



## Chapter I

### Introduction

#### Background and Rationale

The important process in general computer application system development is a system performance analysis. The performance of any procedures should be evaluated so that system weakness can be identified and improved before they become panic or uncontrollable.

The University Entrance Examination application system is arranged annually between March and May. The procedures for the computerization are as follow.

1. Examination seat numbers preparing.
2. Enrollment system operating for the applicants.
3. Examination rooms preparing.
4. Absent student records preparing.
5. Scoring of all students who take the examination.
6. Students selecting for each faculty.
7. Examination results announcing.

This system is taken care by a group of officers that are ad hoc and event-driven officers. New officers have to urgently reorganize software and hardware every year to service the requirement of the University Entrance Examination committee. The limitation of time is also very important.

Therefore, the auther believes that the performance analysis of the University Entrance Examination application system would help the new officers to understand more about this system and be able to improve the system performance. The University Entrance Examination application system is a good

example for making tools and hypothesis to analyze the performance because the duration of the system is short.

### Objectives

The objective of the study are as follow.

1. Create tools and performance models for the implementation to analyze the performance of the University Entrance Examination application system.
2. Analyze the problems of the University Entrance Examination application systems and present the suggestion to solve them.

### Scope and Limitations

The performacne analysis of the University Entrance Examination application system is limited to analyze the performance of the following procedures.

1. Student records getting procedure.
2. Examination rooms preparing procedure.
3. Examination seat numbers validating procedure.

### Development Procedure

The steps of the performance analysis are as follows.

1. Study over all of the University Entrance Examination application system.
2. Study all existing source programs for this application system.
3. Test all performance programs.
4. Develop new programs to serve some of requirements of the committee of The Ministry of University Affairs, academic year 1994.
5. Develop tools for the performance analysis.
6. Conclude the performance of the system.

### Expected Benefits and Application

The usefulness of the performance analysis of the University Entrance Examination application system are :

1. It would be an example to evaluate the performance of any application systems.
2. The study would help the new officers to understand more about the University Entrance Examination application system and help them to improve the system performance.



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