Business Excellence and ROI based process maturity

SPEG North America – 2014
KK Raman, KPMG
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Agenda

- Changing business environment
- Trends in Process improvement
- People practices
- Conclusions
“The Business environment around us is changing and changing faster than ever before”
Increasing Competition
Globalization
Changing Economic Climate
High cost of failures

Service Provider to Pay Millions In Compensation to Customers

Ariane 5 crashes 37 seconds after takeoff

Software Bug Compromises Privacy of Wireless Customers
Emerging Trends
and
Impact of Business Excellence
DNA for Business Excellence

- **Process improvement and maturity**
- **Customer focus and stakeholder value**
- **Human capital – skilled manpower for economic growth**
Context of KPMG Survey

- **Understanding the adoption rates of various Business Excellence and delivery frameworks**
- **What are the drivers for successful process improvement initiative**
- **Methods to calculate ROI from process improvement initiatives**
- **Attributes for PI function today and for next generation**
- **Benefits from adoption of Business excellence and PI frameworks**
More than 120 responses from 100 organizations across various industries.

- **IT/ITeS**: 79 responses
- **Automotive**: 4 responses
- **Banking**: 2 responses
- **Consumer/Electronics**: 1 response
- **Defence & Aerospace**: 1 response
- **Engineering**: 4 responses
- **Healthcare**: 1 response
- **Media & Entertainment**: 1 response
- **Logistics**: 1 response
- **Pharma/Biotech**: 1 response
- **Power & Energy**: 3 responses
- **Real Estate**: 1 response
- **Telecom**: 4 responses
- **Transport**: 3 responses
- **Others**: 15 responses
Organizational Parameters

Sector Breakup

- IT/ITES: 35%
- IT Divisions of other sectors: 65%

Organization size

- 1 – 500: 28%
- 501 – 1000: 16%
- 1001 – 5000: 10%
- 5001 – 10000: 12%
- Above 10000: 34%

Legal entity status

- Listed entity: 23%
- Unlisted entity: 27%
- Subsidiary of a foreign firm: 50%
Most Org Investments in Process improvement is to the tune of 0.6 to 1.9%

67 organizations provided inputs related to the annual investment in process improvement [people, process, tools] vis-à-vis annual turnover. 37% of organizations have an investment of 0.6% to 1% in process improvement whereas 27% organizations responded to an annual investment of 1.1% to 1.9% of their annual turnover.

Source: KPMG : Business Excellence global survey 2014
Investment blocks for Business Excellence

SEPG/Process group

On-line/Integrated QMS

SQA/Audit group

Tools and Technology

Measurement group

Automation products

Knowledge management

Training

Certifications

Research

Customer satisfaction
Top reasons of Improvement initiatives

- Reducing people dependency: 69%
- Improve time to market: 69%
- Improving organisational productivity: 83%
- Meet statutory/regulatory requirements: 62%
- Improving quality (reducing defects): 86%
- Maintaining competitive state: 77%
- Meeting market and customer needs: 81%

Source: KPMG :Business Excellence global survey 2014
85% organizations observed significant improvement in delivered quality while 77% organizations observed improvement in customer satisfaction as the top benefit from any process improvement initiative.

Source: KPMG :Business Excellence global survey 2014
### Model based process improvement

**Advantages**
- Process improvement frameworks based on industry best practices aligned to organization process context and business objectives
- Independent audit and process compliance verifications
- Allows for benchmarking
- Authorized trainings and appraisals
- Channelizing the energy of the organizations for process improvement

**Challenges**
- Mandatory requirements clamp on the flexibility of implementation
- Misinterpretation of model requirements
- Cost of certifications/assessments/maintaining the certificate
- If not appropriately strategized can be an over kill

### Non-Model based process improvement

**Advantages**
- Customized to the organizations requirement
- Flexibility in execution (independent, jointly with client organization, scope based)
- Reduced cost because of limited external certifications and benchmarks

**Challenges**
- Not a globally recognized certification
- In competitive bid situations – not having the certifications could having a bearing on selection process
- Motivating the workforce to adopt processes and practices
Effectiveness of SCAMPI Methodology

- 68%: Just right
- 23%: Too prescriptive and complex
- 9%: Not adequate
Biggest Challenges – ‘Resistance to Change’

- Lack of implementation experience: 28.3%
- Multi location cultural issues: 32.3%
- Lack of relevant expertise within the organization: 26.0%
- Lack of competent external consultants: 11.8%
- Lack of senior management commitment: 11.8%
- Resistance from people for the changes: 65.4%
- Too much documentation: 59.1%

Source: KPMG :Business Excellence global survey 2014
Key attributes of quality teams

- Service delivery/management experience: 64%
- Vertical/industry knowledge: 52%
- Move people from delivery to quality on a rotation basis: 41%
- Free and available people in the organization: 16%
- Education and certifications: 60%
- Years of experience in a similar role: 73%
Along with renewed focus on ‘Soft Skills’, organizations are looking at quality teams to ramp up their knowledge and skills as per Business/ Domain verticals.
CMMI based process improvement is growing at a healthy rate
Delivery Excellence – CMMI Dev

Source: KPMG :Business Excellence global survey 2014
Region wise breakup

Source: CMMI Institute Published results - 2013
Delivery Excellence – CMMI SVC

Source: KPMG :Business Excellence global survey 2014
Delivery Excellence – ISO 9001

Source: KPMG :Business Excellence global survey 2014
Delivery Excellence – ISO 20000

Source: KPMG :Business Excellence global survey 2014
Common Frameworks

**IT Services**

- ISO Based standards
  - 9000
  - 20000
  - 27001

- CMMI

- DEV

- SVC

-Frameworks

- ITIL

- Methods

- Six Sigma

- Lean

- Agile

- People Maturity

- PCMM

**IT Divisions**

- ISO Based standards
  - 20000
  - 27001

- CMMI

- DEV

- SVC

- ACQ

-Frameworks

- ITIL

- COBIT

- Methods

- Six Sigma

- Lean

- Agile
People management practices are finding ever increasing adoption to supplement processes
People Frameworks

More than 60% of organizations invest in people related practices to maintain employee motivation, learning, career growth and minimize attrition

Source: KPMG :Business Excellence global survey 2014
### Potential Benefits

#### People Competency
- Increase in resource utilization
- Reduction in time in making new joinees productive

#### HR Productivity
- Reduction in attrition
- Innovative schemes to motivate and increase the morale of the employees
- Integration of work processes with the employee competencies

#### Business Productivity
- Increase in employee satisfaction index
- Alignment of employee KPI with business objectives
- Mechanism of sharing key people practices from individual units to leverage the benefits across the Organization

- Aligning identified functional roles with the business and future needs
- Maintaining consistency in the Project Management Quality
- Meeting internal and external customer expectations
- Value addition through identified competencies
- Integrate competencies of identified function with Performance management system
- Facilitation for ensuring quality of recruitment, selection and workforce development
Operational HR Function Improvement metrics observed by PCMM clients

- Position filling efficiency has improved by 12%
- Offer acceptance index increased by 18%
- Probation to confirmation efficiency increased significantly by 22%
- Voluntary turn-over reduced by 15-20%
- Employee concern resolution efficiency increased by 11%
- Percentage of employees' discharge due to poor performance has significantly reduced by 25%
- Learning index increased by 30% including all development opportunities provided
- Time taken to move employees from lower capability levels to higher capability levels on key competencies showed reduced trend over time. Time to make new incumbent productive cam down by 6%
- Succession plan efficiency improved by 40%. This would cover the aspects of identifying and placing resources as a result of attrition at key positions
Six Sigma, Agile and DevOps are common frameworks/methods being used in IT organization and divisions
Percentage of Organizations implementing Six Sigma

- 43% Implemented
- 34% In progress
- 23% Not considered

Source: KPMG :Business Excellence global survey 2014
- 49% of businesses are using Agile development
- 52% of customers are happy or very happy with Agile projects
- More than 50% agree that prioritizing customer depends is the biggest Agile challenge
- 15% increase in respondents who work where there are at least 5 Agile teams from 2011 to 2012
- Planning to implement agile development in future projects has increased from 59% in 2011 to 83% in 2012
- Most Agile-savvy groups are ScrumMasters and Project Managers (57%)
- Least Agile savvy groups are Product Owners (3%) and Executives (2%)
- The most popular Agile method used is Scrum (52%)
- The use of Agile project management tools has jumped by 8%
- 52% of companies state the biggest barrier to Agile adoption is the inability to change organizational culture

Source: Survey conducted by Serena Software at the Agile 2012 Conference in Dallas 7th State of Agile Development Survey by VersionOne
Agile leading to DevOps

• Software development method that stresses communication, collaboration and integration between software developers and information technology (IT) professionals.

• Adoption of DevOps is being driven by factors such as:
  - **Use of agile** and other development processes and methodologies
  - Demand for an **increased rate of production releases** from application and business unit stakeholders
  - Wide availability of **virtualized and cloud infrastructure** from internal and external providers
  - Increased usage of **data center automation** and configuration management tools
- Manual processes are being replaced by automated tools
- End to end integration is still far off from reality
Automation in the IT sector vs. Other sectors

![Diagram showing automation in the IT sector vs. other sectors.](image)

- **IT spending as a % of revenue**

- **People**
- **Process**
- **Tools**

<table>
<thead>
<tr>
<th>Sector</th>
<th>IT % of Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>0.8</td>
</tr>
<tr>
<td>Metals &amp; Natural Resources</td>
<td>1.4</td>
</tr>
<tr>
<td>Construction &amp; Engineering</td>
<td>1.6</td>
</tr>
<tr>
<td>Consumer Products</td>
<td>1.7</td>
</tr>
<tr>
<td>Food &amp; Beverage Processing</td>
<td>1.7</td>
</tr>
<tr>
<td>Retail</td>
<td>1.8</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>2.3</td>
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<tr>
<td>Chemicals</td>
<td>2.3</td>
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<td>Pharmaceuticals</td>
<td>3</td>
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<td>Utilities</td>
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<td>Transportation</td>
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<td>Insurance</td>
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<td>Hospitality &amp; Travel</td>
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<tr>
<td>Media</td>
<td>8.7</td>
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<td>Professional Services</td>
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<td>Banking and Finance</td>
<td>10.6</td>
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<tr>
<td>Cross-Industry</td>
<td>5.4</td>
</tr>
</tbody>
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More than 50% of the organizations give high priority to automate Project Management, Configuration Management, Testing and Incident/Problem management.
Industry specific models and frameworks are additionally being used for process improvement in specific domain and sectors.
Industry Specific Models

**Telecommunications**
- e-Tom
- TL 9000

**Pharmaceuticals**
- CFR

**Financial Services**
- SOX
- COBIT

**Automotive**
- ISO15504 and Automotive SPICE
- TS 16949 defines requirements in addition to those in ISO 9001:2008 specifically for the automotive industry
- QS 9000

**IT/IT Services**
- TickIT guidelines are an interpretation of ISO 9000 for software development
- ISO/IEC 90003:2004 provides guidelines for the application of ISO 9001:2000 to computer software
- IEEE, CMMI, ITIL
Multi-model adoption or Integrated Quality Management Frameworks for Business Excellence is commonly being adopted.
Almost 20% of the organizations confirmed to adopting more than one Business Excellence frameworks. 2 most common combinations seen were Lean/ Six Sigma with Balanced Scorecard and Lean/ Six Sigma with CoBIT.

35% organizations have not implemented any Business Excellence frameworks. For ‘others’ organizations identified ISO 9001 and CMMI.
Testing Frameworks

- **TMAP - Test management approach**: 10 implemented, 4 in progress
- **STEP - Systematic test and evaluation process assesses**: 4 implemented, 7 in progress
- **ISO - International organisation for standardisation (ISO/IEC 29119, ISO 9126 etc.)**: 11 implemented, 10 in progress
- **TPI - Test process improvement**: 5 implemented, 10 in progress
- **TMMI - Test maturity model integration**: 5 implemented, 13 in progress

Source: KPMG :Business Excellence global survey 2014
PMBoK is the 2nd most adopted framework for Project Management with 29% adoption rate after in-house developed framework.

Source: KPMG :Business Excellence global survey 2014
ROI measuring framework using a combination of various parameters
42% organizations have developed an ROI measuring framework using a combination of various parameters such as improvement in process compliance indexes, process capability baselines and achievement of business targets.

Source: KPMG : Business Excellence global survey 2014
Management reaction in situations of economic slowdown

39% of the organizations confirmed it is ‘business as usual’ for process improvement initiatives and activities, whereas 23% include additional checks and balances during recessionary times to ensure that customer demands are met. Overall organizations continue or enhance the efforts for process improvement/ monitoring during tough economic periods.

Source: KPMG :Business Excellence global survey 2014
Conclusions …

**Process improvement models promise reduced costs, increased predictability of project costs and schedules, higher quality and productivity, shorter cycle time leading to increased customer satisfaction and higher employee morale**

**Model based trend is growing and the market is also showing an interest in complementary approaches**

**Multi-model approaches are gaining pace to address different aspects while integrated business excellence approach becomes vital for tapping the full benefits. PCMM is perceived to play a synergising role in this context**

**Organizations have developed methods to measure ROI using a combination of various parameters such as improvement in process compliance index, process capability baselines and achievement of business targets**
Thank You

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