People, Process, Technology synergy - a key to Business Excellence

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Individuals / groups need to be involved in making decisions that affect their work.
Effective planning =

Function (well designed processes,

_people awareness of their contribution to organization performance,

supporting information and communication technology)
Establish objectives and specify measures

- **Vision**
- **Mission**
- **Objectives**

**Organization**

- **Project / Division Objectives**
  - Measures
    - Mix of competency in a project
    - Training effectiveness

- **Business analyst**

- **Development team**
  - Balanced Score Card
  - GQM (Goal Question Metric)

- **Production support**

- **Project Manager**

- **Measures**
  - No of Changes to requirements

- **Measures**
  - Development Effort
  - Defects
  - Competency Levels or increase in competency levels

- **Measures**
  - Time to Fix defects
  - Availability of System
Communicate Objectives

Analysis of time sheet data did not provide any insight

Script to fill time sheet !!! To save Time!!!

- Practitioners did not know how the data would be used
- Practitioners are required to generate numerous reports, but receive no feedback

Communicate objectives for shared understanding of data usage

- Practitioners need to be trained to use the collected data to make better decisions
- Practitioners need to present the data in a form that highlights issues that need management attention
Continuous discussion of performance also focuses on work processes, resources and other issues which can improve the performance.

Design processes to enable effective monitoring and control.

Measurable performance objectives need to be defined based on the committed work and should be revised as needed.

Information and communication systems should support the information needs.

Effective monitoring and control.
Need a Project Manager...

Select Roy...

Oops!!!
Issue resolution is more important

How good should he be in Issue resolution over Planning? Strongly to very strongly preferred

Project Manager - profile

<table>
<thead>
<tr>
<th>Competency</th>
<th>Roy competency Level</th>
<th>Arun competency Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Issue resolution</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Competency level alone is not sufficient
Significance of the competency also needs to be considered!!!
Organization perspective...

- Can we go ahead with new offerings/projects
- Are our competencies in-line with business objectives
- How to close competency gaps

Analyze and understand the competence profile to optimize the contribution of workforce to the companies strategic objectives
Individuals’ perspective...

- Where do I stand in the organization
- What are the various roles in the organization
- What are my competency gaps

“If you're not learning in your work, you're not doing enough”...
Leveraging Organizational Learning

- Organizational process assets support organizational learning and process improvement
  - Mentoring plays a major role in deploying these assets
  - Workforce practices and activities need to encourage and support the development and use of process assets

![Usage of Process Asset Library](chart)

- Communication vehicles e.g. mail, awareness sessions & road shows
Design processes to enable effective reviews

Reviewer

Project Managers looking for specific reviewers

• Reward / recognize
• Train

People

Effective reviews

Capture and reuse experts knowledge

Technology

Process

Synergy – Effective reviews
Number of process defects for projects analyzed wrt.

- PM’s total experience
- PM’s total experience in the organization
- Whether the PM is an auditor
- Whether the PM is a first time PM

### Analysis of process defects - Example

<table>
<thead>
<tr>
<th>Description</th>
<th>Average #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average # process defects where PM is not an auditor</td>
<td>4.0</td>
</tr>
<tr>
<td>Average # process defects where PM is an auditor</td>
<td>2.3</td>
</tr>
<tr>
<td>Average # process defects where PM is not a CSQA</td>
<td>3.6</td>
</tr>
<tr>
<td>Average # process defects where PM is a CSQA</td>
<td>2.9</td>
</tr>
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</table>
Refining People processes

- Training PMs as auditors
- Audit and Project management reviews for mentoring
- Rotation of PMs between quality and delivery
- Motivating auditors and reviewers through incentives and recognition

Need to achieve behavioral changes that drive continuous improvement
People - Process interface

• Using number of process defects to evaluate the performance of Project Manager
Using Metrics data to evaluate individuals

Review defects

Defects found per week in a programmers code

Number of defects

Week

Week 1
Week 2
Week 3
Week 4
Week 5
Week 6
Week 7
Week 8
Week 9
Week 10
Week 11
Week 12

Week

Defects found per week

Using data for performance evaluation of a programmer has significantly reduced DEFECT REPORTING
Competency and defect density analysis - Example

% resource having E2 / E3 competency

Defect Density

TATA CONSULTANCY SERVICES
People

Business capability

Process

Technology

Thank you

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