



Test Management Part 2

Test Outsourcing

Objective



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Develop a plan for
outsourcing
testing.

Home Analogy



| Do you do the work yourself or hire a contractor to do the work for you?

Factors Influencing Outsourcing Decision



| Need for specialized /
advanced technology
or capability

| Strategic value of
system

| Cost

| Strategic Alliance

| Maintenance support

| Speed of development

| Desire for level staffing

Test Outsourcing Activities



- | Define the work to be subcontracted

- | Develop an outsourcing plan

- | Perform domain and/or process evaluations if needed

- | Select a subcontractor

- | Contract with subcontractor

- | Oversee the testing to ensure that it is on schedule, within cost, and meeting requirements

- | Accept the testing

Defining Subcontracted Work



| Partition the product and its activities

| Select subcontracted work to:

- Maximize organization's effectiveness
- Match skills and capabilities of potential subcontractors
- Minimize communication and coordination efforts
- Minimize dependencies
- Minimize risk of subcontractor knowledge not being transferred to the organization

Develop a Subcontractor Management Plan



| Develop a technical specification for the work

| Develop a statement of work for the supplier

- Identify all tasks to be performed
- Identify relevant processes to be followed
- Identify maintenance responsibilities

Develop a Subcontractor Management Plan (cont'd)



| Perform risk management

- Identify outsourcing risks early
- Adjust acquisition strategy to minimize risks

| Estimate resources needed

- Estimate supplier test effort (what it should cost)
- Estimate effort for vendor

Components of an Outsourcing Agreement



| **Contract**

| **Technical specs**

| **Statement of work**

Supplier Management Activities



| Selection

- Searching for and evaluating vendors
- Specifying legal terms of contract
- Negotiating contract

| Subcontract management

- Conveying and explaining requirements
- Monitoring vendor, including reviews
- Resolving problems

Factors to Consider in Selecting a Supplier



| **Strategic business alliances**

| **Prior performance on similar work**

| **Geographic location**

| **Software testing and software management capabilities**

| **Available staff**

| **Domain expertise**

| **Cost**

| **Similarity of processes and tools**

| **Business viability**

Contract with Supplier



| See lawyers!

Tracking and Oversight



| A plan must be developed for supplier tracking and oversight

| Plan must address:

- Activities to be performed and the schedule to perform them
- Identification of groups, assigned responsibilities and inter-group communication
- Techniques, tools and methodologies to be employed for review and tracking of vendor performance
- Escalation procedures

Tracking and Oversight Activities



- | **Maintaining good communication**

- | **Reviews**

- | **Metrics**

- | **Continuous risk management**

- | **Approval of invoices**

Acceptance of Work



| Acceptance of work is a formal procedure which has contract implications

| You must be convinced that the testing is thorough and complete

Summary

