process made by the committee, including outsourcing decisions.

IT Strategy and Strategic Planning Process

- Communicate and provide feedback
 - Information regarding IT activities should flow freely.
- Set and evaluate performance metrics
 - Establish performance measures for the IT department and see they are met.

IT Strategy and Strategic Planning Process



Figure 12.2 IT strategic planning process.

IT Strategy and Strategic Planning Process

- Governance
 - Formally established statements that direct the policies regarding IT alignment with organizational goals and allocation of resources.
- Long-range IT plan (Strategic IT plan)
 - What IT should do to achieve the goals, objectives, and strategic position of the firm and how this will be achieved.
 - The overall direction, requirements, and sourcing of resources.
 - Time frames are set for three to five years into the future.

IT Strategy and Strategic Planning Process

- Medium-range IT plan
 - Identifies general project plans in terms of the specific requirements and sourcing of resources as well as the **project portfolio**.
- Tactical Plan (Short-range)
 - Details budgets and schedules for current-year projects and activities.

IT Strategy and Strategic Planning Process

- Project Portfolio
 - Lists major resource projects that are consistent with the long-range plan.
- Applications Portfolio
 - A list of major, approved information system projects that are also consistent with the long-range plan.

IT Strategy and Strategic Planning Process

1. What are value drivers?
2. What are the three categories of value drivers?
3. Why do reactive approaches to IT investments fail?
4. What is onshore sourcing?
5. What is the goal of IT–business alignment?
6. Why is IT strategic planning revisited on a regular basis?
7. What are the functions of a steering committee?
8. Describe the IT strategic planning process.

2. IT-Business Alignment

Aligning IT with Business Strategy

- IT Business Alignment Improvement Activities
 1. Commitment to IT planning by senior management.
 2. CIO is a member of senior management.
 3. Understanding IT and corporate planning.
 4. Shared culture and good communication.
 5. Multilevel links.

Aligning IT with Business Strategy

- Strength of CIO & C-Suite Relationship Influences Performance
 1. Achieve better results.
 2. Adapt quickly.
 3. Think together.
 4. Act together.
 5. More aligned on strategy.

Aligning IT with Business Strategy

- CIO Skillset
 - Political savvy
 - Influence, leadership, and power
 - Relationship management
 - Resourcefulness
 - Strategic planning
 - Doing what it takes
 - Leading employees

TABLE 12.3 Skill Set of the CIO

Skills of CIOs needed to improve IT–business alignment and governance include:

- *Political savvy.* Effectively understand managers, workers, and their priorities and use that knowledge to influence others to support organizational objectives.
- *Influence, leadership, and power.* Inspire a shared vision and influence subordinates and superiors.
- *Relationship management.* Build and maintain working relationships with co-workers and those external to the organization. Negotiate problem solutions without alienating those impacted. Understand others and get their cooperation in nonauthority relationships.
- *Resourcefulness.* Think strategically and make good decisions under pressure. Can set up complex work systems and engage in flexible problem resolution.
- *Strategic planning.* Capable of developing long-term objectives and strategies and translating vision into realistic business strategies.
- *Doing what it takes.* Persevering in the face of obstacles.
- *Leading employees.* Delegating work to employees effectively; broadening employee opportunities; and interacting fairly with employees.

Aligning IT with Business Strategy

- IT/Business Alignment
 - CIO drives business change through the use of digital technology, not just supporting business, but introducing profitable new lines of business.
 - Even older organizations, considered traditional and slow-moving, can become agile, even innovative through technology.

Aligning IT with Business Strategy

1. How can IT–business alignment be improved?
2. How does strong collaboration among the CIO and other chief-level officers influence performance?
3. What skills are important to a CIO's success?
4. How did the CIO of CBA contribute to the bank's competitiveness?

3. Balance Score Card Method

Balanced Scorecard

- HBR editors consider the BSC as one of the most influential management ideas of the past 75 years.
- BSC is used to clarify and update the strategy, align the IT strategy with the business strategy, and link strategic objectives to long-term goals and budgets.

Balanced Scorecard

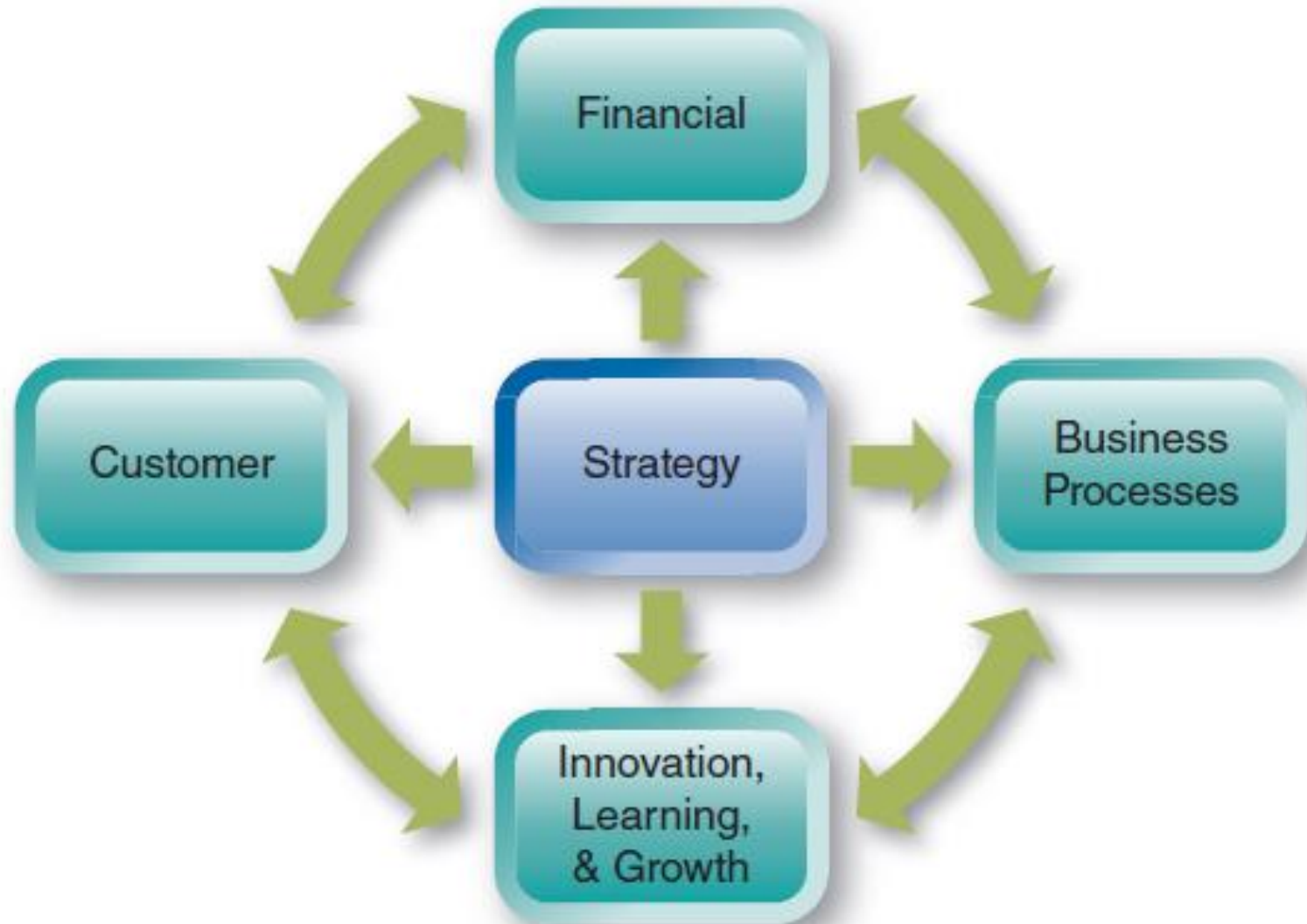
Old Approach to Business

- Lagging Indicators
 - P&L, Cash Flow, Balance Sheets
 - Confirm what has happened.
 - Evaluate outcomes and achievements.
 - Represent history, not ideal for managing day-to-day operations and planning.

Multidimensional Approach to Business

- Leading indicators
 - Predict future events to identify opportunities.

Balanced Scorecard



Metric or Indicator	Examples of Measurement Criteria
Financial	<ul style="list-style-type: none">• Revenue and revenue growth rates• Earnings and cash flow• Asset utilization
Customer	<ul style="list-style-type: none">• Market share• Customer acquisition, retention, loyalty• Customer relationships, satisfaction, likes, recommendations, loyalty• Brand image, reputation• Price–value relationship
Business processes	<ul style="list-style-type: none">• Cycle times, defect rate• Production throughput, productivity rates• Cost per process• Cost per transaction
Innovation, learning and growth	<ul style="list-style-type: none">• Employee skills, morale, turnover, capacity for change• IT capabilities• Employee motivation• R&D• Percentage of revenue from new products/services

Balanced Scorecard

Answers to following questions help to identify important value drivers.

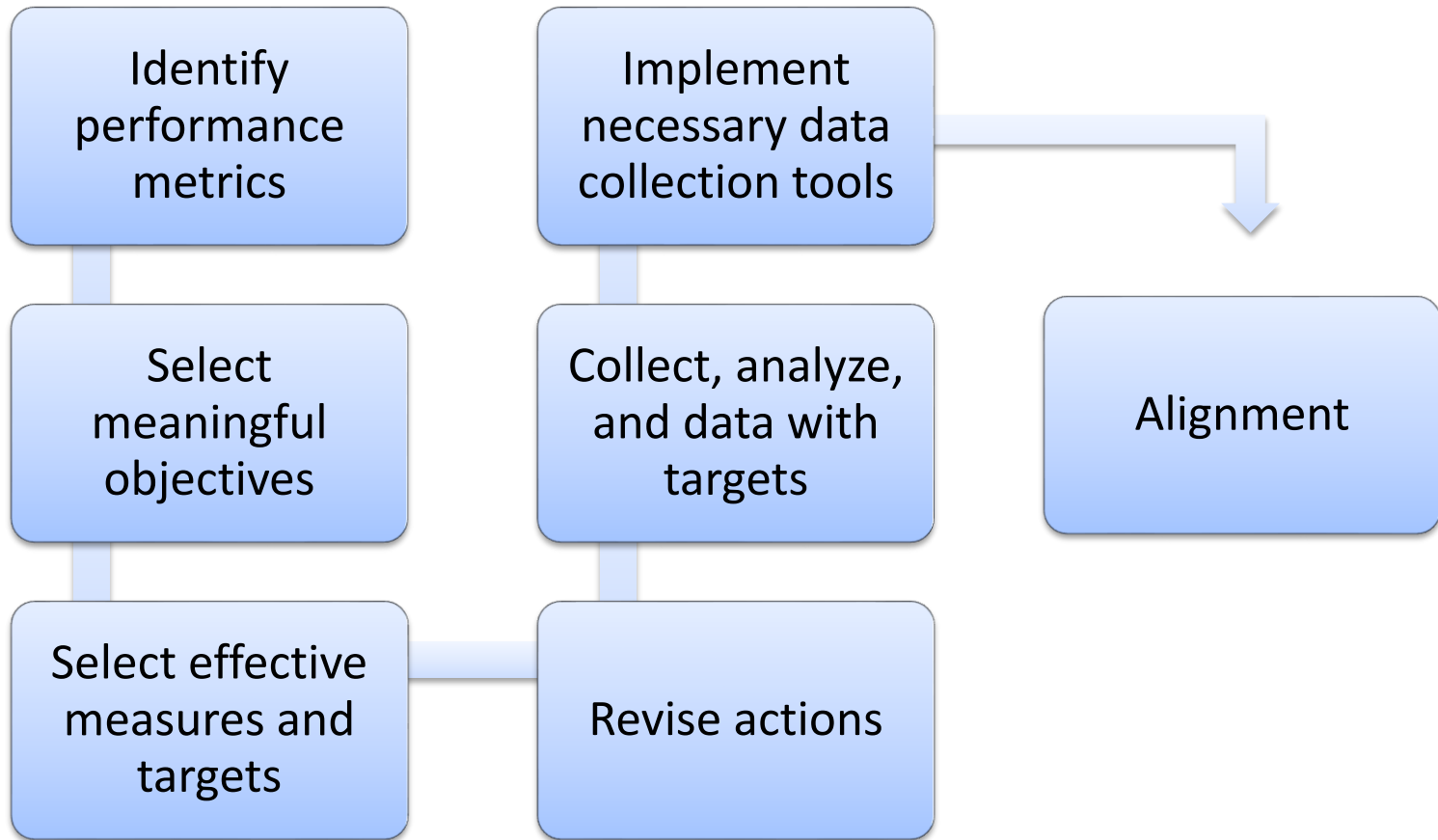
- 1. Financial.** To succeed financially, how should we appear to our investors and shareholders?
- 2. Customer.** To achieve our vision, how should we provide value to our customers?
- 3. Business processes.** To satisfy our shareholders and customers, what business processes must we focus on and excel at?
- 4. innovation, learning, and growth.** to achieve our vision, how will we sustain our ability to innovate, learn, change, and improve?

Balanced Scorecard

IT & Business Strategy Alignment through BSC

- Clarify and update strategy
- Align IT strategy with business strategy
- Link strategic objective to long-term goals and annual budgets

Balanced Scorecard



The BSC methodology process.

Figure 12.4 Overview of a low-cost airline's BSC objectives, measures, targets, and actions to achieve targets.



Objectives	Measurements	Targets	Action to achieve targets
Rapid ground turnaround time	Time on-ground	55 minutes	Synchronize ground crew activities
	On-time departure ratio	85%	Ensure flight crew availability
			Train employees to board passengers quickly

BSC – General Steps

1. Identify performance metrics that link vision and strategy to results-financial performance, operations, innovation, and employee performance.
2. Select meaningful objectives
3. Select effective measures and targets.
4. Determine the actions needed to achieve the targets.
5. Implement necessary tracking, analytic communication, and reporting system, including sensors, data visualization, mashups, and dashboards via social and mobile channels.

BSC – General Steps

6. Collect, analyze, and compare performance data with targets.
7. Revise actions to improve performance gaps and take advantage of new opportunities.

Balanced Scorecard

1. How did the BSC approach differ from previous measurement approaches?
2. How does the BSC approach “balance” performance measurements?
3. What are the four BSC metrics?
4. Give an example of each BSC metric.
5. How does BSC align IT strategy with business strategy?

4. Cloud and Vendor Strategies

IT Sourcing and Cloud Strategy

- Inadequacy of legacy systems
- Migration to the cloud or SaaS to connect core systems and apps.
- One or more types of outsourcing arrangements are part of companies IT strategy.

Cloud Services Add Agility

- Technology as service (XaaS)
- Software as a Service (SaaS)
 - End-user apps, like Salesforce
- Platform as a Service (PaaS)
 - Tools and services making coding and deployment faster and more efficient, like Google App Engine
- Infrastructure as a Service (IaaS)
 - Hardware and software that power computing resources, like EC2 & S3 (Amazon Web Services)

Cloud Services Add Agility

- Data as a Service (DaaS)
 - Data shared among clouds, systems, apps, regardless the data source or storage location.
 - Easier for data architects to select data from different pools, filter out sensitive data, and make the remaining data available on-demand.
 - Eliminates risks and burdens of data management to a third-party cloud provider.

IT Sourcing and Cloud Strategy

Integrating Cloud with On-premises Systems

- Enterprise's cloud strategy is quite complex.
- Cloud is being adopted mostly in addition to on-premises systems
- It is not full replacements for on-premises systems
- Cloud services have to connect and share data with enterprise systems such as order and inventory management, ERP, CRM, SCM, legacy financial, and HR systems and on mobile and social platforms.
- This makes the job complicated.

IT Sourcing and Cloud Strategy

Cloud Strategy and Services

- Cloud Strategy
 - Short for cloud computing IT strategy.
- Edge Service
 - Term that refers to a cloud service.
- Tactical Adoption Approach
 - Incremental deployment resulting in apps and services, patched to create end-to-end business processes.

IT Sourcing and Cloud Strategy

Cloud Complexity

- Extensibility
 - The ability to get data into and out of the cloud service.
- Migration Issues
 - Cybersecurity, privacy, data availability, and service accessibility.
- Newer Challenges
 - Cloud integration with on-premises resources, extensibility, and reliability.

IT Sourcing and Cloud Strategy

- Sourcing Driving Factors
 - Generate revenue
 - Increase efficiency
 - Agile enough to respond to market changes
 - Focus on core competency
 - Cut operational costs
 - More accepted IT strategy
 - Cloud and SaaS have been proven
 - Move IT from capital to recurring operating expenditure

IT Sourcing and Cloud Strategy

Outsourcing Risks

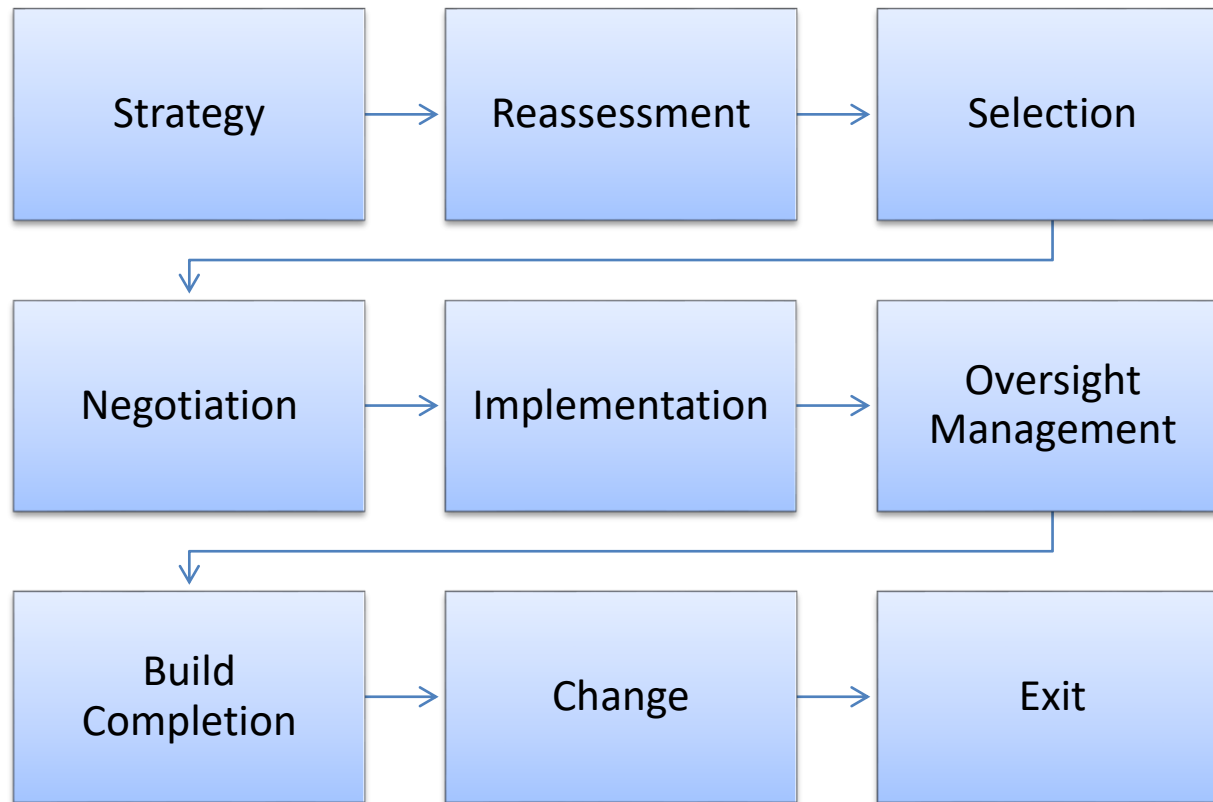
- Shirking
 - The vendor deliberately underperforms while claiming full payment.
- Poaching
 - The vendor develops a strategic application for a client and then uses it for other clients.
- Opportunistic repricing
 - Client enters into a long-term contract with a vendor, the vendor changes financial terms at some point or overcharges for unanticipated enhancements and contract extensions.

IT Sourcing and Cloud Strategy

- Work Not Readily Offshored
 - Work that has not been routinized.
 - Work that if offshored would result in the client company losing too much control over critical operations.
 - Situations in which offshoring would place the client company at too great a risk to its data security, data privacy, or intellectual property and proprietary information.
 - Business activities that rely on an uncommon combination of specific application domain knowledge and IT knowledge in order to do the work properly.

IT Sourcing and Cloud Strategy

Outsourcing Lifecycle



IT Sourcing and Cloud Strategy

Vendor Selection Criteria

- Experience with very similar systems of similar size, scope, and requirements; experience with the ITs that are needed, integrating those ITs into the existing infrastructure and the customer's industry.
- Financial and qualified personnel stability. A vendor's reputation impacts its stability.

IT Sourcing and Cloud Strategy

Focus on Value Not Costs

- Costs undermine goals.
- Close relationships are mutually beneficial.
- Both sides are best served viewing relationship over simple transaction.

Before Signing...

- Do a trial run.
- Create SLAs.

IT Sourcing and Cloud Strategy

1. What contributes to the complexity of a cloud strategy?
2. How does tactical adoption of cloud services differ from a coordinated cloud strategy?
3. What are the major reasons for sourcing?
4. What types of work are not readily outsourced offshore?
5. When selecting a vendor, what two criteria need to be assessed?
6. What is the risk of an overemphasis on cost when selecting or dealing with an IT vendor?
7. What needs to be done before signing a contract with an IT vendor?