

# UKSMA

## Application Outsourcing: how do you know how much money you are losing/saving?

Michael Hartley  
VP Gartner Benchmarking Group  
2009

This presentation, including any supporting materials, is owned by Gartner, Inc. and/or its affiliates and is for the sole use of the intended Gartner audience or other authorized recipients. This presentation may contain information that is confidential, proprietary or otherwise legally protected, and it may not be further copied, distributed or publicly performed without the express written permission of Gartner, Inc. or its affiliates. © 2009 Gartner, Inc. and/or its affiliates. All rights reserved.




---

---

---

---

---

---

---

---

---

---

## The current Applications Outsource market is showing significant focus on Cost and Price.

- Applications Development and Support Pricing has always seen to be somewhat of a mystery. What mechanisms exist to determine the price of an Application Development or Support Outsourcing deal? What works and what does not?
- Is size the only price driver? Is measuring the workload really the battleground we expect to see? Is offshore any different?
- Applications Development and Support (ADS) can account for more than 50% of an entire IT budget. Cost management is not possible without a clear understanding of what drives price in order to take effective actions to reduce costs.

© 2009 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner, UKSMA and Benchmarking Group are trademarks of Gartner, Inc. or its affiliates.

2




---

---

---

---

---

---

---

---

---

---

## 2009 CIO strategies reflect the need to reduce the cost of IT and raise IT performance

Ranking of strategies CIOs selected as one of their top 5 priorities

	2009	2008	2007	2006	2012
Linking business and IT strategies and plans	1	2	2	2	2
Reducing the cost of IT	2	10	12	*	6
Delivering projects that enable business growth	3	1	1	1	1
Improving IT governance	4	7	8	9	14
Implementing IT process improvements	5	6	12	*	13
Improving the quality of IS services	6	4	7	12	12
Improving the business and IT relationship	7	5	*	*	11
Attracting, developing and retaining IT personnel	8	3	4	5	5
Consolidating IT operations (e.g. shared services)	9	12	*	*	15
Use of information/intelligence	10	9	6	*	4
Developing or managing a flexible infrastructure	11	11	7	8	8
Building business skills in the IT organization	12	9	8	3	9
Leading enterprise change initiatives	13	13	10	*	3

\* New question

Source: Gartner's CIO Agenda 2009

© 2009 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner, UKSMA and Benchmarking Group are trademarks of Gartner, Inc. or its affiliates.

3




---

---

---

---

---

---

---

---

---

---

### 3 Themes

1. The Applications outsource market
2. What types of model are required for benchmarking?
3. Practicalities and rules of engagement

---

---

---

---

---

---

---

---

### ■ ■ ■ ■ 1. The Applications outsource market

---

---

---

---

---

---

---

---

### 1. What's happening in the Apps Outsourced world? Still growing – but carefully

"The current economic environment has created two extremes of buyers:

- those financially distressed
  - and those exercising extreme caution
- but both are exhibiting extreme focus on cost reduction."

"Economic woes create extreme price pressure from clients and intensify competition. With nearly all organizations looking to reduce IT costs, ..."

Source: Gartner Research

"service providers face several challenges: ... extreme focus on cost

Clients are aggressively seeking ways to deliver immediate cost-benefits

Outsourcing levels are set to increase ... During the next two years, the number of organizations that evaluate their use of IT Outsourcing as high is set to grow

- from 30% to 41% in North America,
- from 25% to 34% in Western Europe,
- and from 31 to 51% in Asia/Pacific."

Source: Gartner Research

#### DataQuest Research has identified

- **51 new (large) Applications Outsourcing deals in 2008**
- **27 new (large) Applications Outsourcing deals in the first half of 2009**

---

---

---

---

---

---

---

---

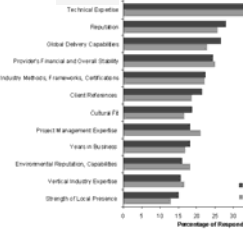
# 1. What's happening in the Apps Outsourced world? Focus is on Price and Cost Saving

## Top Factors during Request For Proposal and in Final Selection

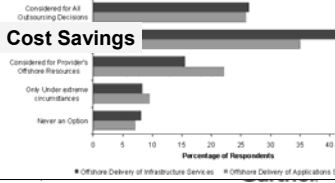


Gartner Research:  
Economic Pressures Drive Cost-Oriented Outsourcing, Worldwide, 2008-2009

### Price



## Key Parts of Today's Outsourcing Strategy



© 2008 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner, the Gartner logo and trademarks of Gartner, Inc. or its affiliates.

# 1. The Applications Outsource Market What happens when Apps is outsourced?

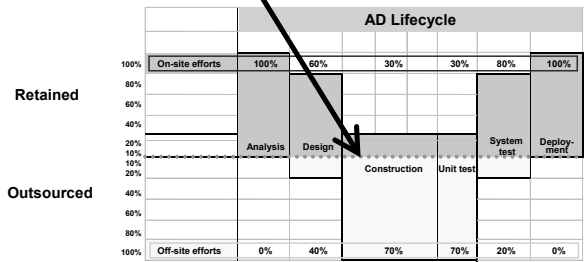
- **Application Development** is split between the Service Recipient and the Service Provider and the lifecycle responsibilities are initially defined but soon fall apart
- **Applications Support** scope expands considerably to incorporate e.g.:
  - Help Desk, operations management, and configuration management,
- On-shore/off-shore mix is initially planned as part of the outsourcing business case – but the profiles change under geographically driven price differentials.
- Additional responsibilities are added to fill the gaps in the Service Recipient's previous organisation,
  - Lead Systems Integrator role
  - Risk management

© 2008 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner, the Gartner logo and trademarks of Gartner, Inc. or its affiliates.



# 1. The Applications Outsource Market The contracted AD Effort and Phase Allocation

## Clean demarcation lines

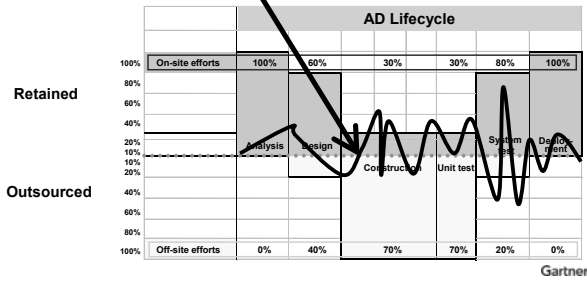


© 2008 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner, the Gartner logo and trademarks of Gartner, Inc. or its affiliates.



# 1. The Applications Outsource Market the reality

It's just a !!!!! mess !




---

---

---

---

---

---

---

---

---

---

---

---

# 1. The Applications Outsource Market Three types of deal are being signed

- Staff augmentation** - A contract to provision technical workers to supplement client-application-related responsibilities, typically on a time-and-expense basis in which labour and hourly rates are the key metrics.
- Project-based** - A contract involving the purchase of application-related services that are purchased for a specified scope of work finitely executed. Typically, the contract is structured with specific milestone dates for the project work, and payment is contingent on completing the specified work.
- Full Application outsourcing** - A multiyear contract or relationship involving the purchase of ongoing application services from an external provider that supplies the people, processes, tools and methodologies for managing, enhancing, maintaining and supporting custom and packaged software applications, including hosted applications. Services sold via outsourcing include application management and maintenance, and may also include consulting, development and integration, help desk, and other optimization services.

---

---

---

---

---

---

---

---

---

---

---

---

## ■ ■ ■ ■ 2. What types of model are required for benchmarking?

---

---

---

---

---

---

---

---

---

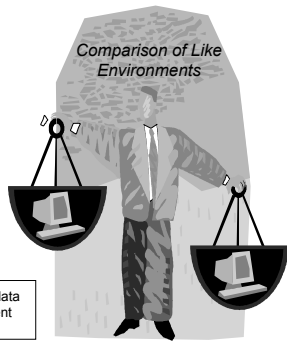
---

---

---

## 2. Benchmark Models: What is a Benchmark?

- A benchmark is a metric comparison of a defined environment to a peer\* group with similar environments.
- Analysis can measure cost, price, efficiency, effectiveness and deviation from peer group norms.



\*Peer — An Organization whose benchmarking data points match the characteristics of the environment being benchmarked.

## 2. Benchmark Models: What types are required for benchmarking?

Staff augmentation

- The model used must be linked to the type of deal:

Project-based

- Staff Augmentation – Day Rates
- Project – Price and Productivity for Project

Full Application outsourcing

- Full Outsourcing – Price for Service

## 2. Benchmark Models: Staff Augmentation

Staff augmentation

### Rate Card Assessments.

- Uses a combination of Skill Level models and detailed Job Description information.
- Requires details from SR (and SP) of:
  - Contract terms,
  - Roles and Responsibilities of resources
  - On-shore / off-shore profiles

Gartner		Agreed Success																		
		Role 1 - Ops Engineer																		
<b>Job Characteristics</b>		Ops Engineer																		
• Job Name																				
• Responsibility Cluster		This role is used primarily for Desktop Engineers here of the Center Cluster as a good match for it. It is not targeted for Cluster A as the best option to work with. Cluster to advise whether they have comparable responsibility cluster. If not, provide technical support discipline. Applicable subject matter knowledge to handle general support issues. Act as a team member, providing information and support to best ability.																		
• Skills Cluster		This role is used primarily for Desktop Engineers here of the Center Cluster as a good match for it. It is not targeted for Cluster A as the best option to work with. Cluster to advise whether they have comparable skills clusters.																		
Education Required		None for Center education levels																		
<table border="1"> <thead> <tr> <th>Title</th> <th>Responsibilities</th> <th>Skills</th> </tr> </thead> <tbody> <tr> <td>Senior Systems Administrator</td> <td>Manage and maintain all computer systems, including servers, networks, and databases. Provide technical support to users and troubleshoot hardware and software issues.</td> <td>Advanced knowledge of Windows and Linux operating systems, networking, and database management. Strong problem-solving and communication skills.</td> </tr> <tr> <td>Systems Administrator</td> <td>Manage and maintain all computer systems, including servers, networks, and databases. Provide technical support to users and troubleshoot hardware and software issues.</td> <td>Advanced knowledge of Windows and Linux operating systems, networking, and database management. Strong problem-solving and communication skills.</td> </tr> <tr> <td>Network Administrator</td> <td>Manage and maintain all computer systems, including servers, networks, and databases. Provide technical support to users and troubleshoot hardware and software issues.</td> <td>Advanced knowledge of Windows and Linux operating systems, networking, and database management. Strong problem-solving and communication skills.</td> </tr> <tr> <td>Database Administrator</td> <td>Manage and maintain all computer systems, including servers, networks, and databases. Provide technical support to users and troubleshoot hardware and software issues.</td> <td>Advanced knowledge of Windows and Linux operating systems, networking, and database management. Strong problem-solving and communication skills.</td> </tr> <tr> <td>Help Desk Support</td> <td>Provide technical support to users and troubleshoot hardware and software issues. Act as a team member, providing information and support to best ability.</td> <td>Basic knowledge of Windows and Linux operating systems, networking, and database management. Strong communication and problem-solving skills.</td> </tr> </tbody> </table>			Title	Responsibilities	Skills	Senior Systems Administrator	Manage and maintain all computer systems, including servers, networks, and databases. Provide technical support to users and troubleshoot hardware and software issues.	Advanced knowledge of Windows and Linux operating systems, networking, and database management. Strong problem-solving and communication skills.	Systems Administrator	Manage and maintain all computer systems, including servers, networks, and databases. Provide technical support to users and troubleshoot hardware and software issues.	Advanced knowledge of Windows and Linux operating systems, networking, and database management. Strong problem-solving and communication skills.	Network Administrator	Manage and maintain all computer systems, including servers, networks, and databases. Provide technical support to users and troubleshoot hardware and software issues.	Advanced knowledge of Windows and Linux operating systems, networking, and database management. Strong problem-solving and communication skills.	Database Administrator	Manage and maintain all computer systems, including servers, networks, and databases. Provide technical support to users and troubleshoot hardware and software issues.	Advanced knowledge of Windows and Linux operating systems, networking, and database management. Strong problem-solving and communication skills.	Help Desk Support	Provide technical support to users and troubleshoot hardware and software issues. Act as a team member, providing information and support to best ability.	Basic knowledge of Windows and Linux operating systems, networking, and database management. Strong communication and problem-solving skills.
Title	Responsibilities	Skills																		
Senior Systems Administrator	Manage and maintain all computer systems, including servers, networks, and databases. Provide technical support to users and troubleshoot hardware and software issues.	Advanced knowledge of Windows and Linux operating systems, networking, and database management. Strong problem-solving and communication skills.																		
Systems Administrator	Manage and maintain all computer systems, including servers, networks, and databases. Provide technical support to users and troubleshoot hardware and software issues.	Advanced knowledge of Windows and Linux operating systems, networking, and database management. Strong problem-solving and communication skills.																		
Network Administrator	Manage and maintain all computer systems, including servers, networks, and databases. Provide technical support to users and troubleshoot hardware and software issues.	Advanced knowledge of Windows and Linux operating systems, networking, and database management. Strong problem-solving and communication skills.																		
Database Administrator	Manage and maintain all computer systems, including servers, networks, and databases. Provide technical support to users and troubleshoot hardware and software issues.	Advanced knowledge of Windows and Linux operating systems, networking, and database management. Strong problem-solving and communication skills.																		
Help Desk Support	Provide technical support to users and troubleshoot hardware and software issues. Act as a team member, providing information and support to best ability.	Basic knowledge of Windows and Linux operating systems, networking, and database management. Strong communication and problem-solving skills.																		
Approved by: _____ Date: _____																				

## 2. Benchmark Models: Project Based

Project-based

**Combination of Productivity calculation and Rate Card approaches used to benchmark Price of a Project.**

- Projects are sized,
- Productivity drivers are documented,
- Project performance is modelled from database productivities,
- Additional factors are used to address:
  - Testing demands to meet required Service Levels,
  - time compression to achieve deadlines,
  - Additional Service Provider management

© 2008 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner, IT, and registered trademarks of Gartner, Inc. or its affiliates.

16

Gartner

---

---

---

---

---

---

---

---

---

---

## 2. Benchmark Models: Full Outsource

Full Application outsourcing

**Full Applications Price Benchmark**

- Based on combination of Productivity calculation and Rate Card approaches used to benchmark Development and Support.
- Using models to support shared/split responsibilities through the development lifecycle.

**Challenges:**

- "Agile" methods will undermine the current ability to allocate performance responsibility between SP and SR
- Sizing of Development outcomes – Function Points is still the best approach but there are pockets of significant resistance
- Moves to "Business Value" outcomes will require rethink on measures of productivity

© 2008 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner, IT, and registered trademarks of Gartner, Inc. or its affiliates.

17

Gartner

---

---

---

---

---

---

---

---

---

---

## 2. Benchmark Models: Typical results and uses

**Benchmarking ...**

- ... provides a measure for continuous improvement
- ... tests the validity of fees for certain services
- ... evaluates relative performance within a peer group
- ... creates leverage for price adjustments
- ... quantifies the appropriate price/service delivery balance

**Benchmarking basics:**

Coverage areas	When?	How often?	Comparison metrics	Methodology
Peer group selection	Provider selection	Realistic definitions	Benchmark management	How to use results

© 2008 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner, IT, and registered trademarks of Gartner, Inc. or its affiliates.

18

Gartner

---

---

---

---

---

---

---


---

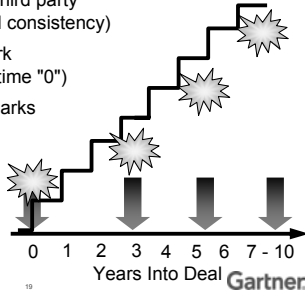
---

---

## 2. Benchmark Models: Applying Benchmarking In a Deal

- Jointly agree to benchmarking process (cooperation and openness)
- Decide on an independent third party (impartial, methodology and consistency)
- Conduct an initial benchmark (sets a stake in the ground time "0")
- Routinely schedule benchmarks (used to adjust deal as needed)

 = Decision Points



© 2009 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner, the Gartner logo and Benchmarking are registered trademarks of Gartner, Inc. or its affiliates.

19

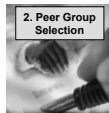
## 2. Benchmark Models: Benchmarking Process overview

Contract	Summary of Deal Profile
Contract ID: 123456	Client: ABC Corp
Contract Type: Outsourcing	Service: IT Support
Start Date: 2008-01-01	End Date: 2010-12-31
Contract Value: \$5M	Contract Status: Active

- Deal profile completed by client
- Validated during interviews/workshops

Factor	Weight	Value	Weighted Value	Score	Weighted Score
Client	40	100	40	100	40
Contract	30	80	24	80	24
Service	20	90	18	90	18
Location	10	70	7	70	7
Total			89		89

■ Agreed with service provider and service receiver



■ Database of Outsourcing Contracts

Normalization for client X	Client A	Client B	Client C	Client D	Client E	Client F	Client G	Client H	Client I	Client J	Client K	Client L	Client M	Client N	Client O	Client P	Client Q	Client R	Client S	Client T	Client U	Client V	Client W	Client X	Client Y	Client Z
Client X	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	3.00	3.10	3.20	3.30	3.40	3.50

© 2009 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner, the Gartner logo and Benchmarking are registered trademarks of Gartner, Inc. or its affiliates.

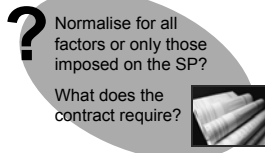
20

Gartner

## 2. Benchmark Models: Normalisation – a necessary step

Normalisation must be done for each of the peer outsourcing deals across multiple criteria – make the peer look like “this deal”:

- Scope of Offering
- Scale
- Geography
- Supported Environment
- Maintained Technologies
- Service Level Agreements
- Terms and Conditions
- Labour Market Factors



© 2009 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner, the Gartner logo and Benchmarking are registered trademarks of Gartner, Inc. or its affiliates.

21

Gartner

## 2. Benchmark Models: Peers & Normalisations – extract - data template

Contract: Price Benchmarking Applications Maintenance: Peer Contracts						
		Peer Contract 1	Peer Contract 2	Peer Contract 3	Peer Contract 4	Peer Contract 5
<b>Scope of Offering</b>						
Applications Support	100%	100%	100%	100%	100%	100%
Consulting and Emergency Maintenance	100%	100%	100%	100%	100%	100%
Proactive Maintenance	100%	100%	100%	100%	100%	100%
Release Packaging	100%	No	5%	100%	100%	100%
Technical and End User Support	100%	No	4%	100%	100%	100%
Minor Enhancements	100%	100%	100%	100%	100%	100%
Business and Operations Support	No	No	No	No	No	100%
Technical Upgrades	No	No	10%	100%	No	100%
<b>Scale</b>						
Size of Applications Portfolio (Function Points)	204,075	244,201	3,61%	256,231	4,69%	235,466
Weighted app years	5.1	5.9	4.03%	11.8	4.91%	17.7
<b>Geography</b>						
Required to engage on non-base sites with End Users?	No	No	No	No	No	No
F100 - how many sites?						
<b>Supported Environment</b>						
Development Methodology	No	No	No	No	No	No
IT/EC - what is the method?						
Business Criticality of Maintained Applications	critical	critical	critical	critical	critical	critical
<b>Change Management Strategy</b>						
As done	No	10%	0.05%	20%	0.10%	7%
Via release	quarterly	8%	4%	4%	8%	8%
Process Maturity Rating	-1	1	1	1	1	1
QIP level - GSI level gap						
<b>Maintained Technologies</b>						
Language Profile						
JAVA	6%	44.8%	10.5%	1.0%	14.4%	43.9%
COBOL			4.0%	0.3%		
Other			85.5%	81.7%		

Gartner

## 2. Benchmark Models: Peers & Normalisations - normalisation factors

Contract: Price Benchmarking Applications Maintenance: Peer Contracts						
	Peer Contract 1	Peer Contract 2	Peer Contract 3	Peer Contract 4	Peer Contract 5	Peer Contract 6
<b>Scope of Offering</b>						
Applications Support	100%	100%	100%	100%	100%	100%
Consulting and Emergency Maintenance	100%	100%	100%	100%	100%	100%
Proactive Maintenance	100%	100%	100%	100%	100%	100%
Release Packaging	100%	No	5%	100%	100%	100%
Technical and End User Support	100%	No	4%	100%	100%	100%
Minor Enhancements	100%	100%	100%	100%	100%	100%
Business and Operations Support	No	No	No	No	No	100%
Technical Upgrades	No	No	10%	100%	No	100%
<b>Scale</b>						
Size of Applications Portfolio (Function Points)	204,075	244,201	3.61%	256,231	4.69%	235,466
Weighted app years	5.1	5.9	4.03%	11.8	4.91%	17.7
<b>Geography</b>						
Required to engage on non-base sites with End Users?	No	No	No	No	No	No
F100 - how many sites?						
<b>Supported Environment</b>						
Development Methodology	No	No	No	No	No	No
IT/EC - what is the method?						
Business Criticality of Maintained Applications	critical	critical	critical	critical	critical	critical
<b>Change Management Strategy</b>						
As done	No	10%	0.05%	20%	0.10%	7%
Via release	quarterly	8%	4%	4%	8%	8%
Process Maturity Rating	-1	1	1	1	1	1
QIP level - GSI level gap						
<b>Maintained Technologies</b>						
Language Profile						
JAVA	6%	44.8%	10.5%	1.0%	14.4%	43.9%
COBOL			4.0%	0.3%		
Other			85.5%	81.7%		

Normalisation factors are applied to adjust for differences between the peer's characteristics and those of "this deal"

	The deal	The peer	Factor
FP Size	204,075	244,201	3.61%
Apps Age	3.1	5.9	4.03%

Gartner

## 2. Benchmark Models: Summary Normalisations & Price Comparison

XYZ Application Support Calculated price per year											
Contract	Unadjusted Price	Net Adjustment	Adjusted Price	Scope of Offering Impact	Scale Impact	Geography Impact	Supported Environment Impact	Maintained Technologies Impact	Service Levels Impact	Terms and Conditions Impact	Market Factors Impact
BP1	£ 565,936	8.2%	£ 489,947	-0.0%	-0.6%	1.7%	2.0%	3.6%	6.0%		
BP2	£ 649,593	4.1%	£ 548,947	-2.7%	-0.6%	3.5%	1.3%	2.7%	3.6%		
BP3	£ 662,308	-2.6%	£ 644,947	-1.6%	1.1%	0.0%	3.1%	0.8%	2.7%	-2.5%	
BP4	£ 790,543	19.8%	£ 644,947	2.9%	0.0%	-1.2%	2.7%	0.0%	7.9%	3.6%	
BP5	£ 650,910	8.8%	£ 548,947	-5.7%	3.6%	2.7%	-0.6%	-2.7%	-1.4%	1.3%	3.6%
Average		4.3%	£ 548,947	4.5%	1.8%	1.3%	0.6%	1.7%	8.5%	3.6%	2.9%

example

XYZ Application Support Calculated price per year			
Support Price	ABC price is % of	Range vs. min.	
Minimum	£ 489,947	132%	100%
Average	£ 555,700	116%	113%
Maximum	£ 790,513	91%	145%
Client XYZ	£ 645,923		

Gartner



### 3. Practicalities:

---

---

---

---

---

---

---

---

### 3. Practicalities and rules of engagement

- Everyone's favourite subject
- Sizing

---

---

---

---

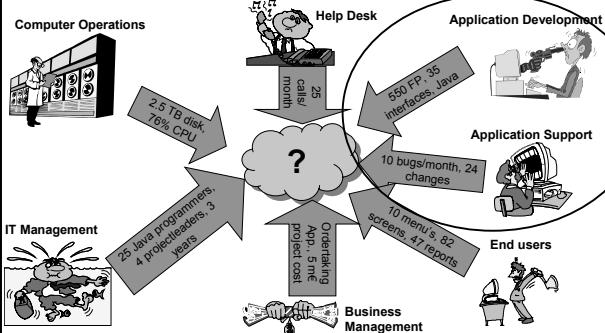
---

---

---

---

### 3. Practicalities What's the size of an Application? Who is looking?



---

---

---

---

---

---

---

---

### 3. Practicalities different sizing approaches for different deals

<ul style="list-style-type: none"> <li>Counted Function Points – Formal FPA                     <ul style="list-style-type: none"> <li>e.g. with the International Function Point User Group (IFPUG) or NESMA methods</li> </ul> </li> <li>Fast Function Points                     <ul style="list-style-type: none"> <li>e.g. Gartner Fast Function Point Analysis (FFPA)</li> </ul> </li> </ul>		OK for Drill down Benchmark
<ul style="list-style-type: none"> <li>Express Size                     <ul style="list-style-type: none"> <li>Number of objects x factor : only for portfolio</li> </ul> </li> <li>Counted Lines of Source Code → “Backfired FP”                     <ul style="list-style-type: none"> <li>Part or whole portfolio (i.e. not for individual apps.)</li> </ul> </li> </ul>		OK for High level Benchmark
<ul style="list-style-type: none"> <li>Estimated Lines of Code</li> <li>Comparative Functionality</li> </ul>		Option for High level Benchmark

Source: Gartner best practices  
 © 2008 Gartner, Inc. and/or its affiliates. All rights reserved.  
 Gartner, the Gartner logo and trademarks of Gartner, Inc. or its affiliates.




---

---

---

---

---

---

---

---

---

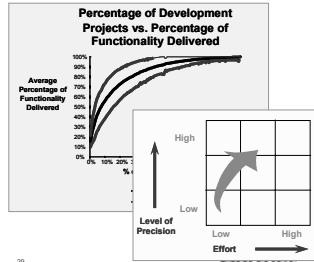
---

### 3. Practicalities Is sampling OK?

- Sampling is acceptable

**?** How much data is needed?

- Enough to be representative
- As agreed between Service Recipient and Service Provider



© 2008 Gartner, Inc. and/or its affiliates. All rights reserved.  
 Gartner, the Gartner logo and trademarks of Gartner, Inc. or its affiliates.

20

---

---

---

---

---

---

---

---

---

---

### 3. Practicalities Good Measurement Practices

- Size is a major price driver for outsourcing contracts in Application Development and Support, but not the only one. Others are: complexity, quality, technology, volatility (for Apps Support)
- Each of these needs to be measured.
- Use Function Point Analysis to determine the size of an Application in Support or to be developed. Lines of Code can be an alternative,
- Have the functional design counted TWICE: once by the SR, once by the SP. In case of conflict, seek arbitrage via a 3rd party.
- Agree on the size (and other price drivers) before negotiating on price
- Base contracts for AD and AS on a productivity figure (hours/FP), or on a price (£/FP)
- Create metrics to stimulate the ESP to meet requirements of the deal which could be increase productivity, reduce defects, or reduce costs.

© 2008 Gartner, Inc. and/or its affiliates. All rights reserved.  
 Gartner, the Gartner logo and trademarks of Gartner, Inc. or its affiliates.

30




---

---

---

---

---

---

---

---

---

---

■ ■ ■ ■ In closing .....

---

---

---

---

---

---

---

---

**Measuring Success**  
What Works and What Doesn't ... Lessons Learned

- **Adopt a benchmark process based on a proven methodology, a robust database and market trend understanding.**
- **Be prepared to be pragmatic in measuring functional size. Select the right technique for the needs of the benchmark**
- **ESP and SR should be equally involved during the benchmark process.**
- **Don't focus on data exclusively from industry peers — you may find the best practices elsewhere.**
- **Normalisation is normal!**
- **Benchmark the contract and remember the constraints under which the SP has to operate.**

---

---

---

---

---

---

---

---

■ ■ ■ ■ Q & A

---

---

---

---

---

---

---

---