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Abstract

✓ It presents the overall scope of an ongoing study to assess resource utilization at the University of Botswana’s main library.

✓ Information on the print collection and remote access on electronic resources will also add to the computation of library resources utilization.

✓ Data will be collected through time studies on appropriate activities during the semester (for optimum results).
Results of the study are expected to indicate whether or not the human resource is sufficient to cope with the demand.

The utilization results will also inform on materials to invest in and journals to subscribe to.

The outcome of the study will enhance the library’s ability to contribute immensely to the achievement of the University’s strategic goal of academic excellence in Africa and the world.
Introduction

- This paper covers the preliminary phase of an ongoing research.
- This research helps to assess the utilization of the library resources by stakeholders by using modeling and simulation.
Objectives

- The objectives of this study include studying and analyzing service rates of the library personnel, utilization of library reading materials and equipment, and queuing times for the clients.
- The study also seeks to develop a model of the library system for simulation purposes to support decision making on library resources.
The University of Botswana main library resources broadly include reading materials, equipment such as computers, and library personnel.

Assessment of utilization by users (staff & students) is critical for decision making purposes.

Tool for assessment – modeling & simulation
Problem Statement

- It is not known whether or not the library is being fully utilized by intended users.

- Queue length is an indication of an imbalance between the number of users queuing for service and the number and work rate of the servers (library personnel).
Print collection and remote access on electronic resources – utilization.

These factors can only be measured through a quantitative study such as the one proposed in this study.
The hypothesis that appeared to be worth of study is the relationship between the queuing time of students for book check-out, length of queues, service time (librarians), and utilization (of librarians).

The proposed decision support system should improve the library utilization.

Hypothesis summary – Library resources are not being optimally utilized.
Steps In a Simulation Study

1. Problem Formulation
2. Model Conceptualization
3. Setting of Objectives and overall project plan
4. Data collection
5. Model Translation
6. Experimental Design
7. Production run and Analysis
8. More runs
9. Documentation and Reporting
10. Implementation
Methodology

- Time studies carried out (clock-timing of activities) at different sections of the library.
- The print and electronic resource usage is captured by the library system on a daily basis.
- The library system will be modeled in the Arena modeling and simulation software environment.
- Statistical analysis will be done on SPSS software.
This paper has broadly discussed the scope of the ongoing research on resource utilization at the University of Botswana’s main library.

The results of the study are expected to help the library management in decision making regarding:

- types of material to purchase,
- journals to scribe,
- Allocation of human resources
References


Questions...???
Thank You