Information technologies towards enhanced service delivery during the COVID-19 Pandemic, South Africa

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Introduction

• Academic libraries are influenced by IoT, AI, Cloud Computing and Robotics.

• Social media such as Facebook, Twitter, WhatsApp and Instagram gained momentum during the COVID-19 era.

• Academic librarians are forced to adopt various IT tools to enhance service delivery.
Contextual Setting

- Twenty-six public universities across all provinces in South Africa.
- Government to make three crucial drastic decisions:
  - 15 March 2020 - the South African government declared the COVID-19 pandemic as a national state of disaster.
  - 17 March 2020 – University closures were announced.
  - 23 March 2020 – National lockdown was pronounced
- Universities switched from traditional teaching and learning to online methods.
- Socio-economic challenged – student affected by digital divide
Conceptual Setting

• The researcher developed a framework emanating from:

  – Standards for Distance Learning Library Services.
    Key components:
    □ Resources
    □ Services
    □ Facilities
    □ Training
    □ Promotion

  – Situational Crisis Communication Theory.
    Key components:
    □ Crisis Response Strategy
    □ Crisis History and Relational Reputation
    □ Crisis Responsibility and Reputational threats
Conceptual Framework

Standards for Distance Learning Library Services
Conceptual Framework

Situational Crisis Communication Theory

Diagram: Conceptual Framework of Situational Crisis Communication Theory (SCCT)
Developed Conceptual Framework and Components

Developed framework:
- Distance Education Academic Library response to COVID-19 Pandemic Framework

Components are:
- Resources
- Services
- Facilities
- Promotions
- Library Education/Training
- Reputational Threat to the Higher Learning Institutions
- Relational Threat to Library Services
- Response Strategy
Conceptual Framework impacting the research

Distance education academic library response to COVID-19 pandemic framework

- Higher Learning Institution
- Academic libraries
- Library staff
- Library Management
- Resources
- Services
- Facilities
- Promotions
- Library Education/Training
- Information Technologies
- Reputational Threat to the Higher Learning Institution
- Relational Threat to Library Services
- Response Strategy
- Remote Clients

CRISIS

COVID-19 pandemic
Purpose and Research Questions

• **Purpose:**
The purpose of this paper is to propose innovative strategies that can be adopted by academic libraries to enhance service delivery during the COVID-19 era.

• **Research Question:**
What are innovative strategies that academic libraries can employ to enhance service delivery?
Methods

• The study adopted pragmatism as a research paradigm.
• The mixed methods research approach was selected as an enquiry approach involving the collection of quantitative and qualitative data and the integration of these types of data during data analysis and presentation.
• The explanatory sequential design was selected as it permits the researcher to conduct quantitative research and follow this up with qualitative data to understand the research problem in more depth and detail.
• The research was limited to academic librarians and their line managers working in the three participating higher-learning institutions in Gauteng Province, South Africa.
Methods
• Quantitative data was collected by means of online questionnaire which was designed using closed- and open-ended questions. The online questionnaire designed using Microsoft Forms was sent to the target population (academic librarians from the three participating universities) via email.
• Based on the quantitative data gathered through the questionnaire, interviews were scheduled to confirm, validate and supplement the quantitative findings.
• Qualitative data was collected by means of structured interviews (with the line managers), with predetermined questions to obtain further insights into the views of selected participants.
• The interview questions were open-ended, allowing the respondents to express their opinions on the questions asked.
Methods Cont’d

• To align with the collection of both qualitative and quantitative data, two types of sampling were used in the mixed method research.
  – Probability sampling was be applied to identify respondents for the quantitative data-collection process.
  • For quantitative research, the researcher adopted cluster sampling as it is suitable when the population is geographically dispersed.
  – Non-probability sampling should be used to identify participants as part of the qualitative data-collection process.
  • Purposive sampling was adopted as a method employed in qualitative research to identify and select in-depth information to validate the quantitative findings.
Methods Cont’d

- Pilot study was conducted to determine the validity and reliability of the questionnaire.
- In this regard, convenient sample of six respondents from the targeted universities (two respondents from each university) was asked to participate in the pilot testing. The questionnaire was then emailed to those selected respondents who did not form part of the sampled population, to ascertain the reliability and validity of the questionnaire.
Methods Cont’d

• For qualitative data collection, the researcher demonstrated credibility through ‘peer debriefing’, whereby questions relating to research processes and research findings were discussed with peers who assisted with additional viewpoints on the interpretation and process of data analysis.

• Quantitative data was analysed by suing SPSS whereby descriptive data analysis process was adopted to gather numerical data to be analysed statistically/numerically by using tables and graphs.
Ethical Considerations

• The respondents/participants were made aware of the implications and risks of the research.
• In the final report, the names of the participants are removed, and only pseudonyms are used for identification purposes.
• Confidentiality was emphasised and assured.
• After the interviews, the researcher and the participant engaged in a debriefing process, discussing the interview and its impact.
• The debriefing process was conducted to ensure that participants were not left traumatised or emotionally drained.
Proposed Innovative Strategies based on the research findings

Research Findings

• **Online Request Services**
  – It was discovered that this service is used differently by the academic libraries. This warranted determining the processes for requesting information resources. Email and OPAC was discovered to be the main methods used by remote clients to request information resources.

Proposed Innovative Strategies

• Academic libraries should expand the online request services for remote clients, to the point where all information resources can be requested.
Proposed Innovative Strategies based on the research findings

Research Findings

• Training Remote Clients
  – Training remote clients to use the library and access information resources; handling library enquiries received via email, the telephone and social media platforms

Proposed Innovative Strategies

• Library management should pay attention to other library services to improve academic librarians’ responsibilities and ensure that remote clients are not limited to very few library services.
Proposed Innovative Strategies based on the research findings

Research Findings
• Re-skilling of Academic Librarians
  – The effect of Information Technologies require the re-skilling of academic librarians, the training of remote clients, the decreased usage of hard copies, the increased subscription of online information resources, and the introduction of new library services.

Proposed Innovative Strategies
• Re-skilling of academic librarians should continually be sustained to improve academic librarians' delivery of information resources and services in the library workplace.
Proposed Innovative Strategies based on the research findings

Research Findings

• BOTsa (chatbot)
  – BOTsa, a library chatbot and a new library services, was officially launched in January 2020, just as COVID-19 emerged. This library chatbot is helpful in answering basic library-related enquiries. Enquiries that cannot be resolved through the chatbot are redirected to the academic librarians’ email addresses for attention.

Proposed Innovative Strategies

• It is recommended that this chatbot be adopted for all academic. This will relieve the load of academic librarians handling numerous library enquiries, allowing them to focus on other library services that cannot be automated.
Proposed Innovative Strategies based on the research findings

Research Findings

- Drop Box
  - The drop box is effective in minimising the number of remote clients entering the library premises. Remote clients returning the books are not allowed to enter the library. Instead, they place their returns in a drop box for 72 hours of quarantine.

Proposed Innovative Strategies

- It is recommended that this drop box facility be used to ensure that library resources can be returned even after hours. During COVID-19 era, drop box was essential to curb the spread of coronavirus and was the best solution available when COVID-19 health protocols were in place.
Proposed Innovative Strategies based on the research findings

Research Findings

• Social Media
  – Social media has gained momentum in this information era and is well suited to the sharing of library notices, announcements, new information resources and other library services.

Proposed Innovative Strategies

• Academic libraries should use social media platforms to reach remote clients. Searching and downloading online information resources, requesting information resources through the library catalogue, online booking of appointments to see the academic librarians, and the Ask a Librarian app are essential library services needing to be promoted on social media.
**Proposed Innovative Strategies based on the research findings**

### Research Findings

- **Teleconferencing**
  - Teleconferencing also gained momentum during the COVID-19 era, and is also useful in providing training and for academic librarians to engage through information sharing and handling enquiries.

### Proposed Innovative Strategies

- Teleconferencing platforms such as Zoom, Skype, Webinar, Webcast, WhatsApp and Microsoft Teams should be used to conduct training as they have gained momentum and are affordable to use.
Libraries Pushing Boundaries

• Virtual training for remote clients on how to access online information resources
• Promotion of library services were dome through social media and library website/portal
• Drop box was introduced to avoid physical contact and mitigate the spread of the Coronavirus.
  – Drop boxes are still in use
Libraries Pushing Boundaries Cont’d

• Increased usage of email for library enquiries and other communication
• Increased subscription to online databases for access to full-text journal articles
• Teleconferencing through Zoom and Microsoft Teams gained momentum
• Enhanced self-sufficiency
  – Most of the remote clients are able to access online information resources and services without the assistance of the librarian
Conclusion

- Academic libraries in the Gauteng province of South Africa introduced new library services as part of managing COVID-19 restrictions.
- Further research is essential to make it possible to implement the ‘higher-education academic library response to COVID-19 framework’ proposed in this research.
- The framework is intended for use by academic libraries in the higher education environment, to make it easier for them to determine strategies to effectively provide information resources and library services for library clients.
Reclaiming Africa’s Intellectual Futures

Thank you