

## THE ROYAL INSTITUTE OF TECHNOLOGY Library

S-100 44 Stockholm 70, Sweden

GROWTH DYNAMICS OF INFORMATION SEARCH SERVICES

Mats G. Lindquist

REPORT TRITA-LIB-6009

NOVEMBER 1976

## ABSTRACT

Computer based information search services, ISS's, of the type that provide on-line literature searches are analyzed from a system's viewpoint using a continous simulation model.

The analysis gives that the observed growth and stagnation of a typical ISS can be explained as a natural consequence of market responses to the service together with a business orientation on part of the funder.

The study also gives an analysis of managerial decision making for an  $\ensuremath{\mathsf{ISS}}$  .

## TABLE OF CONTENTS

Ι	Introduction and background	4
II	Problem statement	5
III	Boundary for the story and the structure of an ISS	7
IV	System description	11
V	The simualation model and behavior of an ISS	17
VI	Further analysis of managerial decision making for an ISS	23
VII	Conclusions	29
VIII	Notes	30
IX	Acknowledgements	32
Х	Appendix: Model description and model equations	35