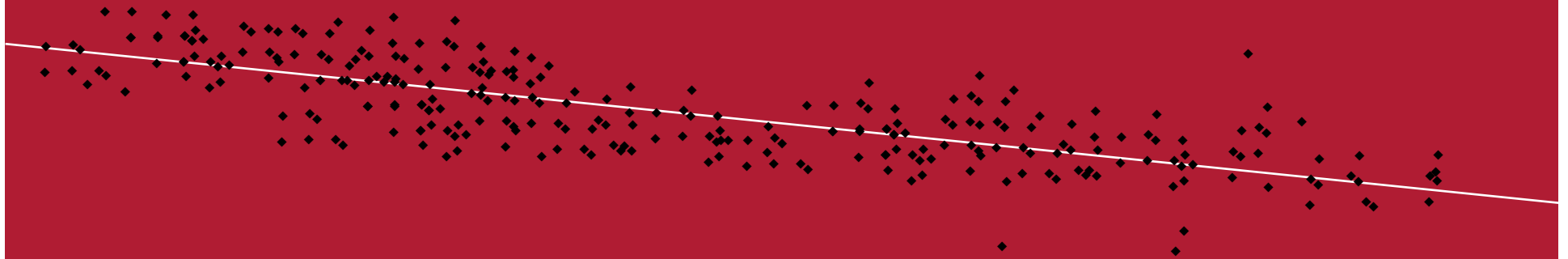


Outsourcing af it-drift



Oktober 2014

Kort om Zangenberg Analytics

- Vi har benchmarket it-aftaler siden 2010
- Vi har mere end 200 aftaler i vores database med en samlet årlig volumen på over 3 mia. kr. – det svarer til over 17% af det samlede marked
- Vi er indskrevet som benchmarker i en række aftaler mellem kunder og såvel nationale som internationale leverandører
- Vores abonnementsordning Quarterly Analytics giver løbende adgang til enhedspriser, indeks, analyser og tutorials, der letter arbejdet med it-sourcing.

Referencer

zangenberg
analytics

Offentlig sektor



POLITI


Skatteministeriet



Danmarks Miljøportal



**Region
Hovedstaden**



KØBENHAVNS UNIVERSITET



KØBENHAVNS KOMMUNE



Forsvaret
Forsvarskommandoen

Centrale systemer

	Medlems-system	WEB CMS	ESDH	SAP	Øvrige systemer	Mail
Udvikling	In-house	KMD	CSC	IBM	In-house	TDC-Cloud
Vedligehold	In-house	KMD	CSC	IBM	In-house	TDC-Cloud
Helpdesk	In-house	KMD	In-house/CSC	IBM	In-house	TDC-Cloud
Databasedrift	In-house	In-house	CSC	IBM	In-house	TDC-Cloud
Applikationsdrift	In-house	In-house	CSC	IBM	In-house	TDC-Cloud
Storage	In-house	In-house	In-house	In-house	In-house	TDC-Cloud
Servere	In-house	In-house	In-house	In-house	In-house	TDC-Cloud
Housing	In-house	In-house	In-house	In-house	In-house	TDC-Cloud

Decentral platform

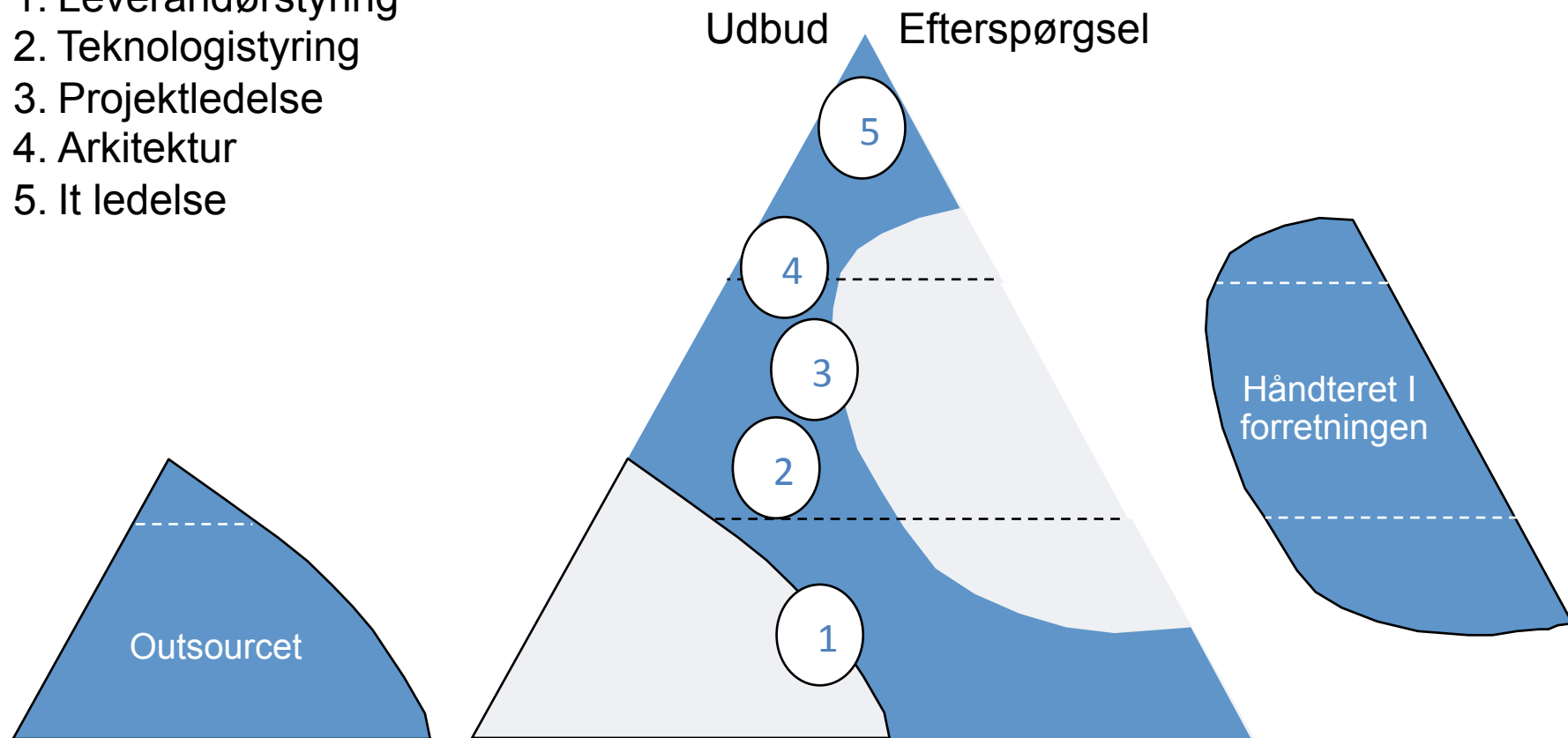
	Workstation	Netværk	Printer/ periferi
Vedligehold	In-house	In-house	In-house
Onsite support	In-house	In-house	In-house
Helpdesk	In-house	In-house	In-house
Overvågning	In-house	In-house	In-house
Ejerskab	In-house	In-house	In-house

Succes med outsourcing kræver

- At man tilpasser sig markedets standardiserede ydelser
- At man bibeholder en række kompetencer i organisationen – primært indenfor ledelse, arkitektur, projektledelse og leverandørstyring
- At man har en klar og opdateret sourcingstrategi
- At man løbende udfordrer og konkurrenceudsætter eller benchmarker ydelserne
- At man har stærke leverandørstyringsprocesser, governance og kompetencer på plads
- At man løbende tilpasser aftaler, rapportering og governance til de aktuelle behov

Gartners IS-Lite model

1. Leverandørstyring
2. Teknologistyring
3. Projektledelse
4. Arkitektur
5. It ledelse



Du har en sourcingstrategi når du kan svare entydigt og udtømmende på disse spørgsmål

Hvorfor

- De fælles mål der driver beslutningerne om sourcing

Hvad

- Ydelser der skal sources (drift, vedligehold, udvikling)

Hvem

- Den organisation (intern eller ekstern) der skal levere ydelsen

Hvordan

- Leverancemodellen

Hvor

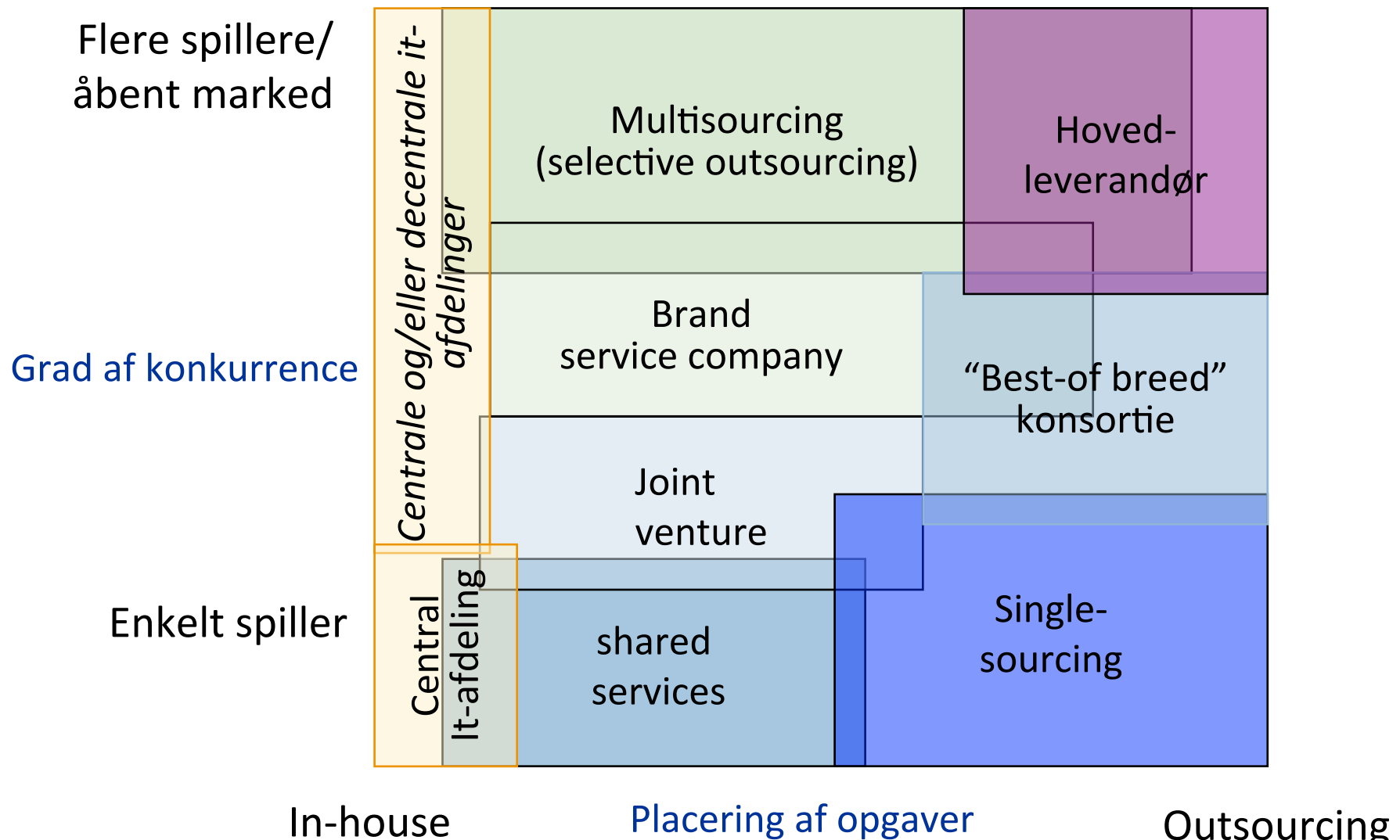
- Lokationen

Hvor længe

- Beskrivelsen af hvad der trigger en revurdering af beslutningen

Sourcingmodeller

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Fokusområder for servicefællesskaber

- Hvis målet er omkostningsreduktion (eller blot markedskonforme priser) er standardisering en meget vigtig forudsætning
- Hvis målet er stabilitet er standardisering en forudsætning
- Vær opmærksom på, at prismodellen (charge-back struktur) er et meget væsentligt styringsinstrument
- Erfaringen viser, at servicefællesskaber kan levere stabil drift til konkurrencedygtige priser hvis de:
 - Har styr på omkostninger og markedspriser
 - Har kritisk masse (typisk over 500 servere)
 - Sørger for at standardisere, konsolidere og virtualisere infrastrukturen hurtigt
 - Arbejder med et begrænset sæt af SLA'er
 - Driver intern standardisering af processer
 - Professionaliserer arbejdet med kunderelationer
 - Prissætter specialydelser i forhold til faktiske ekstra omkostninger (som en leverandør ville gøre det)

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Decentral platform

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Ejerskab	In-house	In-house	In-house

Scenarie 1

Centrale systemer

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Helpdesk	In-house	KMD	In-house/CSC	IBM	In-house	TDC-Cloud
Databasedrift	XX	XX	CSC	IBM	XX	TDC-Cloud
Applikationsdrift	XX	XX	CSC	IBM	XX	TDC-Cloud
Storage	XX	XX	XX	XX	XX	TDC-Cloud
Servere	XX	XX	XX	XX	XX	TDC-Cloud
Housing	XX	XX	XX	XX	XX	TDC-Cloud

Decentral platform

	Workstation	Netværk	Printer/ periferi
Vedligehold	YY	YY	YY
Onsite support	YY	YY	YY
Helpdesk	YY	YY	YY
Overvågning	YY	YY	YY
Ejerskab	YY	YY	YY

Scenarie 2

Centrale systemer

	Medlems-system	WEB CMS	ESDH	SAP	Øvrige systemer	Mail
Udvikling	In-house	KMD	CSC	IBM	In-house	TDC-Cloud
Vedligehold	In-house	KMD	CSC	IBM	In-house	TDC-Cloud
Helpdesk	In-house	KMD	In-house/CSC	IBM	In-house	TDC-Cloud
Databasedrift	In-house	In-house	CSC	IBM-Cloud	In-house	TDC-Cloud
Applikationsdrift	In-house	In-house	CSC	IBM-Cloud	In-house	TDC-Cloud
Storage	XX	ZZ-Cloud	ZZ-Cloud	IBM-Cloud	XX	TDC-Cloud
Servere	XX	ZZ-Cloud	ZZ-Cloud	IBM-Cloud	XX	TDC-Cloud
Housing	XX	ZZ-Cloud	ZZ-Cloud	IBM-Cloud	XX	TDC-Cloud

Decentral platform

	Workstation	Netværk	Printer/ periferi
Vedligehold	YY	YY	YY
Onsite support	YY	YY	YY
Helpdesk	YY	YY	YY
Overvågning	YY	YY	YY
Ejerskab	YY	YY	YY

Markedet

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Markedet

From a stable balance to a volatile market

Stable balance – up to 2005

- Smaller number of large players dominate the market
- Large transition costs create effective lock-in
- No transparent pricing
- Little or no mobility

Unstable balance - 2005 to 2012

- Dramatic drop in market-prices – but not in existing contracts
- The beginning of benchmarking
- Increased transparency

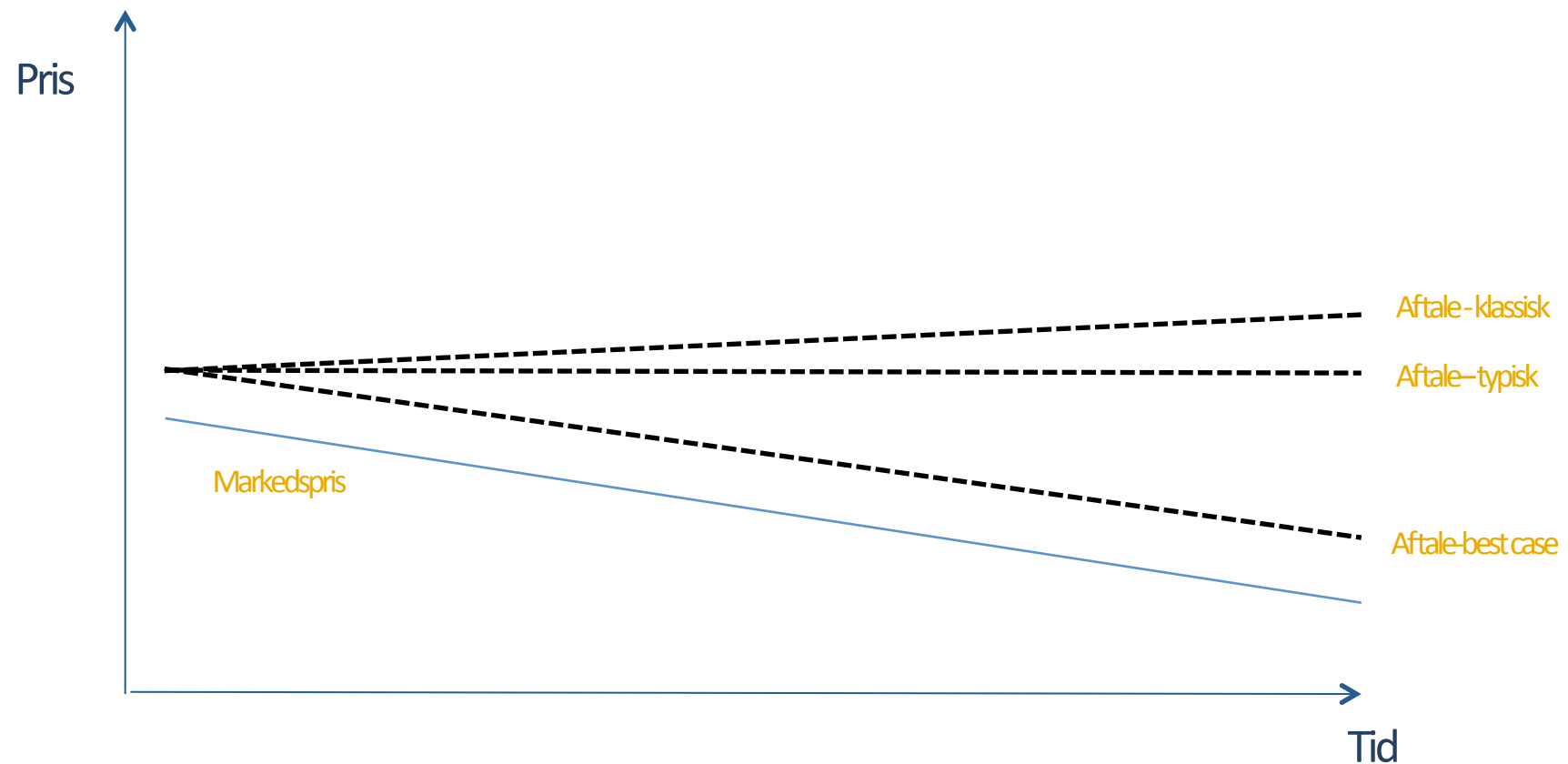
A more mature and transparent market – 2013 and forward

- Benchmarking used to find major savings
- New entrants moving into the market
- Multisourcing is the norm

From deal complexity to sourcing complexity

- Clients are seeking standardized services to reduce overall cost
- The Schizophrenic vendors: we deliver client specific services in a market where standardization is the key to price AND quality
- Multisourcing: for the professional customer. Best of breed services from different vendors.
- This requires competencies, strong governance and implemented vendor management processes

Langt de fleste kunder har en flerårig aftale med en fast årlig pris (nogle har endda en svag stigning indbygget) i et marked med faldende priser. Det er grunden til at en benchmark ofte viser en pris over markedsprisen



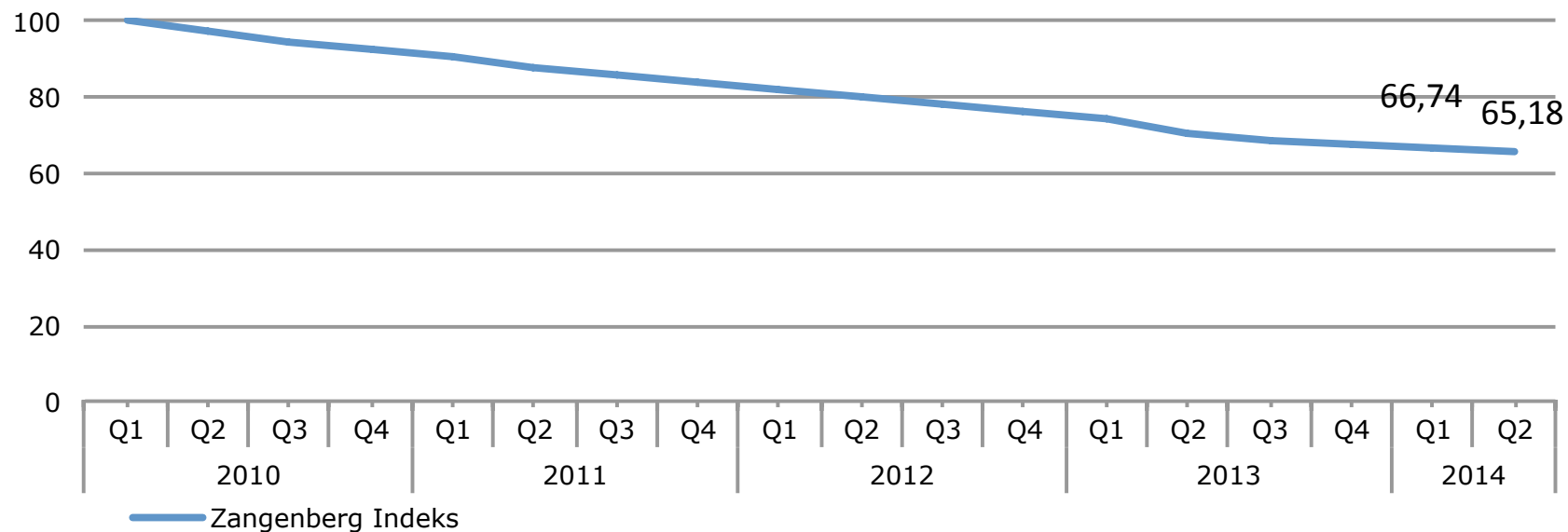
Zangenberg indekset

- Zangenberg Analytics har siden 2010 tracket priserne i it-outsourcing markedet, og baseret på disse data har vi udviklet Zangenberg indekset.
- Zangenberg indekset består af en række sub-indeks; server indeks, storage indeks osv.
- Sub-indeksene er vægtede efter deres "andel" af en standard kontrakt.
- Zangenberg indekset kan derfor bruges til at beskrive udviklingen i en kontrakt, der indeholder standard ydelser og en for så vidt mulig standard sammensætning af ydelser.

Zangenberg indekset

ZANGENBERG INDEKS

Axis Title



The Danish outsourcing Market

- Total outsourcing market: approx 18 bDKK
- Four large players
- Indian entrants
- Midsize players growing up
- Broadband competitors
- Hosting/CoLocation pure-play

The big four



- Significant share of total market
 - Significant presence in public sector
 - All but NNIT have mainframe operation
-
- All four vendors have contracts on benchmark
 - All four vendors present significant variance in pricing across their customer base for identical services

The midsize players

ATEA

Atos

CGI

netcompany

NETDESIGN

FUJITSU



accenture



T Systems

- The midsize players increase their market share through a combination of organic growth and acquisitions and mergers.
- All players offers datacenter services
- Some have deep expertise in application development, SAP-operations and workstation outsourcing.
- The price-distribution is generally smaller than for the big four and all the players in the mid-market can offer services on the benchmark-price.

Indian entrants



Cognizant

- After a longer period in the role of subcontractors the Indian entrants are now emerging as contractors in their own right.
- The targets are the major private sector corporations – typically Nordic Top-50 or clients with a significant total spending over a period.
- Despite the conventional wisdom, the Indian players are NOT seen as especially aggressive on price when we benchmark their contracts, though they are at benchmarking level.

Broardband and hosting pure-plays

colt

...GlobalConnect...
Communication Guaranteed



TDC Hosting

interxion™

- Coming from a market with a completely different pricing dynamic these players offer highly standardized capacity based services at a very competitive unit price.
- Currently the market share is low, but the services are expected to in demand – either sourced directly from these venders our though a main-contractor.
- Pure-play hosting companies (hosting and co-location) make inroads as subcontractors and as an attractive offering for companies with high level of internal “production”.
- These companies offer the most aggressive pricepoints, but the services are typically more limited in scope compared to the traditional outsourcing players

Metode

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Metode

Pricing mechanisms

Predictable

Fixed Price

Agreed
reduction

Follows the
market

Indexed price

Benchmarking

Market-prices

- Our benchmarking model is populated with values from our own normalized database of price-points
- Data from leading research companies are used to verify and adjust
- All important price-points in the benchmarking model has been verified with at least two outsourcing vendors.
- Our "Archetypes" ("fictitious" contracts, described in detail and with a calculated benchmark-price) has all been confirmed by outsourcing-vendors.

The it-services market

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The overall breakdown of the services market

Application development

Function-point based benchmarking.

Application maintenance

Peer-group benchmarking. Benchmarking of rate-cards

Software and software services

Stringent benchmarking model for major software vendors

Operational services

Stringent benchmarking model the majority of services offered in the market

Hvorfor benchmarke?

- Drift udgør typisk en betydelig del af it-budgettet.
- Hvis en del af driften er outsourcet betaler du nok for meget
- Med en benchmark får du det mest potente værktøj til en genforhandling og nedbringelse af de outsourcede omkostninger
- Værktøjet virker – andre har fået endog meget store reduktioner
- Du kan bruge det nu – også selvom du er midt i kontraktperioden
- Vi vil ikke sælge en benchmark medmindre vi tror, at der er mindst 10 gange honoraret at spare

What companies achieved through benchmarking



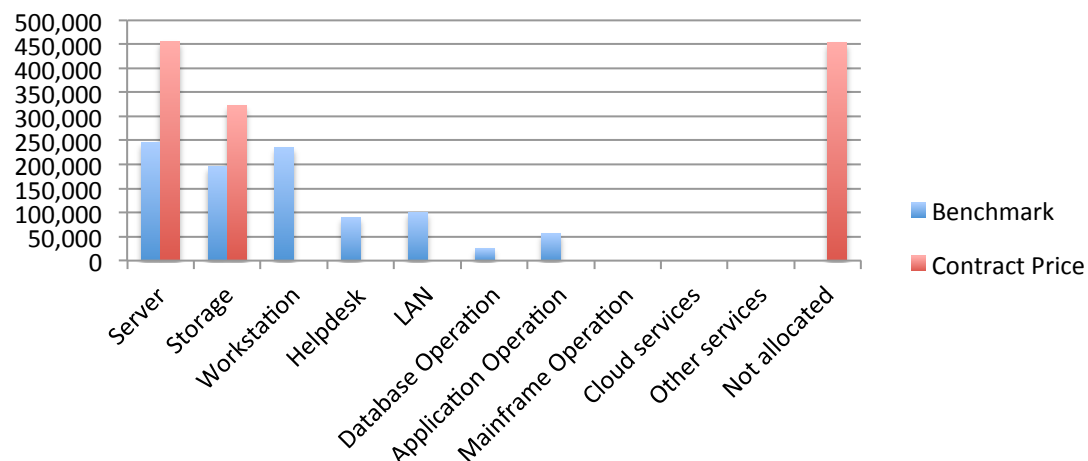
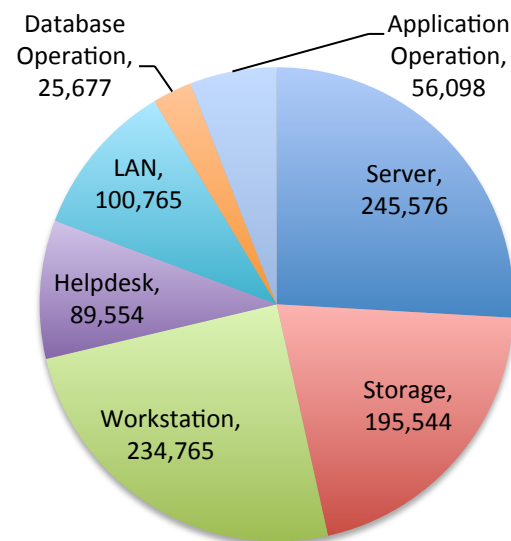
Benchmarking

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analytics

Output sample

Element	Benchmark	Contract Price	Difference
Server	245.576	456.098	210.522
Storage	195.544	321.887	126.343
Workstation	234.765		-234.765
Helpdesk	89.554		-89.554
LAN	100.765		-100.765
Database Operation	25.677		-25.677
Application Operation	56.098		-56.098
Mainframe Operation			n/a
Cloud services			n/a
Other services			n/a
Not allocated		453.667	453.667
TOTAL	947.979	1.231.652	283.673

Total pr Year	11.375.748	14.779.824	3.404.076
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Operational services benchmark model

Server

Wintel – physical 1-4 CPU
 Wintel – physical 5-8 CPU
 Wintel – physical 9-16 CPU
 Wintel – virtual 1 CPU
 Wintel – virtual 2 CPU
 Wintel – virtual 4 CPU
 Wintel – virtual 5-8 CPU
 Wintel – virtual 9-16 CPU
 UNIX/LINUX– physical 1-4 CPU
 UNIX/LINUX– physical 5-8 CPU
 UNIX/LINUX– physical 9-16 CPU
 UNIX/LINUX– physical >16 CPU
 UNIX/LINUX– virtual 1 CPU
 UNIX/LINUX– virtual 2 CPU
 UNIX/LINUX– virtual 4 CPU
 UNIX/LINUX– virtual 5-8 CPU
 UNIX/LINUX– virtual 9-16 CPU
 UNIX/LINUX– virtual >16 CPU
 Housing

Storage

SAN
 Backup
 Remote Backup

Database operation

MS SQL
 Oracle
 DB2

Application operation

Standard application
 Special application
 SAP

Helpdesk

Standard applications only
 Special applications

LAN/WAN

Switches
 Routers
 Wireless access points
 Proxy and WEB-Gateways
 VPN
 Other components

Workstation

Desktop PC
 Laptop
 Virtual PC

Mainframe

Mainframe Operation
 DASD
 Tape

Industrialized/Hybrid Cloud

Virtual Windows Server
 Virtuel Linux Server
 Storage
 Remote backup

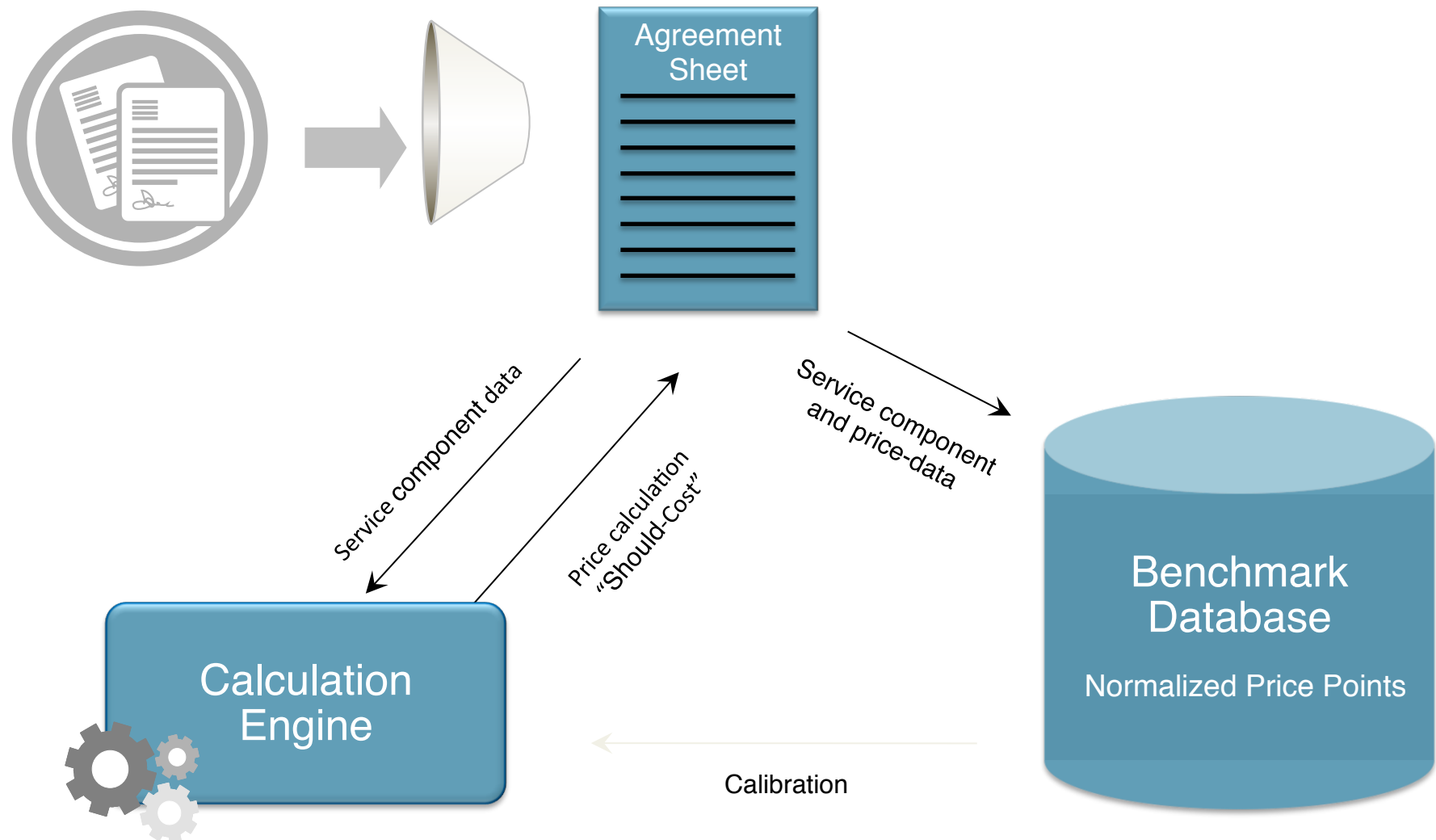
Cloud services IaaS

Virtual Windows Server
 Virtuel Linux Server
 Storage
 Cloud Remote backup

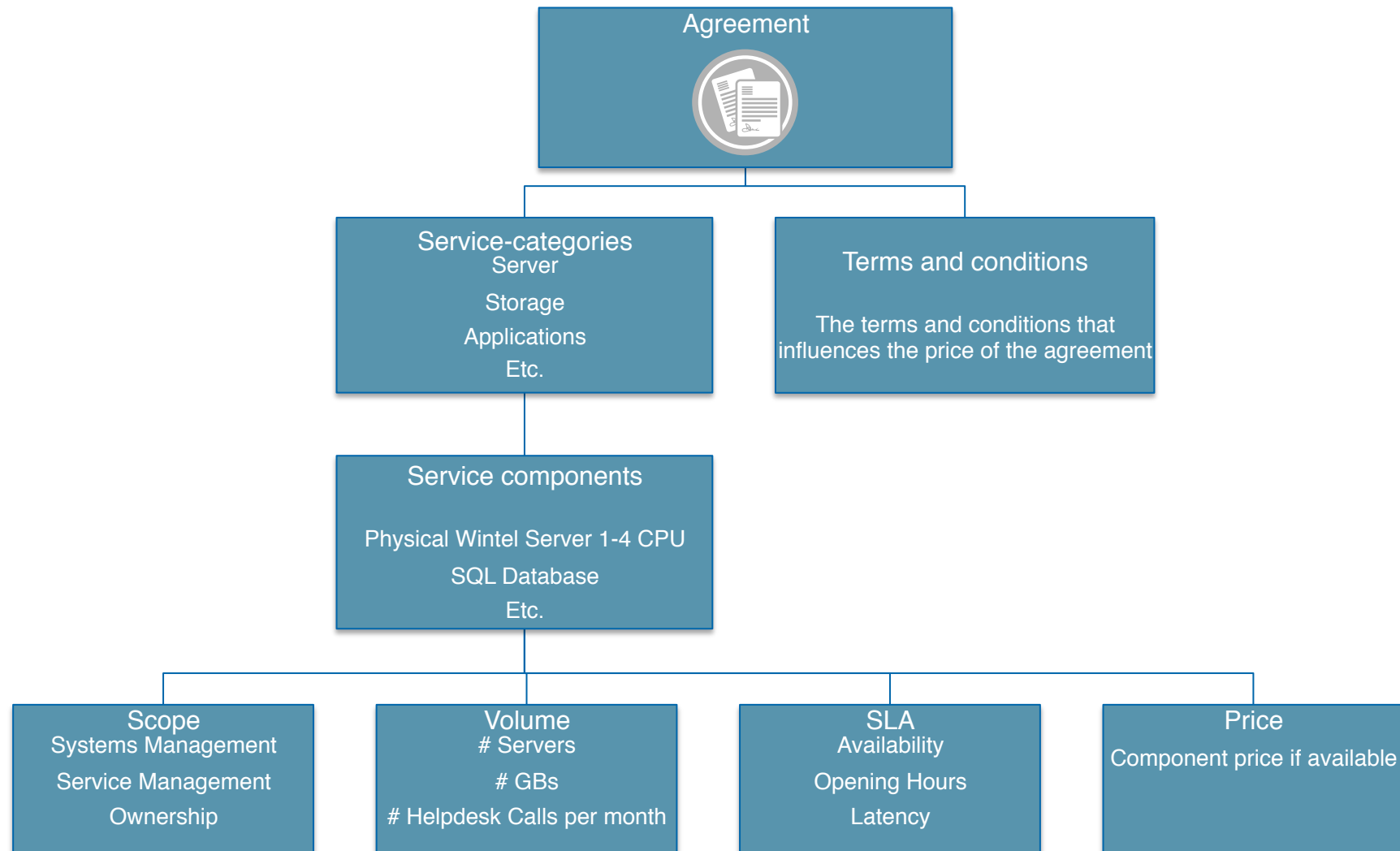
Cloud services PaaS

Hosted Exchange
 Hosted mail POP/IMAP
 Hosted Sharepoint
 Azure

Benchmarking concept

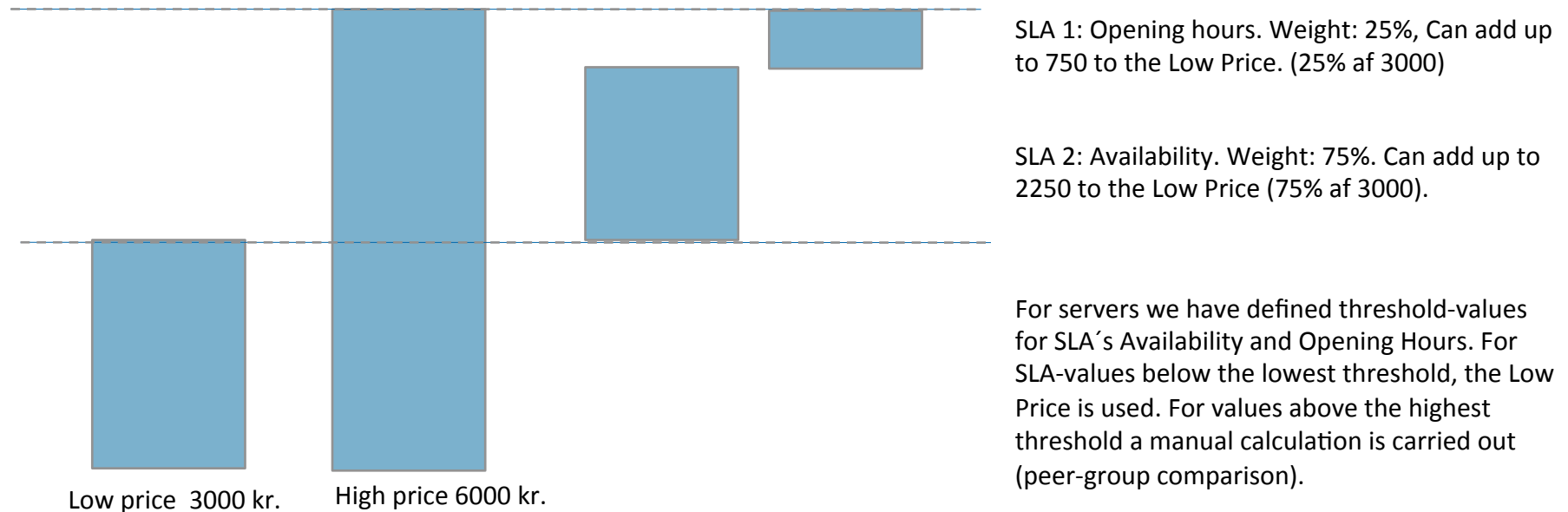


Key Elements of Agreement Decomposition



Using SLA's to calculate the price

Each Service Category has a "Low Price" and a "High Price" - depending on the SLA's. Example: Servers.



Specification of the services

[illegible]

The multiplier is calculated from the terms and conditions

Capacity-flexibility	Cap at 80% of agreement	Cap at 50% of agreement	Unlimited downward flexibility
The complexity of the pricemodel	Follows standard pricing parameters	Follows non standard pricing parameters	
Design authority including refresh strategi	Supplier	Select demands described in the contract	Client
Complexity - integration	No mainframe, integrations compared to systems 2:1 (or no description), max two database platforms	No mainframe, number of integrations compared to systems 4:1 or more than two database platforms	Mainframe plus midrange closely integrated (more than 2:1 integration:systems)
		Mainframe plus midrange with few integrations	
Governance - non standard setup	Central agreement with central governance	Decentral (national) governance	
Reporting	Follows the suppliers setup on standard SLA's	Special reporting which requires extra measurement	
Benchmarking	No benchmarking	Benchmarking with the ability to renegotiate/readjust	Automatic price adjustment as a consequence of benchmarking
Exit - commitment period	4 years binding	3-4 years binding	Less than 3 years binding
Punitive provision	Punitive provision maximum 10% of monthly fee	Punitive provision between 10 and 25% of monthly fee	Punitive provision above 25% of monthly fee
Location of datacenter	Not specified	Europe	Denmark
Location of personel for oversight	Not specified	Europe	Denmark
Special security demands	None	Doubling of datacenters, hot switch etc	Military/intelligence

Application maintenance contracts are normalized according to the variables that drive cost

Normalization variables

Complexity – system landscape complexity

Installation size – modules, applications

Operational maturity - baselining

Resource composition – offshore vs. local

Contract size

Cloud

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Hybrid cloud offerings

New services – Narrow scope og lower price

- ! Network operators entering the market with an industrialized and highly scalable setup
- ! Highly competitive price and should be considered as a sourcing alternative for larger virtualized installations
- ! The service-scope is narrow compared to “classical outsourced services”
- ! This is partly compensated by an automated and policy driven ressource allocation.

Case: Industrialiseret outsourcing

Retail Client

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Omfang og SLA

Price

Conventional setup

- **Scope**
 - 130 Physical wintel servers
 - 650 Virtual wintel servers
- **SLA**
 - Availability 99,5%
 - Opening Hours
 - Monday – Friday = 16 hours
 - Saturday = 13 hours
 - Sunday = 8 hours

• 2,85 – 3,15 DKK/month

Hybrid cloud

- **Scope**
 - 130 Fysiske wintel servere i konventionelt setup
 - 650 Virtuelle wintel servere
 - Limited Service og Systems Management
 - ESX redundant
- **SLA**
 - Availability 99,9

• 1,32 – 1,46 mDKK/month

Industrialised outsourcing services

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Industrialized setup – (Red) not included (Yellow) policy baseret setup

Service Management

Participation in the architecture and planning, and test implementation and integration, of solutions
Data management policy and practices
Application change management policies
Software license management policies
Service-level requirements definitions
Product evaluation and usability testing
Procurement – defining processes and procedures and assisting in purchase consumables (such as tapes).
Asset management – hardware inventory management; software inventory management; software configuration management; and financial management of leases or depreciation
Security services – security policy development, incident tracking, intrusion detection, compliance management and antivirus management
Service management – reports and metrics (none, low, medium and high), chargeback (none, low, medium and high), and network charges to customer sites
Disaster/recovery (DR) planning – planning and testing support

Systems Management

System administration services – ID management resource permissions
Problem determination and root cause analysis
Help desk support Level 3 (excludes application support)
Preventive software maintenance
Performance management analysis
Performance management and tuning
Capacity trending analysis
Capacity management – policy based
Storage management – policy based
Change management
24/7 monitoring
Data backups and backup storage management (system); and off-site, backup storage
Installations, moves, adds, changes (IMAC)
Physical IMAC activity and logical IMAC activity
Electronic software distribution to servers

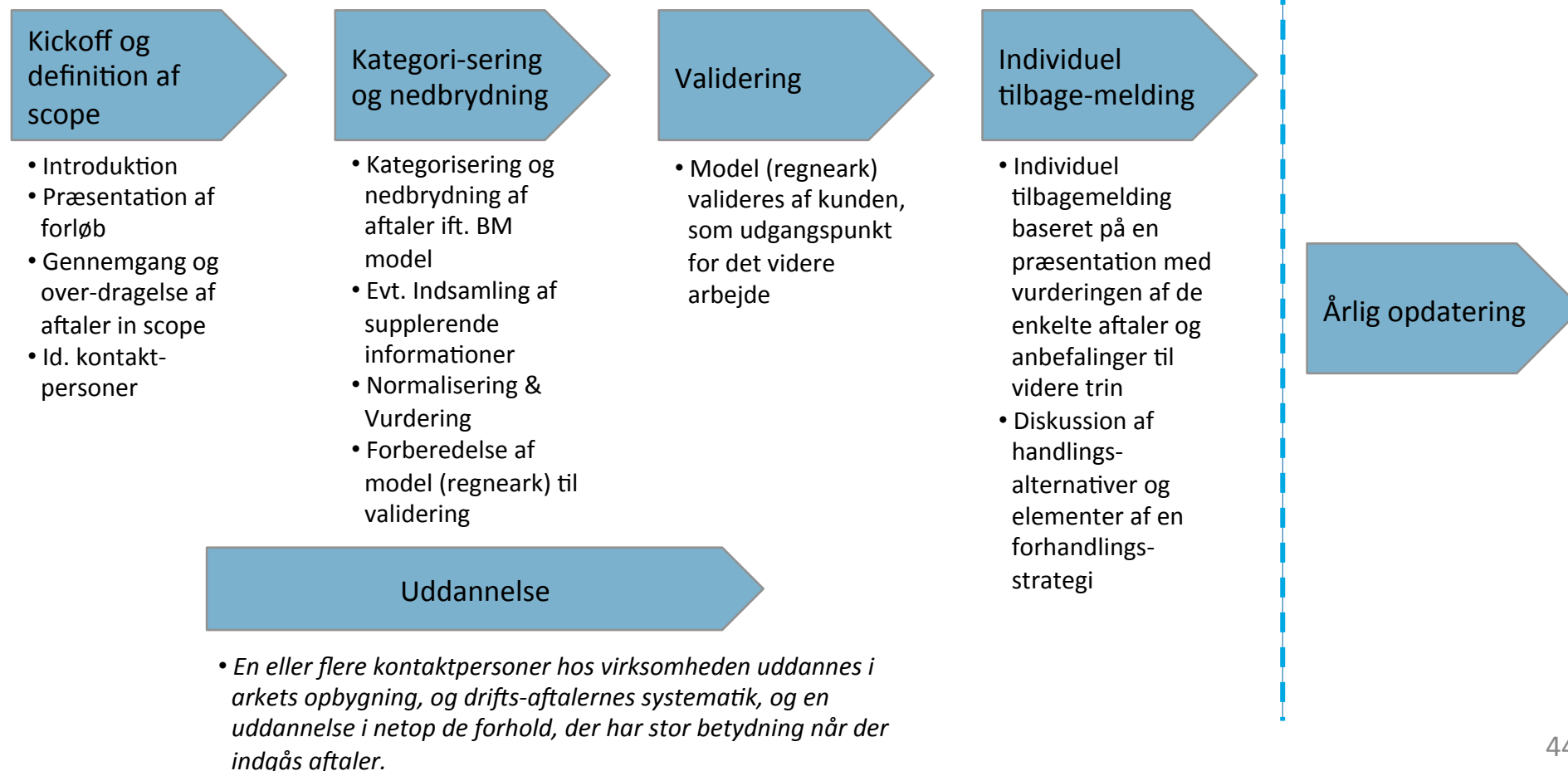
Relevante Quarterly Analytics artikler om aktuelle trends.

- Insourcing – flere kunder trækker infrastrukturen tilbage efter en længere periode med outsourcing. Dette sker typisk for at gennemføre større moderniseringer og opnå kontrol.
- Benchmarking vinder indpas, men der er stadig langt til USA hvor op mod 80% af alle aftaler har en benchmark-klausul
- Aftalevilkår bliver i stigende grad genstand for forhandling – aftalevilkår koster penge og flere kunder bliver opmærksomme på omkostningerne knyttede til specialiserede krav
- Fast track udbud vinder indpas
- SAP i skyen – SAP kunder bør løbende følge udviklingen i SAP-Cloud tilbud, da disse vil kunne give betydelige reduktioner for nogle kunder
- Applikationsvedligehold overgår i stigende grad fra at være aftale med fast årlig betaling til at være forbrugsafregnede

Fokusområder for servicefællesskaber

- Hvis målet er omkostningsreduktion (eller blot markedskonforme priser) er standardisering en meget vigtig forudsætning
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Benchmarkøvelsens forløb



Targetpricing

Kickoff og definition af scope

- Introduktion
- Præsentation af forløb
- Gennemgang af it-strategi og afledte krav til outsourcing

Udarbejdelse af scenarier

- Definition af mulige sourcing-scenarier
- Fastlæggelse af aftale vilkår og forudsætninger
- Beskrivelse af krav og behov for de enkelte ydelses-komponenter
- Detaljering af scenarier i forhold til model

Validering

- Model (regneark) valideres af kunden, som udgangspunkt for det videre arbejde

Individuel tilbage-melding

- Individuel tilbagemelding baseret på en præsentation med vurderingen af de enkelte scenarier og anbefalinger til videre trin
- Diskussion af handlings-alternativer og elementer af sourcing strategi

Uddannelse

- *En eller flere kontaktpersoner hos virksomheden uddannes i arkets opbygning, og drifts-aftalernes systematik, og en uddannelse i netop de forhold, der har stor betydning når der indgås aftaler.*

Benchmarking - driftsaftaler

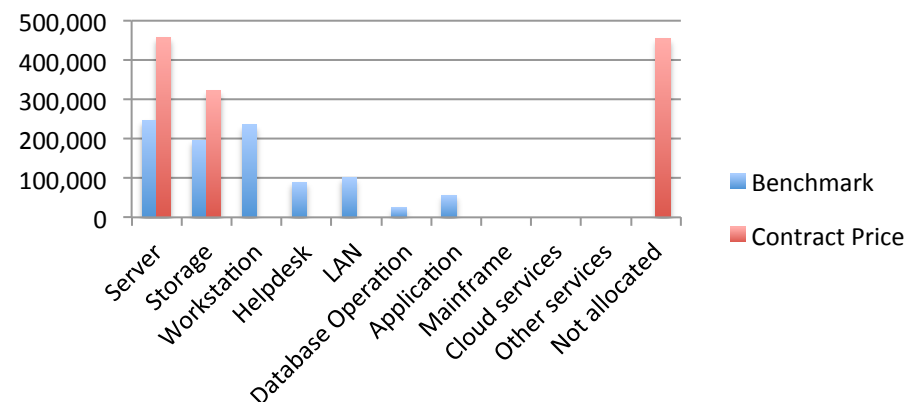
Benchmarken giver svaret på spørgsmålet: hvad bør denne aftale koste netop nu.
Kunden overdrager aftaler, fakturering og CMDB til Zangenberg Analytics, der herefter foretager nedbrydning, normalisering og beregning

Kalendertid: 2-3 uger
Kundens indsats: 2-3 mandedage
Leverance: Udførlig rapport og præsentatopn

Benchmark af en aftale: DKK 130.000
Benchmark af 5 aftaler: DKK 350.000

Element	Benchmark	Contract Price	Difference
Server	245.576	456.098	210.522
Storage	195.544	321.887	126.343
Workstation	234.765		-234.765
Helpdesk	89.554		-89.554
LAN	100.765		-100.765
Database Operation	25.677		-25.677
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Not allocated		453.667	453.667
TOTAL	947.979	1.231.652	283.673

Total pr Year	11.375.748	14.779.824	3.404.076
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Targetpricing

Targetpricing giver svaret på spørgsmålet:
hvad er markedsprisen på denne
potentielle aftale.

Sammen med kunden udarbejdes et antal
scenarier for den mulige fremtidige aftale.
Disse beskrives i detaljer og Zangenberg
Analytics beregner aftaleprisen

Kalendertid: 1 uge

Kudnens indsats: 1-2 mandedage

Leverance: Udførlig rapport og præsentation pr
scenarie

Targetpricing – 5 scenarier: DKK 65.000

5 ekstra scenarier: DKK 35.000

Element	Benchmark
Server	245.576
Storage	195.544
Workstation	234.765
Helpdesk	89.554
LAN	100.765
Database Operation	25.677
Application Operation	56.098
Mainframe Operation	
Cloud services	
Other services	
Not allocated	
TOTAL	947.979

Total pr Year	11.375.748
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