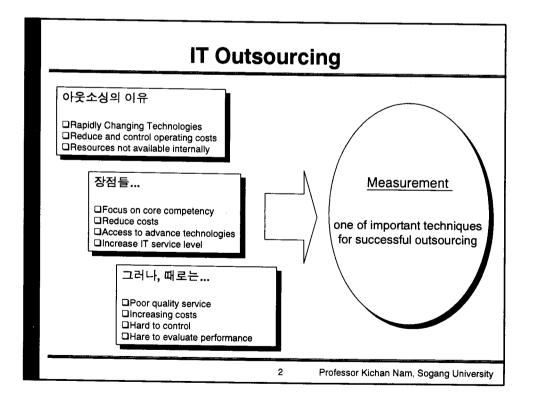
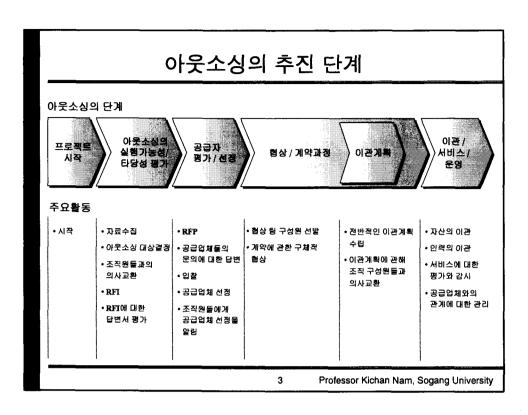
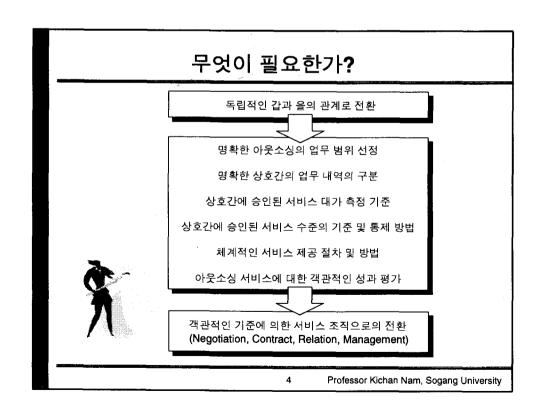
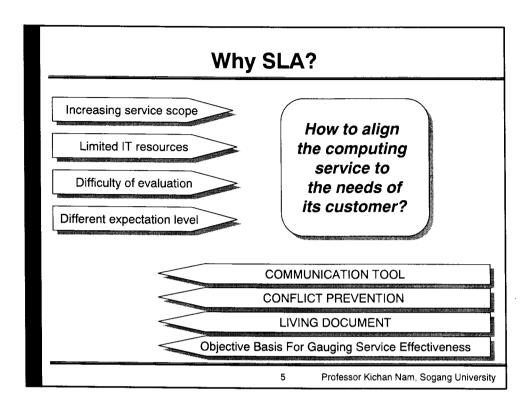
# SLA 기반의 성공적인 아웃소싱 전략

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## SLA에 대한 몇 가지 의문 사업자측 : 고객사측: • SLA를 도입하면 M/M기반의 계약 구조를 바꿀 수 있는가? • SLA를 도입할 경우 비용이 증가하는 것이 아닌가? • SLA를 도입하면 서비스 수준이 향상되는가? • SLA를 도입하면 고품질의 서비스를 받는 • SLA를 도입하는데 얼마나 것인가? 노력이 필요한가? • SLA를 도입하면 정말로 Penalty를 지불하여야 하는가? • SLA를 도압하면 아웃소싱의 만족도가 높아지는가? • SLA 관리 tool은 필요한가? 6 Professor Kichan Nam, Sogang University

## What is SLA?

- □ SLA is an agreement between the computing service provider and the user quantifying the minimum acceptable service to the user.
- ☐ SLA specifies the parameters of systems capacity, network performance, and overall response time required to meet business objectives.
- ☐ SLA also specifies a process for measuring and reporting the quality of service provided by IT vendors.
- ☐ Service level management (SLM) is <u>the continuous process</u> of measuring, reporting, and improving the quality of service provided by the IT organization to the business.
- ☐ Measurement and metrics are just parts of SLA.

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# **Major Components**

## Within the Agreement

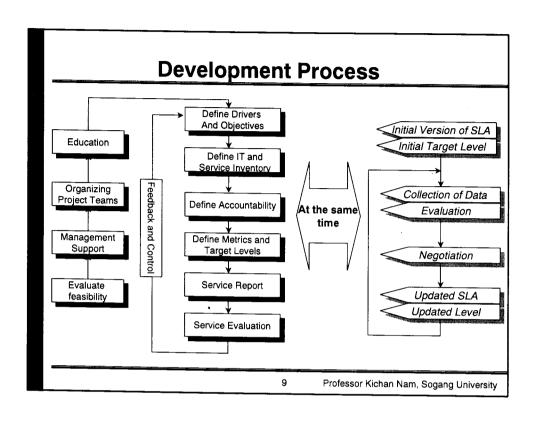
- > Service scope
- > Service requirement
- > Service measurement
- > Service management
- > Communication plan
- > Reporting
- > Reviews
- > Responsibility
- > Non-performance
- > Non-penonnal
- > Penalties
- ➤ Optional Services
- ➤ Limitations
- > Maintenance of SLA

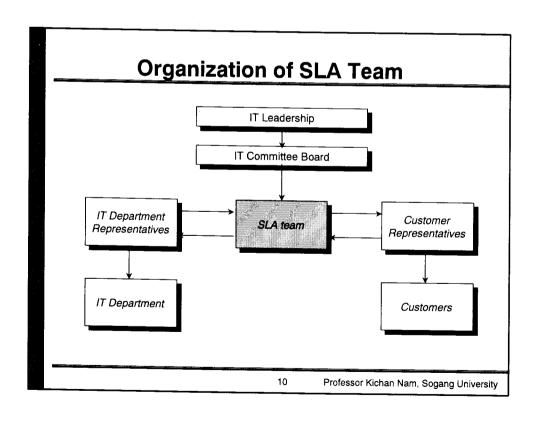
#### Some Consideration

- > Attainable
- > Measurable
- ➤ Understandable
- ➤ Meaningful
- > Controllable
- > Affordable
- ➤ Mutually Acceptable

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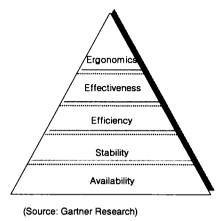
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## Measurement

#### Service Level Hierarchy



Ergonomics:

Tailored, personal value SLA would not reach this level Usually Top mgt's individual requirements

Effectiveness:

Best fit, enterprise value Ideal level of SLA Usually indirect metrics are used

Efficiency:

speed, minimum resources SLA can target this level.

Stability:

Accuracy, dependability
Relevant with the quality of service

Availability:

When, where needed Foundation level

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### Measurement

#### □Overall service level:

≻The Easiest Way

•Service Level =(( Number of On-time Processes/Number of Processes)+(Budgeted Expenses/Actual Expenses)+(Projected Duration of Projects/Actual Duration of Projects))/3

≻A Slightly Better Way

•Weighted Service Level=(On-time Weight X (Number of On- time Processing/Number of Processes)+Budget Weight X (Budgeted Expenses/Actual Expenses)+On-time Delivery Weight X(Projected duration of Projects/Actual Duration of Projects))/3

 $f \square Availability:$  the percentage of the time that a service is available for use.

 $\ensuremath{\square} \ensuremath{\mbox{Responsiveness:}}$  the time taken to complete a request

#### □Others:

- ➤ Reliability
- > Performance
- > Critical Deadlines:
- > Turnaround:
- ➤ Recoverability:
- ➤ Success Rate:



# **Measurement by Function**

#### □Application

Quality Productivity Customer Satisfaction

#### □Network

Availability Stability

#### □Help Desk

Response time:

Average call waiting time Average waiting rate Average give-up rate Total waiting time

Call-back time
Problem resolution time
Problem resolution rate

☐Security Management

□Change Management

□Problem Management

Prioritization Rules Escalation Procedures



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## **Penalty**

- ☐ Remedy for non-performance
  - > Should be determined based on the service importance
  - > Not a compensation for the poor service
  - > Able to cause pain or discomfort to the provider
  - > Penalty is not an mandatory clause
- ☐ Easy to understand and calculate
- ☐ Rule
  - > Cumulative vs. Non-Cumulative
  - > Frequency vs. average
  - Usually maximum limit exists.
- ☐ In Practice:
  - > minor penalty: 1/30 of monthly or daily service rate
  - > major penalty: 5%~10% of monthly service rate for each occurrence
  - > Termination: occurrence of more than 10 times of major non-performance



# **Best-in-Class Hosting SLA**

□ Network performance: 99.97% availability,

less than 1% packet loss,

less than 70% ms domestic latency, less than 100 ms international latency

☐ Systems performance: 99.97% availability,

70% CPU utilization,

less than 50 ms automatic server rollover

□Application performance: guaranteed number of simultaneous users,

guaranteed nightly backup

□Service order acknowledgement: 10 to 15 minutes

☐ Mean time to respond: 15 to 30 minutes

☐ Mean time to repair: 1 to 2 hours for priority 1 outages,

4 to 6 hours for priority 2 outages, 1 to 2 days for priority 3 outages

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## **Some Facts**

Question: Does SLA improve your service quality?

#### **Primary Objectives of SLA**

15% Expand services

25% Measure efficacy of operational procedures

26% Measure impact of IT in business

28% Prioritize services on basis of importance28% Relate technology to business objectives

36% Help justify and prioritize additional investment

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36% Measure quality of service

37% Measure customer satisfaction

42% Map resources to most critical services

48% Define required performance levels

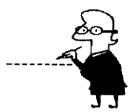
55% Set and manage expectations

(Source: 1999 INS Survey)

## **Some Consideration**

# Implementing SLA requires additional efforts.

- ☐ IT personnel to plan, implement, monitor, and report
- $\hfill \Box$  Software costs for purchasing or developing tools to monitor, diagnose, and report
- ☐ Hardware costs for additional servers
- ☐ IT management attentions



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## **Success Factors**

- ☐ Three cultural changes
  - ➤ Service-Oriented Culture
  - ➤ Measurement Culture
  - ➤ Negotiation Culture
- ☐ Top Management Support
- ☐ Prepare data, template, and methodology beforehand
- ☐ Define What, Who, How, Where(level), and When clearly
- ☐ Business-Oriented driven approach
- ☐ Not too many metrics



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# **Additional Consideration**

- □ 서비스 중심의 조직 마인드
- 🗆 대가 산정 기법
- □ 성과 측정 기법
- □ 프로세스 중심 IT 운영 및 관리 기법



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# Q & A

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