

# **CHAPTER FOUR**

# DATA ANALYSIS

#### 4.1 Introduction

This chapter presents the data collected from GAELIC, FRELICO and LELICO libraries and from libraries in three other Southern African countries, namely, Botswana, Namibia, and Zimbabwe. Data tabled in this chapter will be interpreted in Chapter 5.

The data was collected using the following data collection instruments:

- Questionnaires;
- Interviews;
- Site visits, and
- Analysis of policy and other relevant documents.

The questionnaires and interview schedules are attached as Appendices 1 to 9 at the end of the study.

#### 4.1.1 Questionnaire response rate

#### Table 6 Questionnaires received per institution

LIBRARIES		No. of responses				<b>Response rate (%)</b>
		Lib. heads	Sys. man	Lib. profs	TOTAL	
	MEDUNSA	1	1	8	10	100
	TUT	1	1	6	8	80
GAELIC	UNISA	1	1	6	8	80
	VUT	-	1	6	7	70
	WITS	1	1	6	8	80
	Sub -total	4	5	33	41	
	CUT	1	1	-	2	20
FRELICO	UFS	1	1	18	20	200
	Sub -total	2	2	20	22	



	A D	1			1	100
	AR	1	-	-	1	100
	IDM	1	—	—	1	100
	LAC	1	—	_	1	100
	LCE	1	_	-	1	100
	LHDA	1	_	-	1	100
LELICO	LIPAM	1	_	-	1	100
	LNLS	1	-	-	1	100
	LP	1	-	-	1	100
	LPPA	1	-	-	1	100
	NUL	1	-	-	1	100
	PL	1	-	-	1	100
	PJ	1	_	-	1	100
	Sub -total	12	0	0	12	
	BCA	0	1	0	1	100
Other	NUST	0	1	0	1	100
Southern	UNAM	0	1	0	1	100
African	Sub -total	0	3	0	3	
libraries						
		18	10	53	78	
TOTAL						

#### Key: Lib.heads – Library heads Sys.man – System managers Lib.profs – Library professionals

A total of 78 completed questionnaires were received from GAELIC, FRELICO,

LELICO and the three Southern African libraries. The five GAELIC libraries that

responded to questionnaires were:

- University of Limpopo MEDUNSA campus;
- Tshwane University of Technology;
- University of South Africa;
- University of the Witwatersrand; and
- Vaal University of Technology.

A total of 41 responses were received from GAELIC.



Only two FRELICO member libraries out of five implemented the INNOPAC library system. These were the two libraries that were included in this study. Both FRELICO libraries responded to the questionnaires, namely:

- Central University of Technology; and
- University of the Free State

A total of 20 responses were received from FRELICO.

Different sets of questionnaires were sent to library heads, system managers and library professionals on GAELIC and FRELICO. Library heads are library personnel who oversee the overall management of the library. Their opinions were sought for insights into ways in which the system affected their libraries' performance, and the benefits derived from membership of library consortia. System managers are librarians who manage and maintain the system. They have to ensure that the system is running smoothly at all times. They were asked to comment on the overall performance of the system. Library professionals are trained librarians who use at least one of the system modules on a regular basis. They were asked to comment on their experiences of using the system, and on the performance of various modules.

Each library was given 10 questionnaires: one for library management, one for the system manager and six for library professionals, preferably heads of departments, who are knowledgeable about the operations of various modules. The response rates are shown in Table 6



The library heads of LELICO member libraries were requested to complete questionnaires. The LELICO libraries belong to the following institutions:

- Agricultural Research (AR);
- Institute of Development Management (IDM);
- Lesotho Agricultural College (LAC);
- Lesotho College of Education (LCE);
- Lesotho Highlands Development Authority (LHDA);
- Lesotho Institute of Public Administration and Management (LIPAM);
- Lesotho National Library Service (LNLS);
- Lesotho Planned Parenthood Association (LPPA);
- Lerotholi Polytechnic (LP);
- National University of Lesotho (NUL);
- Palace of Justice (PJ); and
- Parliament of Lesotho (PL).

All 12 LELICO library heads responded to the questionnaire. They were asked to comment on benefits derived from LELICO membership, expected benefits from a common library system, and to rate the importance of certain system properties of the proposed LELICO common library system.

Responses were also received from three Southern African libraries that currently use the INNOPAC library system. It was considered necessary to include these as they could give a stronger basis for comparison with Lesotho. Libraries in these countries have more



similarities with those in Lesotho in terms of size, budgets and access to resources. Their inclusion could improve the validity of the data of the study. The institutions selected from the three Southern African countries (Botswana, Namibia, and Zimbabwe) were the:

- Botswana College of Agriculture (BCA) Library;
- National University of Science and Technology (NUST) Library; and the
- University of Namibia Library.

Responses received are shown in Table 6

#### 4.1.2 Interviews

To clarify issues raised in the questionnaires, a total of 12 follow-up interviews were conducted. Interviews were undertaken with three selected system managers from GAELIC, two system managers from the FRELICO libraries using the INNOPAC library system, five library heads of LELICO, the project manager of SEALS, and the system manager of BCA. Table 7 shows categories of interviews conducted and institutions involved.



	System managers			Library heads
GAELIC	FRELICO	Southern	SEALS	LELICO
		African		
• TUT	• UFS	• BCA	Project	• LCE
• UNISA	• CUT		manager	• LP
• WITS				• NUL
				• LNLS
				• PJ

#### Table 7Institutions where interviews were conducted

In each case where the INNOPAC library system was used, the interview was followed by visits to sections of the library for observation. The BCA interview was done telephonically and was therefore not possible to do a site visit for this library.

In addition to questionnaires, interviews and site visits, relevant documents were analysed to supplement the information obtained. These include the following:

- GAELIC annual reports;
- Minutes of meetings of the GAELIC INNOPAC Working Group;
- *GAELIC Institutional Members Survey 2005* by Underwood and Smith;
- FRELICO annual reports;
- LELICO constitution document;
- LELICO annual reports;



- Minutes of LELICO's executive committee; and
- Innovative Interface Inc. (vendor) development plans.

These documents were examined to whenever the information they contain was required for clarification.

#### 4.1.3 Challenges Encountered

At the commencement of data collection in 2006, the researcher was alerted to a document entitled, "GAELIC Institutional Members Survey 2005", which covered some elements of the researcher's questionnaires prepared for GAELIC, especially the 'Library Management Questionnaire'. It was decided that this document should form part of the study's literature review. The results contained in the document would be compared with those of the current study to identify similarities and differences. The document in question was added to the key documents for analysis in the study. (see section 2.8.2.4)

Another problem encountered was that the Central University of Technology (CUT) library of FRELICO was understaffed at the time the questionnaires were distributed (June 2006). Thus, the researcher decided to increase the sample size of library professionals in UFS from nine to 18, so that FRELICO would be fairly represented.

#### 4.1.4 Categories of analysis

There are two major aspects of this study. The first relates to the INNOPAC library system, as evaluated by GAELIC, FRELICO, and other Southern African libraries; the second relates to how LELICO will implement the INNOPAC system based on the



lessons learned from these libraries. The following categories of analysis were identified to cover these two aspects:

## INNOPAC Library System

- System's performance in GAELIC, FRELICO and selected Southern African libraries;
- Problems encountered with the system;
- Impact on GAELIC and FRELICO members;
- Cost-benefit analysis of the system;
- Comparison between a central and decentralised server model; and
- Success factors for the management of a library consortium and lessons learnt.

#### **LELICO**

- Automation status of LELICO member libraries;
- Expected and derived benefits and proposed activities for LELICO;
- Requirements for implementing the INNOPAC library system in LELICO; and
- Funding of LELICO member libraries

#### **4.1.5 Pre-testing of data collection instruments**

The effectiveness in capturing the correct information was tested in four sets of questionnaires. UNISA library was selected to pre-test three questionnaires for the categories of head of libraries, system managers, and library professionals. The heads of



Lesotho Polytechnic and Lesotho College of Education libraries were asked to complete pre-test questionnaires as LELICO members.

Pre-testing revealed weaknesses that necessitated modifications to some questions. For example, in the case of the LELICO library heads questionnaire, one question required a complete rephrasing for better clarity. In other instances, questions were either added or deleted because of the kind of information sought by the researcher. All inconsistencies were reviewed and the necessary changes made to the final questionnaires.

#### 4.2 INNOPAC library system performance

#### 4.2.1 Introduction

Library professionals of GAELIC and FRELICO were asked to comment on the performance of modules that they use on a day-to-day basis. In addition, they had to evaluate the general performance of the system in terms of:

- functionality;
- usability;
- support and training;
- system management; and
- system vendor.

Another questionnaire was distributed among system managers of GAELIC, FRELICO, and the three Southern African institutions. System managers were asked to indicate which modules were available in their libraries their performance. In cases where



modules were not yet installed, they had to indicate the reasons. They were also asked to rate the performance of the system in terms of its operations, functionality, usability, support and training, as well as the vendor.

Library managers of GAELIC and FRELICO were asked to comment on the value of consortium membership and the factors necessary for effective management. They also had to comment on the value of the INNOPAC library system in their libraries. Furthermore, they were asked to identify any problems that they had encountered with the system, and how they dealt with those problems.

Responses indicated that all the libraries use the basic library modules of the INNOPAC library system, namely, Acquisition, Cataloguing, OPAC, Circulations and Serials. Although Management Information and Course Reserve modules come with the installation package, there are some libraries that have not started using the Course Reserve module. Some libraries have decided to purchase additional modules according to their individual needs. These modules include: Bursar Office Inter Library Loan, Web Access Management, Electronic Resource management, Media, WebBridge, Metafind and E-Checkin, and are shown in Table 8.



	Acquis	Catal	Circ	OPAC	Serials	Man	Web	ERM	Burs	Course	WAM	Media	Meta	E-
						Info	Bridge		Off	Resv			find	Chec
MEDUNSA	$\checkmark$	$\checkmark$				$\checkmark$								
TUT	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$								
UNISA	V	$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	V	V	$\checkmark$	
WITS	V	$\checkmark$	$\checkmark$			$\checkmark$						V		
VUT	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$		
UFS	$\checkmark$	$\checkmark$				$\checkmark$								
CUT	$\checkmark$	$\checkmark$				$\checkmark$		$\checkmark$	$\checkmark$				$\checkmark$	

#### Table 8Modules used per institutional library

Key: Acquis – Acquisitions

Bur Off – Bursar Office Catal – Cataloguing Circ – Circulations Course resv – Course reserve Man Info – Management Information ERM – Electronic Resource management; WAM – Web Access management; E-Chec – E-Checkin

The main reason cited for not installing some of the modules is financial. One library (UFS) mentioned that although it had installed Bursar Office, it has not been used owing to incompatibility with the university's main frame.

### 4.2.2 Performance of the system



According to responses received, the overall performance of various modules is good. As indicated in Table 9, most library professionals (62%) referred to their modules as 'good', while 25% rated their modules as 'excellent'. The OPAC module had the highest number of 'excellent' ratings (50%), while Cataloguing had the highest (76%) number of 'good' ratings.

	Very	Poor	Satisfactory	Good	Excellent	TOTAL
	Poor					
Acquisitions	0	1	2	7	0	10
	0%	10%	20%	70%	0%	
Cataloguing	0	0	1	13	3	17
	0%	0%	6%	76%	18%	
Circulations	0	0	2	6	8	16
	0%	0%	13%	37%	50%	
OPAC	0	0	3	10	5	18
	0%	0%	16%	56%	28%	
Serials	0	0	0	6	1	7
	0%	0%	0%	86%	14%	
TOTAL	0	1	8	42	17	68
	0%	1.5%	11.5%	62%	25%	

# Table 9 Library professionals rating of modules



System managers were also generally satisfied with the performance of various modules (see Table 10). Fourteen per cent of system managers said the modules were 'satisfactory', 74% gave the modules a 'good' rating, while 15% said the modules were 'excellent'. The most highly rated module was Circulation, which was rated 'good' by all system mangers.

	Very	Poor	Satisfactory	Good	Excellent	TOTAL
	Poor					
Acquisitions	0	0	1	5	1	7
	0%	0%	14%	72%	14%	
Cataloguing	0	0	1	4	2	7
	0%	0%	14%	58%	28%	
Circulations	0	0	0	7	0	7
	0%	0%	0%	100%	0%	
OPAC	0	0	1	6	0	7
	0%	0%	14%	86%	0%	
Serials	0	0	1	4	2	7
	0%	0%	14%	58%	28%	
TOTAL	0	0	4	26	5	35
	0%	0%	11%	74%	15%	

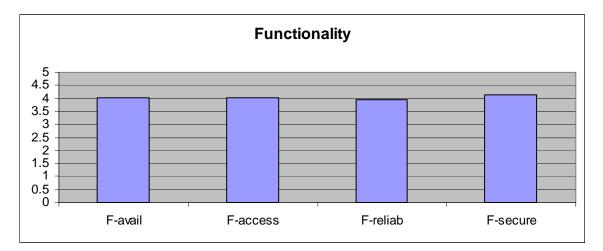
### Table 10 System managers rating of modules



# 4.2.2.1 Functionality

The system scored well on functionality. All components of systems functionality, namely, availability, accessibility, reliability, and security scored above 3.5 on a scale of 1 to 5.

# **Table 11 Functionality**



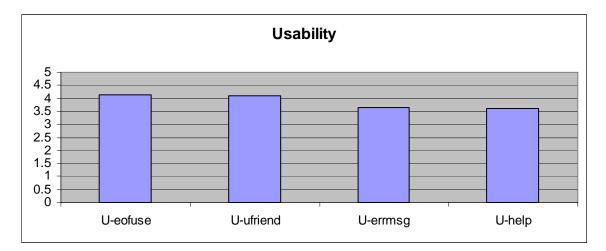
Key: F-avail – availability F-access – accessibility F-reliab – reliability F-secure – security

# 4.2.2.2 Usability

Table 12 shows very high scores for 'ease of use' and 'user friendliness'. Although 'error messages' and 'help messages' scored above average (2.5), they were relatively low compared with the rest.



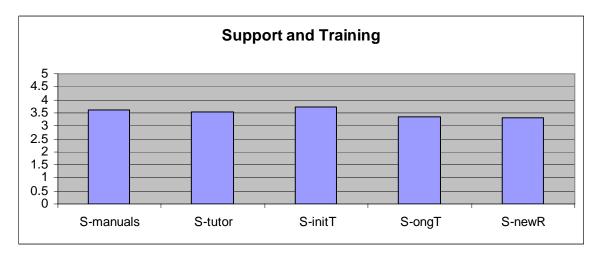
# Table 12 Usability



Key: U-eofuse – ease of use U-ufriend – user friendliness U-errmesg – error messages U-help – help messages

# 4.2.2.3 Support and training

Support and training was rated in terms of manuals, tutorials, initial and ongoing training and new release/updates. All components were rated positively, with initial training scoring the highest (3.7).



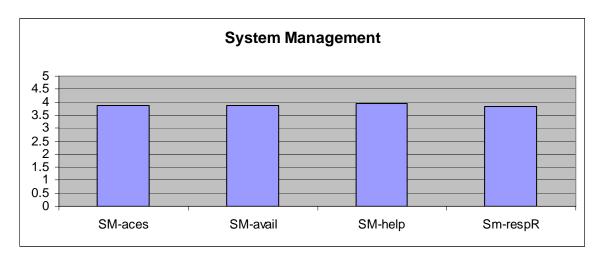
# **Table 13 Support and training**



Key: S-manuals – manuals S-tutor – tutorials S-initT – initial training S-ongT – ongoing training S-newR – new releases/updates

#### 4.2.2.4 System management

System management was another component that library professionals were asked to rate. As shown in Table 14, system management in member libraries is good. While 'helpfulness' scored relatively high, 'response rate' was relatively low.



#### Table 14 System management

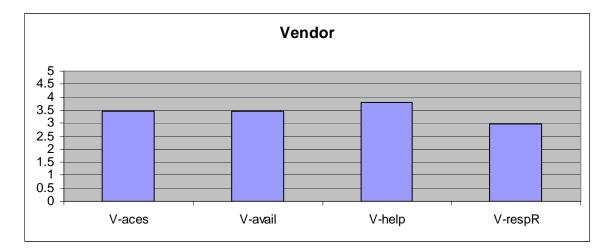
Key: SM-aces – accessibility SM-avail – availability SM-help – helpfulness SM-RespR – response rate

#### 4.2.2.5 Vendor

System managers were asked to rate the vendor in terms of the same attributes. Accessibility, availability, and helpfulness got similar scores (3.72); response rate was the lowest (2.9).



Table 15 Vendor



Key: SM-aces – accessibility SM-avail – availability SM-help – helpfulness SM-RespR – response rate

# 4.2.3 Membership and value of Innovative listserv, Innovative User Groups and GAELIC INNOPAC System Workgroup

System managers were asked to indicate whether or not they are members of the Innovative User Group, Innovative User Group: South Africa, and GAELIC INNOPAC System Workgroup. They were also asked to indicate if they subscribed to the Innovative User Group listserv. The value of these user groups and listserv was also evaluated.

# 4.2.3.1 Membership of Innovative listserv, Innovative User Groups and GAELIC INNOPAC System Workgroup.

All system managers subscribe to the Innovative listserv and user groups, except the Wits system manager who does not subscribe to the Innovative User group. Membership of



support mechanisms (listserv and user groups) of Innovative and GAELIC INNOPAC System Workgroup are shown in Table16.

# Table 16 Membership of Innovative listserv, User Groups, and GAELIC INNOPAC

#### System Workgroup

	IUG	IUG listserv	IUG:SA	GISW
MEDUNSA	Yes	Yes	Yes	Yes
TUT	Yes	Yes	Yes	Yes
UNISA	Yes	Yes	Yes	Yes
WITS	No	Yes	Yes	Yes
VUT	Yes	Yes	Yes	Yes
UFS	Yes	Yes	Yes	Yes
CUT	Yes	No	Yes	Yes

Key: IUG – Innovative User Group IUG Listserv – Innovative User Group Listserv IUG: SA – Innovative User Group: Southern Africa GISW – GAELIC INNOPAC System Workgroup

#### 4.2.3.2 Value of Innovative listserv, User Groups and GAELIC INNOPAC System

#### Workgroup

Table 17 gives system managers' comments on the value of the Innovative listserv, user

groups and the GAELIC INNOPAC System Workgroup.



# Table 17 Value of Innovative listserv, User Groups and the GAELIC INNOPAC

IUG	IUGL	IUG:SA	GISW
<ul> <li>Information</li> <li>sharing (new</li> <li>updates, products,</li> <li>releases, IUG</li> <li>conference)</li> <li>Sharing of</li> <li>expertise</li> </ul>	<ul> <li>Information sharing (new developments)</li> <li>Problem solving</li> </ul>	<ul> <li>Information sharing</li> <li>Sharing of expertise</li> <li>Problem-solving</li> <li>Networking</li> </ul>	<ul> <li>Sharing of skills/expertise</li> <li>Problem-solving</li> <li>Negotiating of group pricing</li> </ul>

#### System Workgroup

The main value of the Innovative support mechanisms seems to be information sharing. One manager mentioned that there is plenty of irrelevant information on the IUG listserv and that she seldom makes use of the listserv.

# 4.2.4 **Problems encountered with the system**

As indicated in Table 18, problems encountered include slow response rate by the vendor, high cost of additional training, poor e-mail support, and screen freezing. The problems have been ranked according to their frequencies.

Table 18 Problems encountered w	with the system
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Rank	Nature of problem
3	Minor problems
3	Slow response rate from the vendor
2	Email support – time differences
2	High cost of additional training
1	Screen freezing
1	Occasional software problems



Some of these problems were solved by reporting them to CSDirect, which is the vendor's helpdesk. Others were solved by contacting other libraries that use the same system. Other minor problems were solved with new releases.

# **4.3 Performance of the INNOPAC library system in three selected libraries in other** Southern African countries

#### 4.3.1 Introduction

Three libraries in other Southern African countries, namely Botswana, Namibia, and Zimbabwe were asked to evaluate the INNOPAC library system. As indicated in Section 4.1. the three institutions selected were the Botswana Agricultural College (BCA), the University of Namibia (UNAM) and the National University of Science and Technology (NUST) in Zimbabwe. At the time of administering the questionnaire (Oct. – Nov. 2006) BCA Library had used the system for four years, UNAM Library for 11 months and NUST Library for three years. Both BCA and NUST were on manual systems before installing the INNOPAC library system, while UNAM used URICA. The three libraries were using basic modules, namely, Acquisitions, Cataloguing, Circulations, OPAC, and Serials.

#### 4.3.2 Performance of the system in BCA, UNAM, and NUST libraries

#### 4.3.2.1 Library modules

System managers were asked to evaluate the performance of the Acquisitions, Cataloguing, Circulations, and Serials modules. Table 19 below indicates how each



module was rated in each library. BCA and NUST rated the modules highly and UNAM rated most modules satisfactory.

	Acquisitions	Cataloguing	Circulations	Serials	OPAC
BCA	Good	Excellent	Excellent	Excellent	Excellent
UNAM	Poor	Satisfactory	Good	Satisfactory	Satisfactory
NUST	Good	Good	Excellent	Good	Excellent

## 4.3.2.2 Functionality

The system's functionality was evaluated against 'availability', 'accessibility', 'reliability', 'security', 'ability to integrate with other systems', 'ability too customise', and 'upgradeability'. Responses are shown in Table 20. In general, the system's functionality was rated positively.

	Availability	Accessibility	Reliability	Security	Ability to	Ability to	Upgradeability
					integrate	customise	
BCA	Excellent	Excellent	Excellent	Excellent	Good	Good	Excellent
UNAM	Good	Satisfactory	Good	Good	Satisfactory	Good	Good
NUST	Good	Good	Good	Good	Satisfactory	Good	Excellent



#### 4.3.2.3 Usability

Usability of the system was evaluated in terms of 'user-friendliness', 'ease of use', 'error messages', and 'help messages'. usability elements were well rated except 'help messages' which were poorly rated by UNAM. Responses are tabulated in Table 21 below.

# **Table 21 Performance on Usability**

	User-	Ease of use	Error	Help messages
	friendliness		messages	
BCA	Good	Excellent	Good	Good
UNAM	Satisfactory	Good	Satisfactory	Poor
NUST	Good	Good	Satisfactory	Good

# 4.3.2.4 Support and training

The support and training component was assessed in terms of Manuals, Tutorials, Initial training, Ongoing training, and New Releases/Updates. Support and training seems to be satisfactory, as reflected in Table 22 below.

 Table 22 Performance on Support and Training

	Manuals	Tutorials	Initial training	Ongoing training	New releases/updates
BCA	Good	Good	Good	Satisfactory	Good
UNAM	Poor	Satisfactory	Poor	Satisfactory	Not given
NUST	Excellent	Satisfactory	Satisfactory	Not given	Good



#### 4.3.2.5 System vendor

The vendor of the INNOPAC library system was evaluated in terms of accessibility, availability, helpfulness and response rate. Response rate was the only component that was rated as poor. The remainder of the vendor elements was rated fair. Performance of the vendor is shown in Table 23 below.

	Accessibility	Availability	Helpfulness	Response rate
BCA	Good	Good	Good	Satisfactory
UNAM	Satisfactory	Satisfactory	Poor	Poor
NUST	Good	Good	Satisfactory	Poor

#### Table 23 Performance of the system vendor

#### 4.3.2.6 Membership and value of Innovative listserv and User Groups

Only one system manager (UNAM) subscribes to the IUG listserv and User Groups. She says there is little value in the IUG listserv and she has not been using it. The reason she gives is that there are "too many messages". The only benefit she derives from the IUG: SA is the attendance of the annual conference. She also mentioned that although the UNAM library is a member of GAELIC, the library does not benefit much because of distance.



# 4.4 Impact of the INNOPAC library system on libraries

#### 4.4.1 Introduction

All GAELIC and FRELICO libraries involved in this study were using other systems before they converted to the INNOPAC library system. As Table 24 shows, previous systems included Erudite, ITS, Inmagic Plus and In-house systems. They all acquired INNOPAC through GAELIC which received funding from the Andrew Mellon Foundation in the USA.

Table24	Previous	library	systems	used	by	selected	GAELIC	and	FRELICO
members									

	Erudite	In-house system	InmagicPlus	ITS
MEDUNSA				
TUT				
UNISA				
WITS				
VUT				
UFS				
CUT				

Data from the questionnaires and interviews indicate that the main reasons for changing to the INNOPAC library system was its versatility and the availability of donor funding to purchase the new system. Other reasons are tabulated below with their respective rankings – the higher the ranking, the greater the number of responses.



## Table 25 Reasons for changing to the INNOPAC library system

Rank	Reasons for changing to the INNOPAC library system
8	Functions available
7	Availability of funding
4	Uniformity with other libraries
4	The need to co-operate with other libraries
3	Problems with previous system
1	Professionalism of commercial vendor

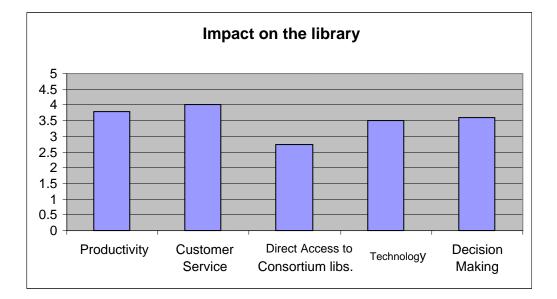
# 4.4.2 Impact of the INNOPAC library system on selected GAELIC and FRELICO libraries

Implementation of the INNOPAC library system in both GAELIC and FRELICO libraries seems to have had a positive impact in terms of customer service, productivity, cost-saving, and contribution to decision making in libraries. The system seems to have had little impact on better access to other consortia members. Table 26 shows the average score of various components. The rating is between 1 and 5, where 1 represents the least impact and 5 the greatest impact.



# Table 26 Impact of the INNOPAC library system on selected GAELIC and

### **FRELICO** libraries



#### 4.4.3 Benefits derived from using the INNOPAC library system

Benefits derived by consortia members from using the INNOPAC library system are tabulated below. The main benefits mentioned are its effectiveness and reliability in executing library operations. A high ranking indicates that more managers mentioned the corresponding benefit.

Rank	Nature of benefit derived from using INNOPAC
6	Effective and reliable system
5	Wide range of functions available
4	Shared training and expertise
3	Large user group
2	System up-to-date with library developments



1	Comprehensive documentation and manuals
1	Excellent customer support

#### 4.5 Cost-benefit analysis of the INNOPAC library system

#### 4.5.1 Costs incurred by libraries using the INNOPAC library system

Table 28 shows the nature of costs incurred by selected libraries. These include cost for installation, running and equipment costs. Other costs relate to additional training, staffing and purchasing of additional modules.

#### Table 28 Nature of costs incurred and their costs in SA Rands (1Rand = \$7.09 - 02

August 2007)
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					TOTAL
Institution	Installation	Running	Equipment	Others	(excl. Others)
MEDUNSA	Not given	230 000	300 000	Additional training – 30 000	680 000
TUT	231 519	1 400 000	26 567	Conversion: 840 000 Salary of system librarian	2 498 086
UFS	1 380 000	95 000	50 000	Additional modules – 370 000	1 525 000
UNISA	2 965 600	1 053 695	102 000	Staffing – 741 455	4 121 295

The highest expense was R4 121 295, which was incurred by UNISA and the lowest was that of MEDUNSA which amounted to R680 000 and excluded installation costs and additional training, as reflected in Table 28.



# 4.5.2 Analysis of costs against the benefits derived from the INNOPAC library system

All GAELIC and FRELICO members felt that although the system is expensive, the benefits derived outweigh the costs. The system is considered to be cutting edge technology that responds to the requirements of libraries. Its regular updates and enhancements enable better servicing of changing needs of users.

Follow-up interviews indicate that foreign exchange rates exacerbate the costs. They also revealed that although initial training is free the cost of additional training remains very high. GAELIC holds collective training sessions for its members, which tends to reduce the overall costs by individual libraries.

#### 4.6 Benefits of consortium membership

#### 4.6.1 Motivation for joining a consortium

All five GAELIC libraries under investigation joined GAELIC when it was established in 1996. The two FRELICO libraries joined FRELICO in 1998, but installed the INNOPAC library system as a sub-node of GAELIC. The seven libraries were asked about their motivation for joining, and the responses are summarised in Table 29, together with their respective rankings, the higher the ranking, the greater the number of responses.

Rank	Motivation for joining a consortium
5	Access to a common library system

Table 29	Motivation	for	ioining	a consortium
	mouration	101	Johnne	a consol train



5	Resource sharing
3	Joint purchasing
3	Joint development opportunities
2	Networking
1	Donor funds

#### 4.6.2 Benefits derived from consortium membership

With regard to derived benefits from consortium membership, all expectations seem to be met, although to a varying degree. Collective training and support from members are other benefits that members gain from membership. Table 30 lists benefits identified by respondents, and their respective rankings.

 Table 30 Benefits derived from consortium membership

Rank	Benefits derived from consortium membership
5	Access to a common library system
4	Joint purchasing of electronic resources
3	Extensive networking with other libraries
3	Support from other libraries
2	Training opportunities
1	Financial gain



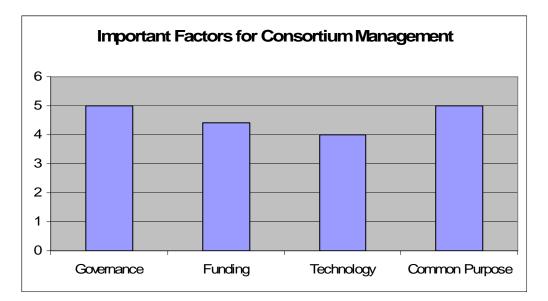
#### 4.6.3 Factors leading to successful management of a library consortium

Library heads of the two consortia were asked to rate the importance of the following factors that contribute to the successful management of a consortium:

- Governance;
- Funding;
- Technology; and
- Common purpose.

These factors were rated on the scale of 1 to 5, where 1 is the least important and 5 is very important. As Table 31 indicates, all the four factors were considered important, with 'governance' and 'common purpose' ranked highest and 'funding' and 'technology' ranked third and fourth respectively.

 Table 31 Important factors for consortium management





#### 4.7 Centralised and decentralised system server models

To reveal the advantages and disadvantages of centralised and decentralised system server models in a consortium, two librarians involved with each model were interviewed. The project manager of the South Eastern Academic Library System (SEALS) was interviewed on the centralised model. SEALS uses a central model for the management of its server. This model is different from a decentralised one used by both GAELIC and FRELICO. Through information gathered from the SEALS project manager, comparisons were made between central and decentralised models, The UNISA system librarian was interviewed on the decentralised model. Table 32 below shows responses received for each model.

Table 32 Advantages and	disadvantages of central	and decentralised server models

	Central server	Decentralised server
Advantages	<ul> <li>Cross-cutting access to all records of member libraries</li> <li>Simultaneous upgrades to software</li> <li>Much cheaper than individual installations</li> <li>Better management</li> </ul>	<ul> <li>Autonomy of individual libraries</li> <li>Better relations with institutions' IT departments</li> </ul>
Disadvantages	• None given	<ul> <li>Cannot directly access other members' holdings</li> <li>Members on different</li> </ul>



		version of the system
	•	Training and support are
		negatively affected
	•	High costs of
		maintenance and
		upgrades

#### 4.8 Analysis of LELICO responses

The 12 heads of LELICO libraries responded to the questionnaire that sought to find out the automation status of their libraries, and their opinion on the benefits derived from LELICO membership. Recommendations on which activities LELICO should prioritise as well as systems requirements for the LELICO common library system were solicited.

#### 4.8.1 Automation status of LELICO member libraries

Out of a total of 12 libraries, only four (25%) are computerised. Two of these libraries use Q and A and CDS/ISIS, which do not have all the core library modules, such as Circulations and Serials. Table 33 shows the automation status of LELICO libraries and library systems.

LIBRARY	AUTOMATED	LIBRARY SYSTEM USED
AR	No	-
РЈ	No	_



IDM	No	-
LAC	No	-
LCE	Yes	Bookworm
LHDA	No	-
LIPAM	Yes	Q & A
LNLS	No	-
LP	No	-
LPPA	Yes	CDS/ISIS
NUL	Yes	Integrated Tertiary Software (ITS)
PL	No	-

The library modules used by four libraries that have automated include Acquisitions, Cataloguing, Circulations, Serials and Management Information. Cataloguing modules are used by all four libraries, whereas OPAC and Acquisitions are used by three (LCE, LIPAM and NUL). Circulations and Management Information are used by only two (LCE and NUL) while Serials is only used by the NUL library. Some problems have been identified with all the four library systems used. Problems for each library are tabulated in Table 34 below.

Library System	Libraries	Problems
Bookworm	LCE	Unable to upgrade



		Vendor not traceable		
		• No system support		
		• No other users known		
Integrated Tertiary	NUL	Not web-based		
Software (ITS)		• Small user group		
Q and A	LIPAM	Cannot access Loans module		
		without going through Cataloguing		
CDS/ISIS	LPPA	Does not accommodate other		
		modules		

The majority of libraries (seven out of eight) that have not computerised identify lack of funds as the main reason. One library (LNLS) said it was in the process of computerising.

#### 4.8.2 Benefits of LELICO membership and proposals

#### 4.8.2.1 Derived benefits

Training workshops are mentioned by many libraries (70%) as a major benefit they have derived from LELICO membership. This is followed by provision of refurbished computers (mentioned by 60% of respondents) donated by LELICO. The opportunity to share information and networking (50%) is another benefit. Access to electronic databases such as EBSCO is a further advantage (mentioned by 40% of libraries). One library mentioned a donation of a set of Dewey Decimal Classification (DDC) that it received, which is used to catalogue and classify its library material. Another library



mentioned that recognition from the government has resulted in the subvention of funds to LELICO.

### 4.8.2.2 Expected benefits

Respondents also mentioned benefits that they expect to derive from LELICO

membership. These are shown below, together with the percentage of library heads who

mentioned them.

- More training workshops 40%
- More marketing and publicity 30%
- Joint acquisition of a common library system 30%
- Interlibrary Scheme 8%
- Compilation of a national directory of Lesotho libraries 8%
- Licensing 8%
- Regional and international partnerships 8%
- Facilitate exchange programmes among members 8%

# **4.8.2.3** Proposals of activities

Members were asked to rank future activities in order of priority. These were: installation of a common library system; engagement in fundraising activities, improvement of communication; expansion of LELICO membership; partnership with regional consortia; and more professional development opportunities. Table 35 is a summary of the ranking of proposals. The installation of a common library system was ranked highest by respondents.



# Table 35 Proposal of activities for LELICO

Proposal	Rank	
Installation of a common library system	1	
Engage in fundraising activities	2	
Improve communication	3	
Provision of professional development	4	
opportunities		
Partnership with regional consortia	5	
Expand membership	6	

## 4.8.3 Requirements for LELICO common library system

# 4.8.3.1 Modules required

Respondents were asked to identify modules they would like to have included in the LELICO common library system. The following modules were suggested (with the percentage of respondents):

- Acquisitions 100%
- Cataloguing 100%
- Circulations 100%
- OPAC 100%
- Serials 60%
- Archives 8%
- Bindery 8%
- Management information 17%

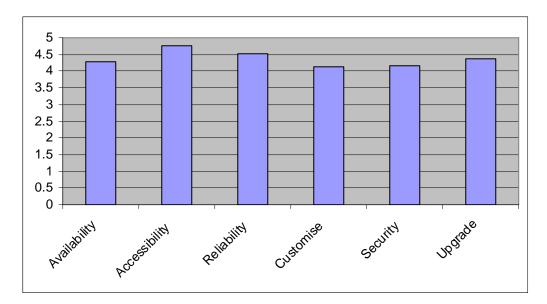


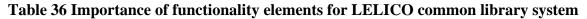
#### 4.8.3.2 System properties

To understand the type of common library system LELICO members wanted, respondents were asked to rate the importance of some properties of a library system. These properties are: functionality, usability, system support and vendor. Elements were identified under each property and these were rated on a scale of 1 to 5, where 1 = least important and 5 = most important. Tables 36 to 39 summarise the ratings as given by respondents.

#### 4.8.3.2.1 Functionality

Library heads were asked to rate the importance of the following functionality elements for the LELICO common library system: availability, accessibility, reliability, ability to customise, security, and ability to upgrade. All the elements were considered important, with scores of over 4, as reflected in Table 36.



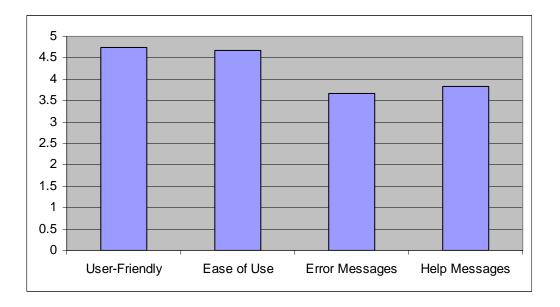




#### 4.8.3.2.2 Usability

Usability elements (user-friendliness, ease of use, error messages, and help messages) were rated on the scale of 1 to 5, and all the elements were considered important, especially the first two, which scored 4.7 and 4.6 respectively.

# Table 37 Importance of usability elements for LELICO common library system

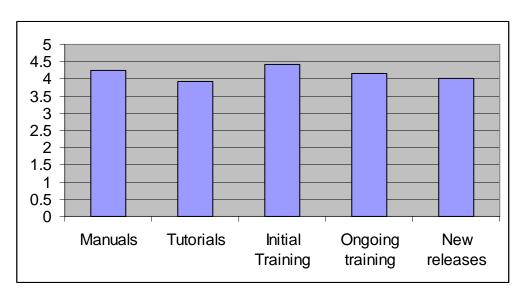


# 4.8.3.2.3 Support and training

Respondents also ranked the importance of support elements – Manuals, Tutorials, Initial training and ongoing training were also ranked on the scale 1 to 5. Initial training, manuals and ongoing training were considered very important, with scores of 4.4, 4.2 and 4.1 respectively. Tutorials were considered of average importance (Score – 3.8).



# Table 38Importance of support elements for LELICO common library



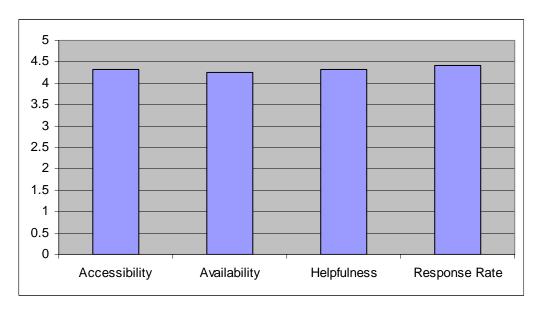
system

## 4.8.3.2.4 Vendor

Vendor elements of accessibility, availability, helpfulness, and response rate were all deemed to be very important for the common system, with all elements scoring over 4. Response rate was found to be of the highest importance among the four elements (score 4.4).



#### Table 39 Importance of vendor elements for LELICO common library



system

#### 4.8.4 Funding for LELICO member libraries

Purchasing a common library system would inevitably have financial implications for LELICO members. It, therefore, became necessary to investigate the latest budget trends among LELICO members, and if funding was adequate for general library needs. Table 40 shows that the three academic institutions (NUL, LP and LAC) received the most funds. The budget for these three ranged between M800 000 toM5 000 000. LNLS had a comparatively better budget than most libraries in 2006 (data for other years was not given). Other libraries, which are mainly 'special' and relatively small, received very little funding (Range: M12 000 – M80 000). In general, the NUL Library was the best funded, with an average of M4 000 000 between 2004 and 2006, whereas LPPA was the least funded with an average of M14 800 for 2005 and 2006.



Heads of LELICO libraries were asked to indicate whether or not funding was adequate for their library needs. Eighty per cent (10 libraries) said that the budget was inadequate, and only 17% (two libraries) said it was adequate.

Table 40	Budget status among LELICO member libraries
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BUDGET OF LELICO LIBRARIES FOR YEARS 2004, 2005 and 2006 in Maloti (1 US\$ = 7.09 Maloti (02 August 2007))							
	2004	2005	2006	Adequacy			
AR	Not known	Not known	Not known	No			
IDM	_	_	_				
LAC	800 000	900 000	1 000 000	Yes			
LCE	60 500	67 350	80 000	No			
LP	1 087 741	1 525 203	2 238 903	No			
LHDA	_	200 000	500 000	No			
LIPAM	49 000	54 000	80 000	No			
LNLS	_	_	2 000 000	No			
LPPA	_	12 600	17 000	Yes			
NUL	3 000 000	4 000 000	5 000 000	No			
PL	50 000	50 000	50 000	No			
PJ	100 000	100 000	150 000	No			

#### 4.9 Conclusion

This chapter presented data obtained from questionnaires, interviews and documents.

Data was presented in two major categories: the first related to GAELIC, FRELICO and three libraries in other Southern African countries that use the INNOPAC library system, the second was the Lesotho Library Consortium, a small library consortium considering the implementation of a common library system. Chapter 5 will interpret data presented in this chapter.