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MOBILE PERSONAL INFORMATION MANAGEMENT SKILLS OF THE UNIVERSITY LIBRARIANS IN PAKISTAN

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Abstract

Effective personal information management (PIM) abilities are essential in the current digital era for university librarians, who act as knowledge stewards in academic settings. The purpose of this study is to find out how well Pakistani university librarians use mobile devices for PIM. Information organization, data storage techniques, information retrieval, and mobile technology maintenance procedures are the main areas of attention for this study.

Mobile-based PIM makes use of cloud services, mobile apps, and web browsers to facilitate effective information access and management. Using a quantitative methodology, the study collects data from university librarians at public and private universities by means of surveys. The results shed light on the methods, obstacles, and tactics that librarians now use to manage personal data on mobile devices.

The purpose of this study is to improve university librarians' comprehension of mobile PIM skills and provide suggestions for strengthening their knowledge and adapting to changing technology needs in academic contexts.

Keywords: Mobile Information Management, Personal Information Management (PIM), Information finding, Information Keeping, Information Organizing, Information Maintaining

Introduction

Information is essential to our ability to function in the environment, complete tasks, make wise judgments, learn more and become more adept at it, comprehend what we can influence and what we have to learn to live with (Osae & Dadzie, 2013 ; Jones, 2010). Mobile devices are now essential tools for managing both personal and professional information in the ever changing field of information technology (Sawant & Manchekar, 2019). The general adoption of smartphones and tablets has had a substantial impact on how people access, save, organize, and manage information (Fourie, 2011). This transformation is especially noticeable in academic settings, as university librarians are essential to the management of enormous volumes of information for their organizations (Fourie, 2011). Consequently, university librarians' proficiency with mobile information management is crucial.

Mobile-based personal information management (PIM) encompasses a range of activities, including finding and re-finding information, information keeping, organizing, and maintaining information, as well as leveraging mobile devices for effective personal productivity and communication. According to studies, the integration of mobile technologies into PIM practices can enhance the efficiency and effectiveness of information retrieval and management (Joo & Choi, 2015; Jones, 2010). Because university librarians are typically thought of as keepers of knowledge and information, they must adjust to these technological developments in order to satisfy the changing requirements of their patrons (Manju et al., 2021).

The use of mobile devices for finding and re-finding information is a critical component of mobile PIM. Tools such as Internet Explorer, Google, Safari, and various mobile applications enable users to search for and retrieve information with ease (Burford & Park, 2014). Re-finding information is a concentrated effort that combines recognition and memory, whereas discovering information

is an exploratory activity that utilizes recognition alone (Chaudhry et al., 2015). Moreover, mobile devices offer the convenience of "just in time" information access, allowing librarians to quickly find information through browsing, searching, and utilizing mobile-specific features like email search and file name search (Kane & Alavi, 2007). The integration of cloud services like Dropbox and Google Drive for file transfers improves information accessibility and retrieval even more (Kim et al., 2011).

Data must be efficiently and safely stored in order to maintain information on mobile devices. Email drafts, screenshots, and cloud storage solutions are just a few of the ways that smartphones and tablets may capture and save data (Buttfield-Addison et al., 2012). For librarians who work with sensitive and extensive material, the convenience and security of storing data on personal devices are essential (Ali & Warraich, 2021).

Organization of information effectively is another essential component of mobile PIM. Librarians can classify and arrange their notes, reminders, and schedules with the use of programs like Google Calendar, Evernote, and Apple Pages (Buttfield-Addison et al., 2012; Shih et al., 2015). On mobile devices, using folders, colors, and other organizing techniques guarantees that data is methodically grouped and readily accessible (Sun & Li, 2019).

To maintain optimum performance and security, mobile device information needs to be updated and cleaned on a regular basis. This entails removing pointless notes, uninstalling rarely used apps, and maintaining up-to-date personal data in designated folders or online services (Zhang, & Liu, 2015). Clearing call and search history from mobile devices also helps to keep them private and functional (Al-Rahmi & Othman, 2013).

The ability of university librarians to properly service the academic community depends on their competency with mobile devices for PIM. Modern librarianship requires a variety of skills, including maintaining contacts, arranging events, backing up material to the cloud, and organizing tasks via mobile apps (Schmidt & Etches, 2014). Their ability to troubleshoot and solve frequent issues with mobile devices further improves their capacity to effectively handle information (Hill, 2015).

People must overcome a number of challenges while managing their personal information on mobile devices. People face a number of challenges when using mobile software, including variations in the functioning of two different brands of mobile devices and interface design between different models of mobile phones (Zhang, & Liu, 2015).

University librarians' mobile information management abilities are essential in today's academic environment. As knowledge keepers, they must embrace mobile technology to improve PIM procedures so they may successfully and efficiently address their users' changing information needs.

Objectives for the Research Article

1. To assess the proficiency of university librarians in using mobile devices for managing personal information.
2. To evaluate the specific skills of university librarians in finding and retrieving information using mobile devices.
3. To analyze the methods employed by university librarians to keep and store information on mobile devices.
4. To investigate how university librarians organize information using mobile devices.
5. To examine the practices of university librarians in maintaining and managing information on mobile devices.
6. To measure the overall mobile personal information management (PIM) skills of university librarians.

Research Questions

1. How proficient are university librarians in using mobile apps for organizing their daily tasks?
2. What methods do university librarians use to find and retrieve information using mobile devices?
3. How do university librarians store and keep their personal information on mobile devices?

4. What tools and techniques do university librarians use to organize information on their mobile devices?
5. What are the common practices of university librarians in maintaining and managing information on mobile devices?
6. How confident are university librarians in troubleshooting and solving common issues with their mobile devices?
7. Do university librarians regularly back up important information from their mobile devices to cloud storage?
8. How effectively do university librarians use mobile devices to schedule and manage their calendar events?
9. What role do mobile note-taking apps play in the personal information management practices of university librarians?
10. How efficiently do university librarians manage and organize their contacts using mobile devices?
11. What is the frequency of mobile app updates among university librarians to ensure the use of the latest features?

Problem Statement

The effectiveness and efficiency of personal information management (PIM) are critical in the digital age, particularly for university librarians who act as information gatekeepers. Although mobile devices are widely used for many different purposes, little is known about how well university librarians use these devices to handle personal data. Their capacity to improve their abilities and maximize their output is hampered by this information gap. Therefore, it is crucial to look at university librarians' mobile-based PIM skills in order to pinpoint present procedures,

problems, and opportunities for development, ultimately strengthening their professional capacities for effective information management.

Literature Review

The way university librarians organize, store, and retrieve information has changed as a result of the growing reliance on mobile devices for personal information management (PIM). With an emphasis on information searching and retrieval, keeping, organizing, maintaining, and general PIM skills, this literature review examines the corpus of research on mobile-based PIM skills among university librarians.

Information Finding/Re-finding

For librarians to locate and refined information, mobile devices have become essential tools. Research indicates that a lot of librarians use Internet Explorer, Google, and Safari to quickly search for information (Burford & Park, 2014). Furthermore, mobile PIM solutions that facilitate browsing and direct search features improve the effectiveness of information retrieval (Leino et al., 2010). The fact that librarians regularly use mobile devices for "just in time" information access highlights how immediate and practical mobile technology are in educational settings (Yang, 2015). The act of preserving data for future access and utilization is referred to as keeping (Jones, 2010; Bruce, 2005). According to (Case & Given, 2016; Julien & O'Brien, 2014; Urquhart, 2011) finding information is particularly covered by a huge body of research on information retrieval and information seeking.

Information Keeping

It is often known that university librarians have a tendency to store material on mobile devices. For example, people frequently choose smartphones because of its portability and simplicity of use stated by (Head & Eisenberg, 2010). Studies of (Jones & Teevan, 2007) reveal that librarians feel secure and at ease when storing material on mobile devices, underscoring the devices' perceived dependability. (Marshall, 2009) adds that common techniques include emailing oneself

with crucial information, storing drafts, and taking pictures to record information. (Broadman & Sasse, 2004) found that people save information because they need it "to do their work," "just in case they need them later," "to be reminded of their commitments," and "to share with others." This underscores the multifaceted use of mobile devices in maintaining personal information securely and conveniently.

Information Organizing

(Mizrachi & Bates, 2013) includes that for librarians, efficient information management is essential, and mobile devices provide a variety of tools to help with this process. Organization of notes and reminders are commonly accomplished with apps such as Evernote and built-in note-taking tools. (Iqbal et al., 2017) added in their article that utilizing online calendars, like Google Calendar, facilitates the methodical arrangement of appointments and assignments. (Sellen & Harper, 2003) asserts that information saved on mobile devices can be made more manageable and accessible by using techniques like color-coding apps and folders. (Jones et al., 2004) state that this is the role that organization plays. According to (Boardman, 2004), organizing entails labeling, classifying, relocating, renaming, and creating folders with the intention of facilitating the retrieval of information.

Information Maintaining

Another crucial component of PIM is preserving the relevance and integrity of the information. According to research, librarians routinely remove unused apps from their devices and remove pointless notes in order to maximize device efficiency (Blandford & Green, 2001). To make sure data is updated and available, it's usual practice to update mobile apps and save personal data on cloud services (Jones & Bruce, 2005). Clearing call and web search histories highlights the continuous efforts to protect privacy and device functionality (Alon, & Krtalić, 2024; Li, 2023).

Mobile PIM Skills

Academic librarians have a high degree of expertise in utilizing mobile applications to oversee everyday responsibilities and plan events (Hahn, 2008). Regularly backing up information to cloud storage and using note-taking apps are indicative of their adeptness in leveraging mobile technologies for PIM (Whittaker, 2011). Their assurance in identifying and resolving typical

problems with mobile devices also speaks to their technological proficiency (Marshall & Bly, 2005).

The literature concludes that university librarians are adept at using mobile devices for a variety of PIM tasks, such as data integrity maintenance and information retrieval. This flexibility highlights how essential mobile technologies are to contemporary librarianship, enabling effective information management in a changing academic setting.

Methodology

The present study used a quantitative research design to evaluate the level of proficiency in mobile personal information management (PIM) among Pakistani university librarians. Data from university librarians at different institutions was gathered using a cross-sectional survey approach. 112 Pakistani university librarians from Islamabad made up the study's population. Random sampling was used in the participant selection process to guarantee representation from both public and private sectors. A systematic questionnaire intended to investigate several facets of university librarians' mobile PIM proficiency was used to gather data. The questionnaire was created with a comprehensive assessment of the literature and five Likert-scale questions to gauge participants' knowledge, experiences, and difficulties with mobile PIM. Questionnaire distributed among the participations in both hard and soft form. Descriptive statistics were used to analyses the quantitative data from the survey. For every survey topic, frequencies and percentages were computed to provide an overview of participants' replies pertaining to their proficiency with mobile PIM.

Data Analysis

Data analysis is the procedure of collecting pertinent information, organizing, transforming, and modelling data to enable inferences and decision-making. Identifying patterns, trends, correlations, and anomalies among massive data sets is a necessary step in order to derive actionable insights that help with company objectives and strategic efforts (Ullah, A et al., 2024).

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Result and Discussion

Status of Institution

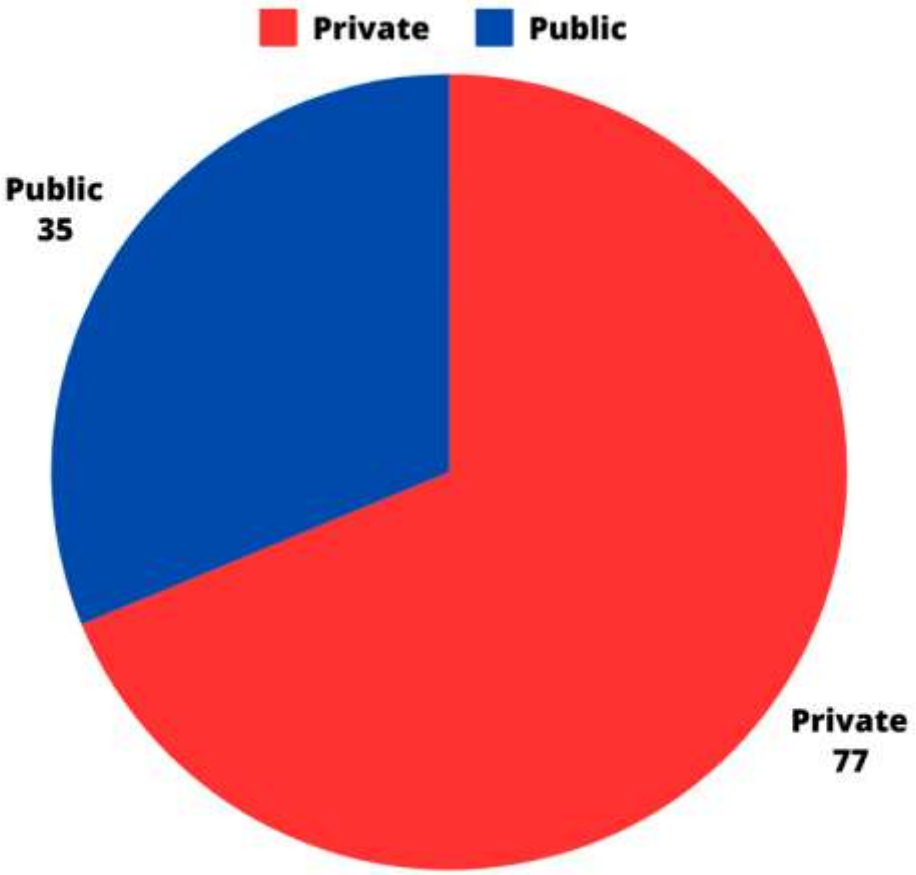

Figure 1. Status of Institution

Data on the state of institutions are shown in Figure No.1, which distinguishes between private and governmental institutions in particular. The data indicates that 77 institutions, or 68.8% of the total, are private out of the total evaluated. However, 35 governmental institutions comprise 31.3 percent of the total. With more than twice as many private institutions as public, this suggests that a sizable portion of the institutions are private. Given that private institutions are more common in the dataset, this distribution suggests that private institutions are more important in the environment under study.

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Designation of the Participations

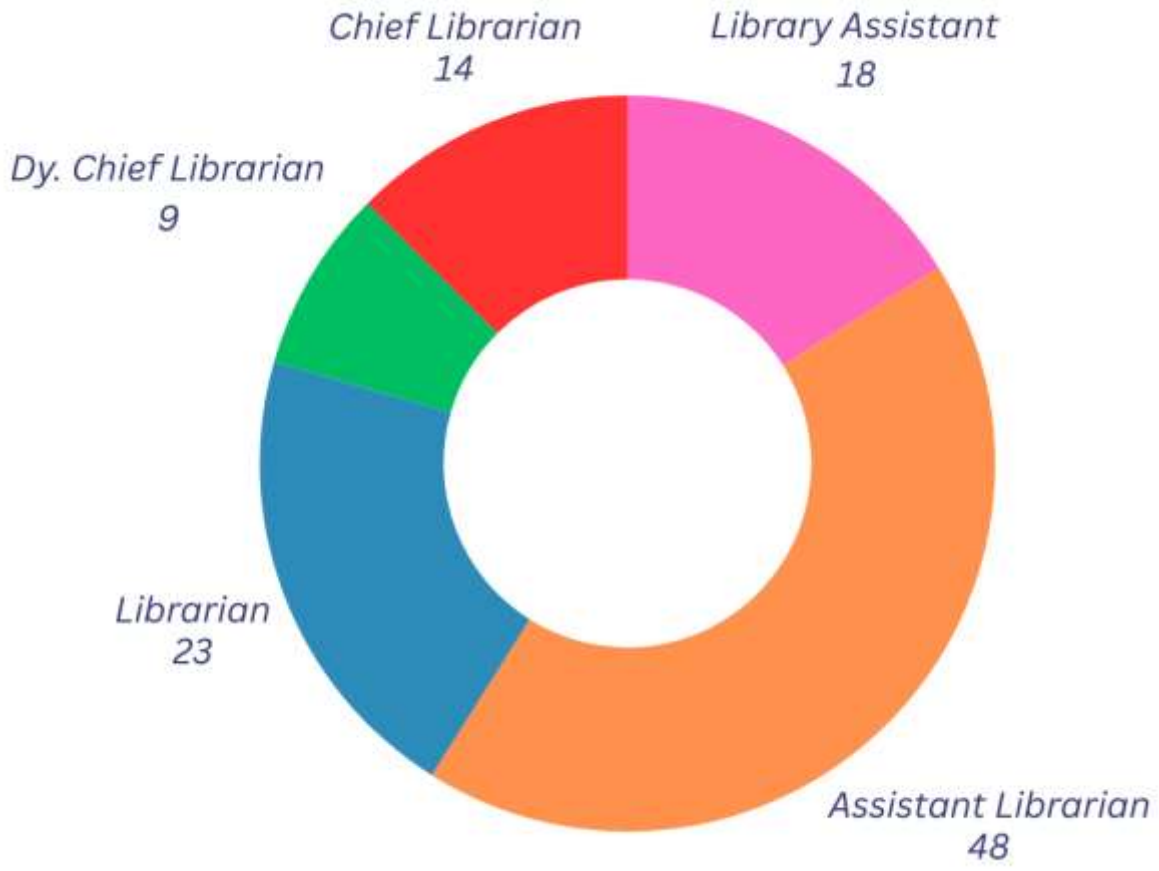

Figure 2. Designation of the Participations

Data on the frequency and percentage distribution of different library positions are shown in figure 2. Assistant Librarians make up the largest group, with 48 members, or 42.9% of the total. After then, there are 23 librarians, or 20.5% of the total. With 18 employees, library assistants make up 16.1% of the workforce. There are fewer chief librarians and deputy chief librarians than one might think—14 (12.5%) and 9 (8.0%), respectively. This distribution indicates that fewer people hold entry-level (library assistant) and senior roles (chief and deputy chief librarians), with the bulk of workers concentrated in mid-level roles (assistant librarians and librarians).

Professional Qualification

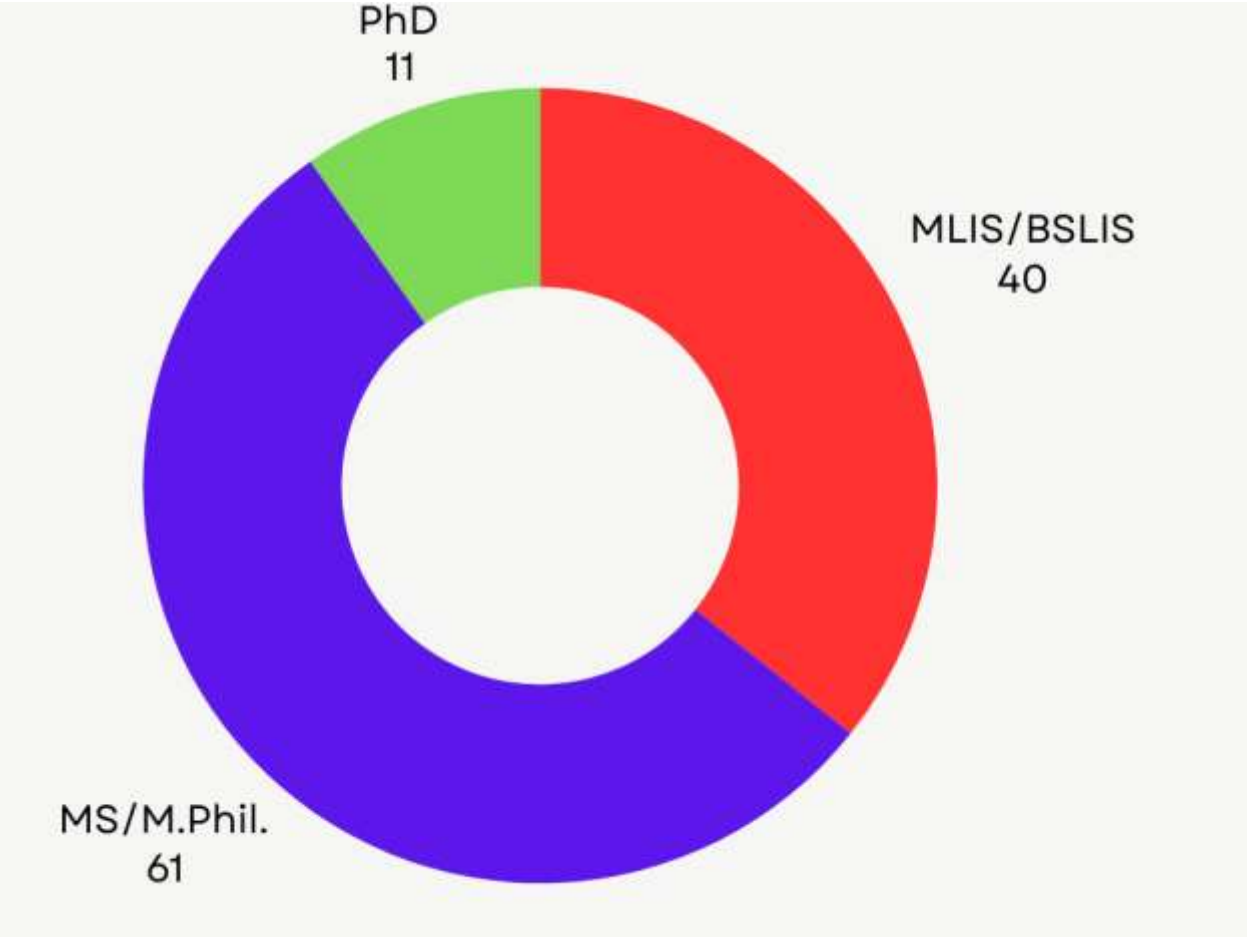

Figure 3. Professional Qualification of the Participations

The study participants' professional qualifications are shown in figure 3. Out of all participants, 54.5% had an MS or M.Phil. degree, with 61 people holding this degree. Those with MLIS or BSLIS degrees come next, making up 40 people and 35.7% of the total. There are 11 participants with a PhD, or 9.8% of the total, making up the smallest group. According to this distribution, more than half of the participants hold advanced postgraduate degrees (MS/M.Phil.), a sizeable percentage hold undergraduate or graduate-level degrees (MLIS/BSLIS), and a lesser percentage hold the highest degree (PhD).

Professional Work Experience

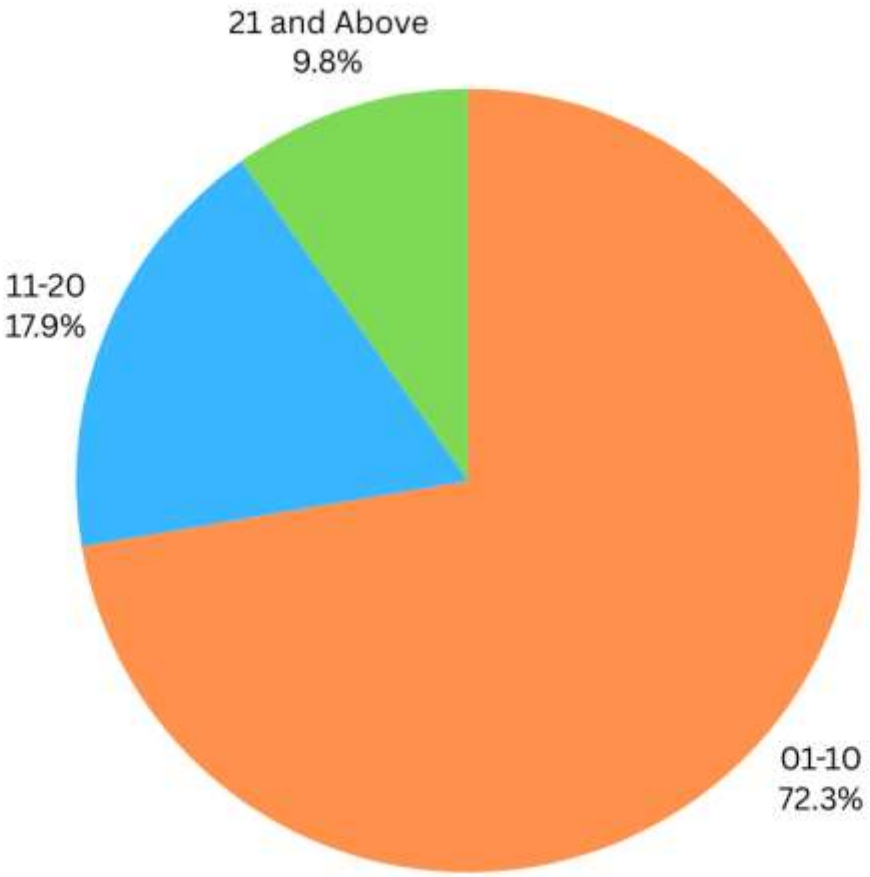

Figure 4. Professional Work Experience of Participants

The participants' professional employment experience is shown in figure 4. 72.3% of the participants, or 81 people, have experience ranging from 1 to 10 years. Twenty participants, or 17.9% of the total, have between 11 and 20 years of experience after this. Finally, 11.8% of the participants, or 11 people, have more than 21 years of experience. With fewer people in the more experienced groups, this distribution shows that the vast majority of participants are professionals in their early to mid-career stages.

Gender

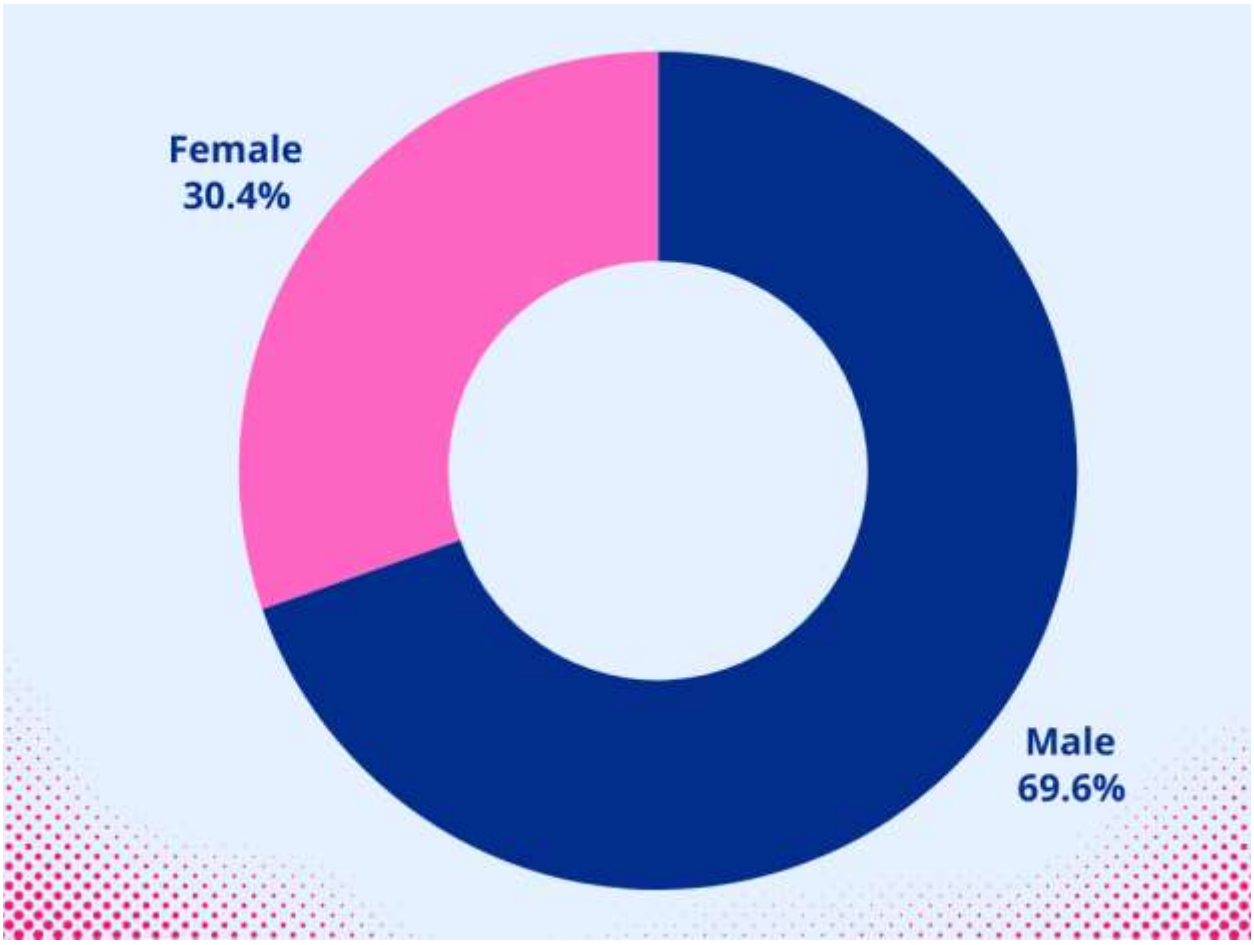

Figure 5. Gender of the Participations

Data on the participants' gender distribution are shown in figure 5. There are 78 individuals in total, or 69.6% of the group, who are male. In comparison, 34 individuals, or 30.4%, are female. This suggests that there is a significant gender gap among the participants, with male making up more than twice as many as female. This distribution points to a participation pool that is predominately male.

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Age

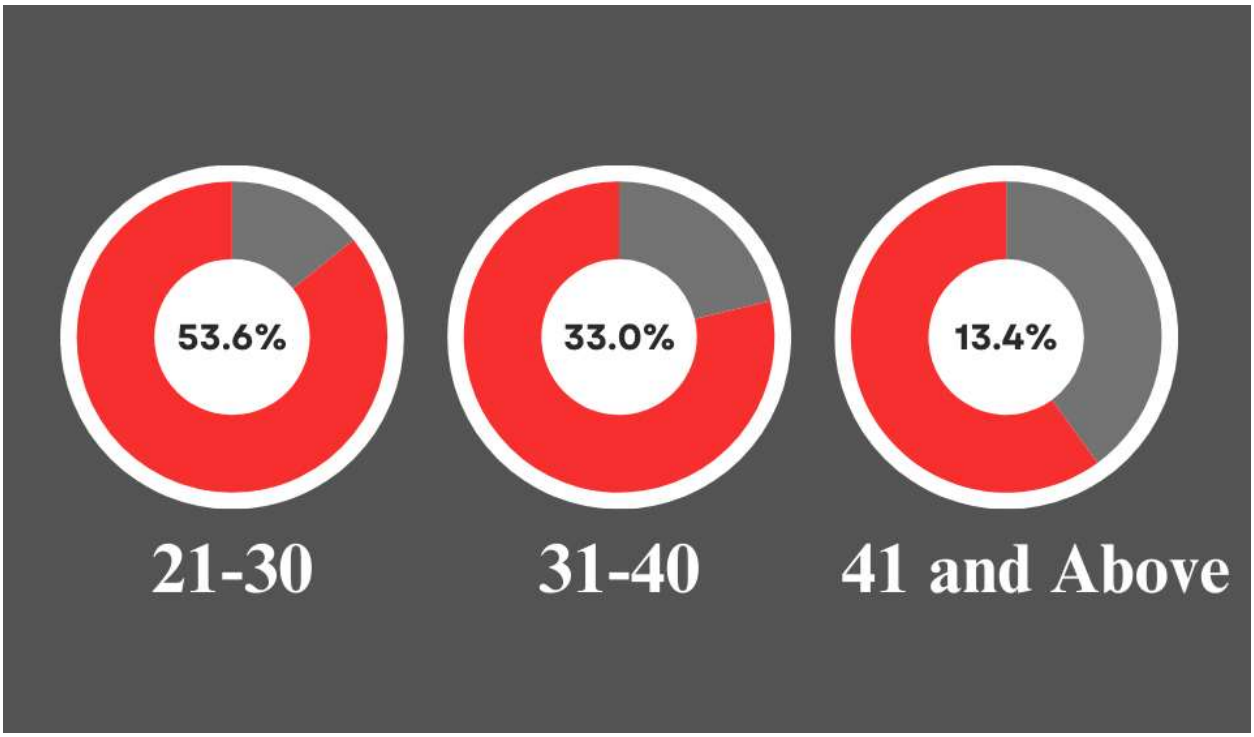

Figure 6. Age of the Participations

The age distribution of the participants is shown in figure 6. With 60 people in the 21–30 age range, or 53.6% of the total, it is the largest age group. The subsequent cohort, consisting of 37 people, represents 33.0% of the sample. Lastly, 15.4% of the participants, or 15, are older than 41 years old. With more than half of the participants falling between the ages of 21 and 30, and a lower percentage in the older age groups, this distribution suggests that the bulk of participants are relatively young.

Information Finding/Re-finding

The information displayed demonstrates many facets of how people use digital tools and techniques to find and refind information. 43.8% of respondents, or a sizable chunk of the sample (47.3%) strongly agreed that they use Internet Explorer, Google, or Safari to look up information. Another common method of retrieving information is browsing; 26.8% strongly

agree and 66.1% agree. 45.5% of respondents agree that they find information through searching, while the majority (54.5%) strongly agree.

Regarding the ability to obtain personal information from emails, 44.6% of respondents are in favor, 27.7% are indifferent, and 17.9% are against. Notably, 45.5% of respondents agree (and another 25% strongly agree) that they can search and browse documents using file names, PIM tools, or mobile apps.

58% of respondents think that mobile devices are essential for "just in time" information access, while 33% are neutral. A majority of 66.1% of participants are in favour of taking digital images of paper documents for electronic reading. 59.8% of respondents felt that sending pertinent information to oneself via email for later use on mobile devices is a good idea, while 66.1% of participants said they frequently transfer files using cloud services like Dropbox and Google Drive.

Of those who think that using a smartphone to discover and retrieve information is easy, 72.3% agree and 14.3% strongly agree. Using categories and folders facilitates data access, according to 54.5% of respondents who agree and 25.9% who strongly agree. The information is managed and retrieved with a significant dependence on digital tools and mobile devices, according to the report.

Table No. 1 Information Finding/Re-finding

Statement	SD	D	N	A	SA
	% (f)	% (f)	% (f)	% (f)	% (f)
I Use Internet Explorer or Google/Safari to search for information.	0	4.5 (5)	4.5 (5)	43.8 (49)	47.3 (53)
Information retrieval by browsing.	0	0	7.1 (8)	66.1 (74)	26.8 (30)
I find out information through searching.	0	0	0	45.5 (51)	54.5 (61)
Upon first attempt, I discovers personal information from emails.	0	17.9 (20)	27.7 (31)	44.6 (50)	9.8 (11)
I can search and view documents through the file names, PIM tools or mobile software.	4.5 (5)	0	25.0 (28)	45.5 (51)	25.0 (28)

Mobile devices enable "just in time" information access for users.	0	8.9 (10)	33.0 (37)	58.0 (65)	0
I can take pictures of the hard documents to read them electronically.	0	19.6 (22)	4.5 (5)	66.1 (74)	9.8 (11)
I email to myself the relevant information to use later on mobile devices.	0	0	12.5 (14)	59.8 (67)	27.7 (31)
Transfer files to their mobile devices using popular cloud services like Dropbox and Google Drive so they may access them later.	0	0	13.4 (15)	66.1 (74)	20.5 (23)
It's easy to find and retrieve information with a smartphone.	0	7.1 (8)	6.3 (7)	72.3 (81)	14.3 (16)
Using categories and folders to access data.	0	7.1 (8)	12.5 (14)	54.5 (61)	25.9 (29)

SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree and SA: Strongly agree

Information Keeping

The information offers insights into people's choices and actions with regard to storing and recording information on digital devices. The majority (72.3%) believe that using a smartphone to record information is preferable, and 14.3% strongly agree. 54.5% of respondents agree and 25% strongly agree that they feel secure and comfortable saving information on the device of their choosing, demonstrating their high level of confidence in their selections.

With 46.4% agreeing and 29.5% strongly agreeing, sending emails to oneself on a tablet or mobile device is a typical habit to protect private information. A smaller portion (7.1%), meanwhile, strongly disagrees with this behavior. 43.8% of respondents agree, 21.4% strongly agree, and 10.7% disagree that private information should be stored in email draft folders on smartphones.

Using photos to create information is also common; 53.6% of respondents agree, and 22.3% strongly agree, while 4.5% disagree. 56.3% of respondents think that sending emails to oneself is a common activity, and 26.8% strongly agree. Regarding emailing others, no respondent strongly disagreed, while 50.9% of respondents agree and 22.3% strongly agree.

Lastly, the percentage of respondents who agree and strongly agree with capturing screenshots of vital content is 41.1%, compared to 4.5% who disapprove. According to the

research, there is a clear preference for collecting and storing information via emails and smartphones, with both methods being linked to high degrees of security and comfort.

Table No. 2 Information Keeping

Statement	SD	D	N	A	SA
	% (f)	% (f)	% (f)	% (f)	% (f)
I preferably used smartphones for information recording.	0	7.1 (8)	6.3 (7)	72.3 (81)	14.3 (16)
I feel secure and comfortable when you store information on your device of choice.	0	0	20.5 (23)	54.5 (61)	25.0 (28)
I send email to myself through tablet or mobile to maintain private information.	7.1 (8)	4.5 (5)	12.5 (14)	46.4 (52)	29.5 (33)
Private information is saved by smartphone users in their email draft folder.	0	10.7 (12)	24.1 (27)	43.8 (49)	21.4 (24)
People take images in order to produce information.	0	4.5 (5)	19.6 (22)	53.6 (60)	22.3 (25)
Send email to myself.	0	4.5 (5)	12.5 (14)	56.3 (63)	26.8 (30)
Email to others.	0	0	26.8 (30)	50.9 (57)	22.3 (25)
I take screenshots of the important material.	0	4.5 (5)	13.4 (15)	41.1 (46)	41.1 (46)

SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree and SA: Strongly agree

Information Organizing

The information shows how people arrange their notes and information in different ways and what tools and strategies they prefer. Regarding note organization, 36.6% and 8.9% strongly agree that they utilize multiple apps, including Evernote, Apple Pages, and built-in note software on tablets. Notably, 19.6% disagree, and 34.8% are indifferent.

Reminding people to set an alarm is a very frequent habit; 71.4% of respondents agree, 3.6% strongly agree, and 6.3% disagree. Google Calendar is also widely used; 53.6% of

respondents agree with its use, and 9.8% strongly approve. But 5.4% strongly disagree and 12.5% disagree with using Google Calendar.

Another extensively used strategy is folder categorization, with 62.5% of respondents agreeing and 12.5% strongly agreeing. 5.4% disagree, and a smaller minority, 6.3%, strongly disagree. 43.8% of respondents believe that programs and folders should be arranged according to color, while 12.5% strongly agree and 12.5% disagree.

Emails are used extensively for organizational purposes; 56.3% of respondents agree, 12.5% strongly agree, and 31.3% are neutral. Internet-based information organization tools are also widely employed; 62.5% of respondents agree, 9.8% strongly agree, and 27.7% are neutral about this.

Overall, the data points to a preference for utilizing a variety of digital tools and techniques for note-taking and information organization, with a strong emphasis on calendar use, reminder setting, and folder classification. Notable usage of emails and internet tools for organizing is also present.

Table No. 3 Information Organizing

Statement	SD	D	N	A	SA
	% (f)	% (f)	% (f)	% (f)	% (f)
To organize my notes, I use few different programs, such Apple's Page app and Evernote, the tablet's built-in note software.	0	19.6 (22)	34.8 (39)	36.6 (41)	8.9 (10)
I set alarms for setting reminders.	0	6.3 (7)	18.8 (21)	71.4 (80)	3.6 (4)
I utilize online Google Calendar.	5.4 (6)	12.5 (14)	18.8 (21)	53.6 (60)	9.8 (11)
Categorization of information in folders.	6.3 (7)	5.4 (6)	13.4 (15)	62.5 (70)	12.5 (14)
Organize apps and folders according to colors.	0	12.5 (14)	31.3 (35)	43.8 (49)	12.5 (14)
Utilization of emails.	0	0	31.3 (35)	56.3 (63)	12.5 (14)

I utilize online tools to organize information.	0	0	27.7 (31)	62.5 (70)	9.8 (11)

SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree and SA: Strongly agree

Information Maintaining

Not many people (40.2%) agree or disagree with discarding away notes to make space, with 28.6% disagreeing and 18.8% strongly disagreeing. This shows that a lot of people prefer to save their notes instead of deleting them.

There is a clear inclination among smartphone users to rely heavily on their smartphones for information storage, as evidenced by the 40.2% who agree with this assertion. Nonetheless, 19.6% strongly disagree, indicating that some users do consider information storage necessary.

Uninstalling less-used apps is supported by the majority (58.9%), with 12.5% objecting and 28.6% remaining indifferent. This illustrates a proactive strategy for controlling mobile device app clutter.

The overwhelming majority (83.9%) favor preserving existing software versions and think that mobile apps should be kept up to date. Neutral respondents make up just 3.6% of the sample, indicating significant awareness of app upgrades.

19.6% strongly agree with this practice, compared to 62.5% who agree. This suggests that personal data on devices is arranged in an organized manner.

While 17.9% are neutral, a sizable majority (64.3%) support maintaining private information backups on cloud services. This demonstrates how much cloud storage is relied upon for data backup.

Clearing phone and web search histories is supported by nearly half (49.1%), demonstrating a pro-active commitment to privacy management. 16.1%, on the other hand, strongly disagree, indicating that some people might not think it important to erase their past.

Table No. 4 Information Maintaining

Statement	SD	D	N	A	SA

	% (f)	% (f)	% (f)	% (f)	% (f)
I rarely discard notes to make space.	0	18.8 (21)	28.6 (32)	40.2 (45)	12.5 (14)
Smartphone users don't feel the need to save information.	3.6 (4)	36.6 (41)	40.2 (45)	19.6 (22)	0
Uninstalling less frequently used mobile apps from the device.	0	12.5 (14)	28.6 (32)	58.9 (66)	0
Keep up-to-date mobile apps.	0	0	3.6 (4)	83.9 (94)	12.5 (14)
Keep personal information in specific folders.	0	6.3 (7)	11.6 (13)	62.5 (70)	19.6 (22)
Keep a copy of your private information on cloud services.	0	12.5 (14)	17.9 (20)	64.3 (72)	5.4 (6)
Clearing call and web search histories.	6.3 (7)	22.3 (25)	6.3 (7)	49.1 (55)	16.1 (18)

SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree and SA: Strongly agree

Mobile Personal Information Management Skills

When it comes to using mobile apps for task organization, the majority (58.9%) agree, with 13.4% strongly agreeing. This shows a high degree of skill. Nobody strongly disagrees, and only 3.6% are indifferent. With 6.3% disagreeing and 18.8% remaining indifferent, the majority (71.4%) is in agreement. This indicates that users of mobile devices have a robust data backup routine. An impressive 66.1% of respondents agree, with 9.8% strongly agreeing, demonstrating the usefulness of using mobile devices for calendar management.

A significant proportion (75%) concur, with 9.8% strongly concurring, suggesting that mobile note-taking applications are widely used for information tracking. Those who strongly agree (19.6%) and those who agree (58%) show that contact management on mobile devices is effective. A sizable majority (62.5%) concur, with 16.1% strongly concurring, emphasizing the usefulness of using cellphone reminders for activities and occasions.

The majority (70.5%) agree, with 13.4% strongly agreeing, indicating ease of document retrieval on mobile devices. Effective usage of mobile devices for email management is demonstrated by the majority (54.5%) who agree, with 20.5% strongly agreeing.

With 19.6% strongly agreeing, half (50%) of respondents feel that updating apps on a proactive basis is a good idea. With regard to managing technological problems with mobile devices, a sizable percentage (33%) agree, with 24.1% strongly agreeing.

Table No. 5 Personal Information Management Skills

Statement	SD	D	N	A	SA
	% (f)	% (f)	% (f)	% (f)	% (f)
I am proficient in using mobile apps to organize my daily tasks.	3.6 (4)	0	24.1 (27)	58.9 (66)	13.4 (15)
I regularly back up important information from my mobile device to cloud storage.	0	6.3 (7)	18.8 (21)	71.4 (80)	3.6 (4)
I effectively use mobile devices to schedule and manage my calendar events.	0	5.4 (6)	18.8 (21)	66.1 (74)	9.8 (11)
I use mobile note-taking apps to keep track of important information.	0	3.6 (4)	11.6 (13)	75.0 (84)	9.8 (11)
I efficiently manage and organize my contacts using my mobile device.	0	6.3 (7)	16.1 (18)	58.0 (65)	19.6 (22)
I use mobile apps to set and manage reminders for important tasks and events.	0	3.6 (4)	17.9 (20)	62.5 (70)	16.1 (18)
I can easily find and retrieve documents stored on my mobile device.	3.6 (4)	6.3 (7)	6.3 (7)	70.5 (79)	13.4 (15)
I use mobile devices to manage my email communications effectively.	0	0	25.0 (28)	54.5 (61)	20.5 (23)
I regularly update my mobile apps to ensure I am using the latest features.	0	6.3 (7)	24.1 (27)	50.0 (56)	19.6 (22)
I feel confident in troubleshooting and solving common issues with my mobile device.	0	6.3 (7)	24.1 (27)	36.6 (41)	33.0 (37)

SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree and SA: Strongly agree

Discussion

The data analysis throws light on the participants' positions within the institutions under study by revealing a number of important insights about their professional and demographic traits. First off, there appears to be a considerable amount of privately run educational facilities in the dataset, as evidenced by the majority of private institutions (68.8%) as opposed to governmental ones (31.3%). The significance of private sector participation in the educational environment under examination is highlighted by this distribution.

In terms of professional jobs, the bulk of participants are Librarians (20.5%) and Assistant Librarians (42.9%), reflecting a hierarchical structure that favours entry-level and mid-career employment over senior management positions. The distribution of expertise at different organizational levels within libraries is highlighted, along with potential avenues for career advancement.

54.5% of participants have advanced postgraduate degrees (MS/M.Phil.), which is a noteworthy educational level. This suggests that the workforce is highly educated and capable of managing complicated library and information management activities. On the other hand, the minority of individuals (9.8%) has PhD degrees, indicating potential for advancement in higher education within the field.

The demography is young, as evidenced by the age distribution, wherein 53.6% of the participants are between the ages of 21 and 30. This young profile reflects a trend in the library industry that seems to be drawing in younger workers, maybe as a result of evolving job positions that call for creativity and digital literacy as well as technical developments.

There is a notable disparity in the gender distribution: 30.4% of participants are female, while 69.6% of participants are male. This discrepancy highlights how difficult it continues to be to achieve gender parity in the library profession in spite of initiatives to promote diversity and inclusivity.

Overall, the results point to a dynamic environment with a noticeable gender imbalance, mid-level posts being held by professionals with postgraduate degrees, and private institutions playing a dominant role. These revelations offer a thorough basis for comprehending the

professional and demographic environment of librarians, directing calculated steps towards professional growth and field-wide organizational improvement.

Conclusion and Recommendations

It is clear from the findings and discussions that university librarians in Pakistan have both possibilities and major obstacles when it comes to employing mobile devices to manage personal information. As information gatekeepers, their ability to efficiently organize, store, and retrieve information through a variety of mobile apps and tools is highlighted in the study. It is evident that mobile technology has become an essential part of their everyday work, improving accessibility and efficiency in educational environments.

Nonetheless, a number of obstacles continue to exist, such as variations in the functioning and interface design of devices among various brands, which may impede smooth information management. In spite of these obstacles, the librarians show a great dedication to implementing new procedures and technology in order to satisfy the changing requirements of their academic communities.

In the future, initiatives to improve support and training in mobile information management may further empower librarians and provide them with the tools they need to make better use of mobile technologies. In addition to maximizing their professional potential, this would help Pakistan's academic library services improve more broadly. Future studies should keep looking into cutting-edge approaches and industry best practices for managing personal information on mobile devices in educational settings.

Author’s statement

All authors equally contributed.

Conflict of Interest

The authors report no conflict of interest related to this study.

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