Business Process Agility and Benchmarking

Richard Leibbrandt
Topics

- The need to improve continuously
- Benchmarkable processes
- APQC-OSBC as international benchmarking clearing house
- Business process agility
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- The need to improve continuously
- Benchmarkable processes
- APQC-OSBC as international benchmarking clearing house
- Business process agility
The need to improve continuously

- When businesses engage in a business process management initiative, it usually stems from the necessity to better manage and improve business processes.
- The job is usually given to IT.
Business process management

- Designing, executing and optimizing of cross-functional business activities
  - Incorporates people, application systems, business partners
  - Process improvement is a part of that
- Governs work flow of a process from E2E
  - Regardless of hand-offs among individuals and departments.
- “It focuses on work. It discovers what we do and what we know, and then it manages that lifestyle of optimization and improvement in a way that translates to our operations.”
  - Cindy Hubert, APQC
BPM is a business issue

Processes captured as business meta data
Physical and digital worlds connected
Real-time business process monitoring
Process optimization features

Increase business user control and IT agility

Enabling Digital Business Architecture

Source: Gartner (May 2006)
Where do you start?

**Scenario 1: IT Leads**

- I wonder if BPM technology will work in this solution?
- We need you to start managing your process flows.
- You manage the process flows, we’re too busy.

**Scenario 2: Business Leads**

- We need to better manage our processes!
- I wonder if BPM technology will work in this solution?
- This technology does not meet with our architectural strategy.

*Source: Gartner (May 2006)*
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Benchmarkable processes

- You cannot improve a process if you cannot measure it
  - How do you know if a process is best practice if it is not measured?
- There are many measurement vendors
  - Which one(s) do you choose?

YOU MUST ENGINEER CAPABILITY FOR BENCHMARKING

- X-Industry, X-framework, Dynamic models
APQC’s Mission

To work with organizations worldwide to improve productivity and quality by:

- Discovering effective methods of improvement
- Broadly disseminate findings
- Connect individuals and the knowledge they need to improve
APQC Operating Groups

Content Dissemination

Knowledge Base

Research Areas

Custom Solutions
Custom Research Advisory Services

Collaborative Research
Consortium Studies

Open Standards Benchmarking Collaborative

Events
Conferences Practicum’s Training

Publications
Books Guides Case Studies

Support Groups

Information Technology

Finance and Accounting

Sales and Marketing

Human Resources
APQC-PCF history overview

- 5 original goals:
  - Classification (taxonomy)
  - Usability (of processes)
  - Standards
  - Benchmarking
  - Continuous improvement
Goal 1: Classification (taxonomy)

- A classification system
  - usable for multiple needs
  - that anyone can understand
  - enter at any level
  - retrieve relationships between levels and processes
Process Classification Framework

OPERATING PROCESSES

1.0 Develop Vision & Strategy
2.0 Design & Develop Products & Services
3.0 Market & Sell Products & Services
4.0 Deliver Products & Services
5.0 Manage Customer Service

MANAGEMENT & SUPPORT PROCESSES

6.0 Develop & Manage Human Capital
7.0 Manage Information Technology
8.0 Manage Financial Resources
9.0 Acquire, Construct, & Manage Property
10.0 Manage Environmental Health & Safety
11.0 Manage External Relationships
12.0 Manage Knowledge, Improvement & Change
Goal 2: Usability (of processes)

- A usable set of processes that can apply to any business, industry or sector
- **Generic** at the business system and major process level
- **Industry-specific** at sub-processes
  - Especially operating system processes
Goal 3: Standards

- A system that standardizes business process definitions
  - so that there is more uniformity;
  - that provides a way for border and cross-border classifications
  - so that users can re-classify,
  - find,
  - and index according to their needs.
Goal 4: Benchmarking

- A system that helps individuals and organizations to improve
  - that will aid diagnosis by providing insights into processes;
  - that aids training and education by reason of having a common classification and linking system among processes;
  - that aids benchmarking by helping to
    - define the scope of the benchmarking activity
    - setting priorities of processes to benchmark
    - finding analogous processes across industries.
Goal 5: Continuous improvement

- A system that
  - meets minimum expectations in the near future
  - and is improved over time;
  - that is flexible;
  - that can be computerized to aid in classification, retrieval, and measurement.
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APQC Content Figuration

APQC Taxonomy

Cross-industry process maps (PCF)

For each process group user could view:
- Standard process definitions
- Associated performance metrics and definitions
- User links to Benchmarks and Best Practices for:
  - Median and benchmark values for performance metrics
  - Best practice statements and case studies

Benchmarks & Best Practices

Median and benchmark values for performance metrics
Best practice statements and case studies

<table>
<thead>
<tr>
<th></th>
<th>All Companies</th>
<th>Median</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of hiring days per employee</td>
<td>4.92</td>
<td>7.82</td>
<td></td>
</tr>
<tr>
<td>Job offer acceptance rate for middle management/specialists</td>
<td>97.00%</td>
<td>96.00%</td>
<td>96.00%</td>
</tr>
<tr>
<td>Number of employees per ‘business, research, and sales employees’ FTE</td>
<td>504.00</td>
<td>1,221.00</td>
<td></td>
</tr>
<tr>
<td>Total budget for the HR function per employee (brassboard)</td>
<td>$1,386.71</td>
<td>$3,366.68</td>
<td></td>
</tr>
</tbody>
</table>

Best Practice Attributes in HR:
- Investing in people has the desired effects increasing operating profits and boosting EBIT margins realized. CHBC’s have to know what the core competencies need to be to compete, sustain or develop.

The CHBC’s sourcing strategies must be linked with the CEO’s business strategies and with modeling of future labor markets in order to maintain flexibility.

In order to retain employees, organizations need to align their reward and benefit programs with their employees’ needs and expectations of their work. CHBC’s understand that retention is a key component in maintaining a high performance workforce.
APQC’s work in process improvement

- Solid leadership in process improvement and business process management for over 30 years
  - Malcolm Baldrige National Quality Award
  - International Benchmarking Clearinghouse
  - Process Classification Framework (PCF)
  - Knowledge Base (KB)
  - Open Standards Benchmarking CollaborativeSM Research
Heritage in knowledge

- Membership of over 500 companies
  - Serving over 25M users
- Trained over 16,000 in 36 countries
- Conducted over 6,000 benchmarking studies
- Conducted over 250 consortium and best practice studies
Best Practice Organizations

In the past 3 years, APQC researched and worked with over 100 organizations:

- Air Products
- Boeing Global Mobility Systems
- Carlson Companies
- Coors Brewing Company
- Deere & Company
- Diageo
- Microsoft (Data partner)
- Northrop Grumman Space Technology
- Operations Management International, Inc.
- UPS
- The Florida Department of Revenue
- MEDRAD
- US Army Armament Research, Development, and Engineering Center
- Sandia National Laboratories
- The United Illuminating Company
OSBC KPI's and metrics

- Over 1,200 individual metrics and performance drivers covering approximately 65 processes and functions
- Data collected from Fortune 1,000 companies for metrics across a variety of industries and geographies
- To date, over 5,000 surveys have been collected across the various process areas and industries
OSBC research database

- Metrics are validated, normalized, and aggregated before reporting
  - Database is refreshed continuously
  - Database covers broad geographies with goals for 40% Americas, 40% EMEA, 20% Asia Pac

- Participants received custom performance level reports

- Compare across multiple dimensions
  - Industry peers, geographic, relevant size, etc.
Primary industry targets

- Aerospace and defense
- Automotive
- Chemical and petroleum
- Consumer products
- Electronics
- Financial Services
- Hospitality and Leisure
- Pharmaceutical
- Public sector
- Retail and wholesale
- Telecommunications
- Utilities
OSBC Database Is Comprised of Broad Demographics

* Sample size only applies to those organizations that responded to the specific question. † Percentages may not total to 100% due to rounding.

**Geography**
- North/South America: 76.6%
- Asia Pacific: 17.2%
- Europe/Middle East/Africa: 6.2%

**Revenue**
- < $500 M: 59.6%
- $500 M - $1 B: 19.9%
- $1 B - $5 B: 15.9%
- $5 B - $10 B: 5.2%
- $10 B - $20 B: 2.6%
- > $20 B: 3.0%

**Industry**
- Consumer Products/Packaged Goods: 14.2%
- Industrial Products: 12.2%
- Services: 12.2%
- Financial Services/Banking: 9.0%
- Electronics: 6.1%
- Retail and Wholesale: 7.4%
- Automotive: 5.7%
- Government/Military: 4.9%
- Petroleum/Chemical: 4.9%
- Distribution/Transportation: 4.3%
- Insurance: 4.1%
- Utility: 3.8%
- Pharmaceutical: 3.6%
- Telecom: 3.1%
- Aerospace: 1.1%
- Media and Entertainment: 0.5%
- Agriculture: 0.3%
- Non-Profit: 0.3%

N = 4692 thru July 2007
Metrics at different levels

- In all 12 categories, metrics are at
  - Executive level
  - Process level
Financial management

- Total cost of the finance function per finance function FTE
- Total cost of the finance function per $1,000 revenue
- Total cost of the finance function as a percent of revenue
- Number of finance function FTEs per $100 million revenue
- Percentage of finance function staff allocated to each finance function process
- Percentage of time allocated to each finance function process
Information Technology

- Total IT budget as a percentage of revenue
- Total IT budget per employee
- Number of IT customers serviced per IT FTE
- Number of employees performing IT processes per $1 billion revenue
- Time in months to break-even for new or enhanced IT services at varying levels
- Percentage of IT budget for each IT process
- Average percentage of project ROI achieved
- Percentage of projects delivered on time
- Percentage of initial functionality delivered
- Total cost of each IT process per $1,000 revenue
Human Capital Management

- Total budget for the HR function per $1,000 revenue
- Total budget for the HR function per employee (headcount)
- Total costs of the HR function per $1,000 revenue
- Total costs of the HR function per employee (headcount)
- Number of employees per HR function FTE
- Total number of HR FTEs per $1billion revenue
- Employee turnover rate
Contact Centers

- Total revenue per sales order and per active customer
- Total cost for the process "manage inbound sales orders" per $1,000 revenue, per sales order, and per agent FTE
- Total number of calls received by live agent per agent FTE
- Total cost of "inbound contact center operations" per active customer, per agent FTE and per inbound contact
- Total cost of the process "manage customer service" per $1,000 revenue
- Call agent utilization and service level
Supply Chain Management

- Demand/supply planning costs per $1,000 revenue
- Inventory carrying costs per $1,000 revenue
- Total annual cost of quality per $100,000 revenue
- Finished goods inventory turn rate
- Total supply chain cost per $1,000 revenue
- Number of supply chain FTEs per $1,000 revenue
Supply Chain Management:

- **Customer Order Management**
  - Total enter, process and track orders per $1,000 revenue
  - Number of sales orders processed per enter, process and track orders FTE
  - Percentage of sales order line items delivered on time as scheduled
  - Number of FTEs for the customer order management function per $1 billion revenue
  - Total cost of the customer order management function per sales order
  - Key customer retention rate
Supply Chain Management:

- **Manufacturing**
  - Warranty costs as a percent of sales
  - Raw material inventory turnover rate
  - Cost of goods sold as a percentage of revenue
  - Finished goods days of supply
  - Actual production rate as a percentage of the maximum capable production rate
Supply Chain Management:

- Supply Chain Planning
  - Customer order cycle time in hours
  - Total operate warehouse cost per sales order
  - Percentage of supplier orders delivered on time
  - Order fill rate
  - Inventory accuracy
  - Total operate outbound transportation cost per $1,000 revenue
  - Freight cost per $1,000 revenue
  - Number of FTEs in the logistics function per $1 billion revenue
  - Percentage of orders shipped complete and on time
Supply Chain Management:

- Logistics
  - Demand/supply planning costs per $1,000 revenue
  - Inventory carrying cost per $1,000 revenue
  - Forecast accuracy one planning period prior to production run
  - Cash to cash cycle time
Supply Chain Management:

- New Product Development
  - Total cost of new product development per $1,000 revenue
  - Time to profitability in months for product/service improvement projects
  - Average time-to-market in days for all types of new products
  - Percentage of new product/service developments launched on budget
  - Percentage of sales due to product/services launched in the past year
  - Percentage of new product/service developments launched on time
  - Total cost of the process "generate new product/service ideas" per new product/service opportunities
Supply Chain Management:

- New Product Development (cont.)
  - Average generate new ideas hours for new product/service development projects
  - Total cost of the process "design and develop product/service" per number of projects making it to test market
  - Total cost of the process "design and develop product/service" per $1,000 revenue
  - Time to market in days for new product/service development projects
  - Total cost of the process "support product/service manufacturing/delivery" per $1,000 revenue
Supply Chain Management:

- **Procurement**
  - Number of purchase orders processed per procurement FTE
  - Total cost of the procurement cycle per $1,000 revenue.
  - Total cost of the procurement cycle per $1,000 purchases
  - Percentage of purchase orders received complete
  - Percentage of purchase orders received damage free
  - Number of FTEs for the procurement cycle per $1 billion purchases
## Procurement:
### Benchmark Data Sample

<table>
<thead>
<tr>
<th>Develop Sourcing Strategy</th>
<th>Top Performer</th>
<th>Median</th>
<th>Bottom Performer</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cost of the process &quot;develop sourcing strategies&quot; per $1,000 revenue</td>
<td>$1.38</td>
<td>$1.38</td>
<td>$2.42</td>
<td>10</td>
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<tr>
<td>Total cost of the process &quot;develop sourcing strategies&quot; per $1,000 purchases</td>
<td>$0.26</td>
<td>$0.63</td>
<td>$1.12</td>
<td>10</td>
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<td>Number of FTEs for the process “develop sourcing strategies” per $1 billion revenue</td>
<td>1.5</td>
<td>2.0</td>
<td>2.5</td>
<td>10</td>
</tr>
<tr>
<td>Number of FTEs for the process “develop sourcing strategies” per $1 billion purchases</td>
<td>7.0</td>
<td>7.9</td>
<td>8.5</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Select Suppliers &amp; Develop/Maintain Contracts</th>
<th>Top Performer</th>
<th>Median</th>
<th>Bottom Performer</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cost of the process &quot;Select Suppliers &amp; Develop/Maintain Contracts&quot; per $1,000 revenue</td>
<td>$0.28</td>
<td>$0.43</td>
<td>$1.06</td>
<td>10</td>
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<tr>
<td>Total cost of the process &quot;Select Suppliers &amp; Develop/Maintain Contracts&quot; per $1,000 purchases</td>
<td>$4.32</td>
<td>$4.94</td>
<td>$5.53</td>
<td>10</td>
</tr>
<tr>
<td>Number of FTE’s for the process &quot;Select Suppliers &amp; Develop/Maintain Contracts&quot; per 1 billion revenue</td>
<td>11.9</td>
<td>13.0</td>
<td>13.8</td>
<td>10</td>
</tr>
</tbody>
</table>
Topics

● The need to improve continuously
● Benchmarkable processes
● APQC-OSBC as international benchmarking clearing house
● Business process agility
Business process agility

- **Inputs:**
  - Best practices, Best of breed EA, Best of breed applications

- **Agile process uses:**
  - Unique IP, Right tools, Right skills
  - Integrated process- and software development life cycle

- **Result:**
  - Best in class
Best practice wizard

- APQC collects, processes and manages a database of benchmarks, business drivers, best practices and tools.
  - Over 100k data points
  - Over 6k content artifacts
Knowledge base is dynamic

Online research library for process improvement professionals.
Provides access to the benchmarks, best practices, peers, and experts

CONTENT
Houses roughly 7,000 content items - worth more than $1 million. With over 100 new items being added each month, the Knowledge Base provides accurate, credible, and timely information in seconds.

KB content types include:
- White papers and articles
- Case studies
- Best practice reports
- Presentations
- Improvement tools and templates
- Sample surveys
- Benchmarks, measure, and metrics

CONNECTIONS
Because networking is such a powerful tool, APQC created the ability for members to contact one another through a searchable, online member directory. More than 15,000 contacts have opted into the directory, and approximately 4,000 are added each year.

APQC’s communities of practice (CoPs) enable you to benefit from the knowledge and experience of others who share similar interests. Members can choose from a variety of online communities such as Knowledge Management and Innovation. Each CoP is moderated by a subject matter expert and features regularly scheduled conference calls covering hot topics.

CUSTOMIZATION
Knowledge Base content is personalized based on information you provide during the registration process.

- PERSONALIZED CONTENT—We know who you are and what you want to see.
- FEATURED PUBLICATIONS—We feature publications based on your area of interest.
- SEARCH OPTIONS—Search content by type, topic, process, industry or use the advanced search feature.
- OTHER USEFUL FEATURES—Access the calendar of events, communities of practice, and member directory.
Consortium Research:
Designed to Identify Best Practices

APQC has conducted over 300 consortia projects, each with 10-40 sponsoring/participating organizations.

- Managing the Total Customer Experience
- Realizing Change
- Emerging Best Practices in KM and Organizational Learning
- Planning, Budgeting and Forecasting
- Customer Profitability
- Project Management: Best Practices in Action
- Effectively Managing Performance Measurement Systems
- Inventory Optimization
- Using Communities of Practice to Drive Performance
- Next Generation HR
- Innovation: Ideas to Action
- Business Process Management
- Leveraging Knowledge across the Value Chain
- Performance Measurement in the Public Sector
- Leveraging Compliance to Optimize Shareholder Value
- Recruit, Select, and Retaining Talent in a Competitive Market
- The Role of Evolving Technologies: Accelerating Collaboration and Knowledge Transfer
- Improving Collaboration for Product and Service Development
- Business Process Management IV
- Enterprise Risk Management II
- Leadership
- Innovation
Work done by Tickbox

- Cross-referencing APQC-PCF to other frameworks:
  - SAP solution maps
    - Developed on ARIS for SAP Netweaver
  - SCOR
  - ITIL

- Future plans
  - Other platforms and frameworks
Business Process Agility and Benchmarking

- THE END -

Website: tickbox.co.za
Title:-
Business process agility and benchmarking

Abstract:-
When businesses engage in a business process management initiative, it usually stems from the necessity to better manage and improve business processes. This presentation looks at the American Productivity and Quality Center (APQC) Open Standards Benchmarking Collaborative (OSBC) as international benchmark clearing house and its position in Africa.

Audience:-
Enterprise and IT architects

Key takeaways:-
1. Benchmarkable processes
2. Business process agility
3. APQC-OSBC as international benchmarking clearing house

Speaker:-
Richard Leibbrandt
Director: Tickbox
PO Box 459, Sanlamhof, 7532
Phone: 021 438 2882/ 072 840 9646
E-mail: rleibbrandt@tickbox.co.za

Biography:-
Richard Leibbrandt is one of the leading retail IT experts in South Africa. He has been part of the IT Management team of a leading South African retailer for many years. His creativity and passion to keep on the technology forefront resulted in forming an initiative that brings world-class benchmarking into Africa via the American Productivity and Quality Center (APQC).