Case Report

Digital initiation of Indian Airforce: E-Library

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A R T I C L E   I N F O

A B S T R A C T

In this case study, I have elaborate digital initiations and approach of Indian Sky Guard: Indian Airforce. Detail facts and figures of Indian Airforce E-Library facilities offer to the enrolled users, uniformed scholars, researchers and dependent family members. In-depth analysis of various sections of e-library and emphasised important collection. The methodology practised during the case study is collecting primary data from the website and collecting different data and numerical of various eBooks, monographs, periodicals and non-print media, SDI and other facilities.

1. Introduction

Being the third largest air force in the world, Indian Airforce (IAF) has taken so many steps towards digitalisation. One of them is the Indian Airforce eLibrary kick-off in 2022 on both webpage and mobile versions available at the google play store and apple store. IAF's main idea of developing eLibrary is to bring knowledge resources nearer to active members and their families. After the pandemic conditions world is moving towards online and digital resources from traditional ones. This facility will help the members to use it to the full extent to gain knowledge.

2. Materials and Methods

In this case study, I have searched the entire website with different subjects, print and non-print media publications by using keywords and indexing. Exploring different facilities offered, data collected from the IAF eLibrary webpage as a primary source that is accessible for members. Data and information were collected from the website on Mar 23 after
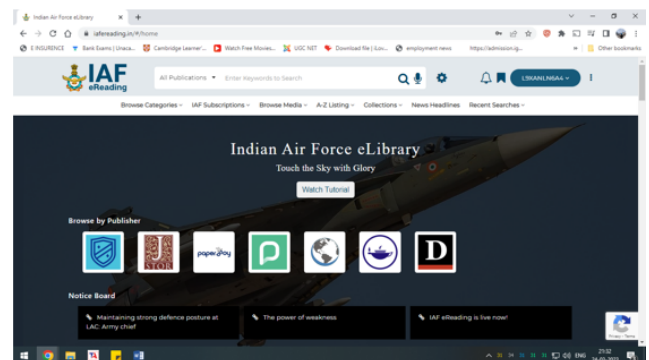

Fig. 1: Indian Airforce eLibrary website

reviewing the literature.

3. Review of Literature

Bhatt, R. (2010). discussed the use of UGC-Infonet Digital Library Consortium Resources by research scholars and faculty members of the University of Delhi in History

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and Political Science. The main aim is to determine the needs of research scholars and faculty members of the University of Delhi in the discipline of history and political science. Shafiu, A., Yakubu, M., Yakubu, A. M., & Nora, N. O. (2019). The study found that the human factors affecting the utilization of eLibrary resources include; user awareness and willingness to use e-library. Concerning the enhancement of the utilisation of e-resources in the College. Somaira Nabi. (2012) The study reports the aim and features of the World Digital Library (WDL), one of the pioneer projects reflecting the beauty of digital preservation. The study analyses the contribution of resources continent-wise, type, lingual pattern, period, subjects covered and institutions to WDL. Mehta, D., & Wang, X. (2020, June 25) Said their experience of a university library in response to the COVID-19 pandemic since early March 2020. The paper describes the library's position during the crisis and illustrates the uncharted challenges that the pandemic has posed to its digital services. Furthermore, it details how the library has adapted some existing services into a digital format and explored new initiatives/practices to support the university's full online teaching and learning since March 23, 2020. Jose, A. (2007). expressed the need for digital library evaluation. It provides insight into a framework for digital library evaluation. The paper also discusses various evaluation techniques in detail

Apart from these ibid references I have gone through the facilities provided by different types of defence, and military libraries providing e-services.

4. The Objective of the Study

The objective of this study is to look in-depth details of the operation and various facilities offered by the Indian Airforce eLibrary

1. To look into various types of print and non-print media available for readers' use.
2. To look into different facilities available like SDI and personalised facilities offered.
3. Exploring facilities, emphasised topics and subjects highlighted for the uniformed scholars,[1] researchers and family member.[2]

5. Different Types of Sources

During my study, I have found that IAF eLibrary has mainly focused to bring world-class literature closer to readers who are not able to access it from traditional libraries. Being a military library, it is difficult to access all the publications and monograms of every member and their family members[2] due to time constraints and the location of the library in a restricted area. This eLibrary has made it possible to collect, store and retrieve the literature in our own time. This facilitates us to use vast areas of a subject like Aviation, Arts, Management, Science Tech and

Humanities. Let's see in the dept inventory held by this eLibrary.

IAF eLibrary is mainly divided into print media (thesis, e-books, journals, monograms, reports, databases, magazines and newspapers) and non-print media (video, audiobooks).

5.1. Thesis

In IAF's eLibrary collection, they have around 2,94,652 theses available sourced from all over the world 76.71%, and 23.21% from India and the rest of the globe. In terms of publishers or archive depositories shared mainly by e-Shodhshindu[3] and the least by California State University Sacramento[4] with 10.27%, and 0.26% respectively. The main contributed subject are Management, and Commerce contributing with 16.572% and 12.574% and Ocean & Hydraulic Engineering with the lowest contribution of 0.001% All thesis shared on this platform has full access to the reader to contribute their studies and research.[5]

5.2. E-Books and monographs

E-books and Monographs held by IAF eLibrary cover 25 major disciplines starting from astronomy to zoology. They are 19,152 e-books and 129 monographs mostly from international publishers are available for the readers' collection dating back to 1913. The majority of monographs are sourced from DOAB[5] with a share of 42.05% and the rest by 26 publishers.
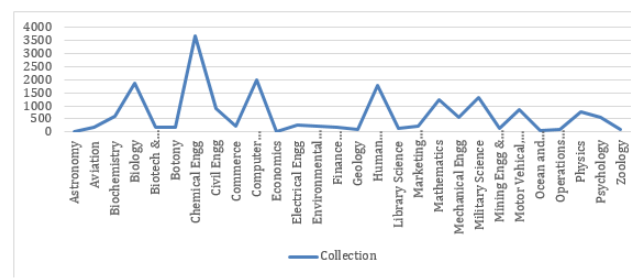
Chart 1: E-books and monographs collection

5.3. Periodicals

Periodicals are the main content provider and most searched topics in any eLibrary. They provide the reader with updated development and innovations in their respective fields. In IAF's eLibrary Journals, Magazines and Newspapers are available under a huge diversified section of subjects. Journals provided a broad area of coverage with an arsenal of 3,108 in which Biology has a share of 14.92% and Computer science with 0.03%. The journals section has International publications of 2,336 and 772 of Indian origin.

Table 1: Thesis details subject wise

Sl. No.	Subject	National	International	Total	Share
1	Aeronautical engineering	25	28,420	28,445	8.882%
2	Biochemistry	25,434	132	25,566	7.983%
3	Biology	2,094	195	2,289	0.715%
4	Biotech & Biomed Engineer	8,114	0	8,114	2.534%
5	Botany	12,188	0	12,188	3.806%
6	Chemical Eng.	25,990	0	25,990	8.115%
7	Civil Eng.	3,326	0	3,326	1.039%
8	Commerce	28,425	11,842	40,267	12.574%
9	Computer Science & Eng.	3,144	22,862	26,006	8.120%
10	Economics	10,676	0	10,676	3.334%
11	Electrical Eng.	4,373	5	4,378	1.367%
12	Finance Management	17	0	17	0.005%
13	Geology	1,435	0	1,435	0.448%
14	Human Anatomy and Physiology	2,761	21	2,782	0.869%
15	Library Science	2,359	0	2,359	0.737%
16	Marketing Management	32,917	20,154	53,071	16.572%
17	Mathematics	13,174	5,257	18,431	5.755%
18	Mechanical Eng.	3,602	50	3,652	1.140%
19	Military Science	487	0	487	0.152%
20	Mining Eng. & Metallurgy	48	0	48	0.015%
21	Motor Vehicle, Aeronautics	40	0	40	0.012%
22	Ocean and Hydraulic Eng.	3	0	3	0.001%
23	Operations Management	1	57	58	0.018%
24	Physics	18,402	7,723	26,125	8.158%
25	Psychology	11,747	2,784	14,531	4.537%
26	Zoology	9,963	5	9,968	3.113%

5.4. Magazines and newspaper

A total of 4238 magazines are available for the reader of which 703 are subject-specified and 3535 are general. Newspapers collection in this library has around 3,056 covering 58 languages all over the globe including Indian native languages.
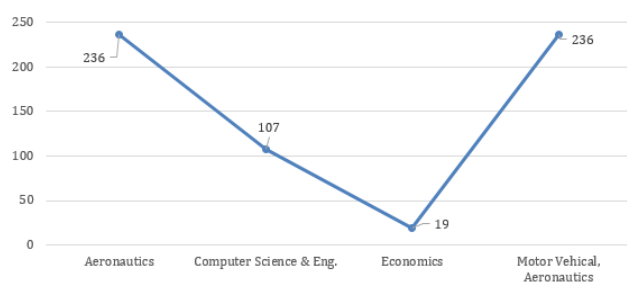

Chart 2: Magazines distribution

5.5. Reports and database

Being a military eLibrary reports take a majority of the share. A total of 23,370 published reports on various types of subjects are available by sole contributor JSTOR.[6] Database of mostly Aerospace and Military affairs are available for accessing various information from United States Airforce,[7] Air University,[8] Press Reader,[9] JSTOR[6] and StratNews Global[10] in unrestricted mode.

5.6. Non-print media

In this contemporary time, we all are shifting towards the digitalisation of everything, we are familiar with audio books and videos which are taking a prominent role in learning and teaching. IAF's eLibrary has 15,503 audiobooks of all subjects and 20,700 videos covering mainly Aviation & Military Science and Economics with 13,541 and 7,159 respectively.

6. Collections

In IAF eLibrary there is an option available in the directory tab Collections.[11] In this section, IAF has accumulated all the information pertaining to aerospace, terrestrial and amphibious warfare and its literature under different sub-sections. They are explained and enumerated in the following table. The 'Arms, Ammunition and Defence Technology' section deals with different types of topics ranging from land mines to space war in this directory we can find all single-point contact for a reader. There is a section go to point for Newsletter related to military and subsidiary department CAPS[12] - Aerospace Newsletters' where we can access free and unrestrictedly. 'CAS

Table 2: Detail distribution of journals

Slno	Subject	Publisher		Journal	Share
		National	International		
1	Astronomy	0	33	33	1.06%
2	Aviation	0	9	9	0.29%
3	Biochemistry	14	114	128	4.12%
4	Biology	58	406	464	14.93%
5	Biotech & Biomed Engineer	13	40	53	1.71%
6	Botany	28	19	47	1.51%
7	Chemical Eng.	18	170	188	6.05%
8	Civil Eng.	158	10	168	5.41%
9	Commerce	124	15	139	4.47%
10	Computer Science & Eng.	1	0	1	0.03%
11	Economics	5	43	48	1.54%
12	Electrical Eng.	171	26	197	6.34%
13	Environmental Technology	0	45	45	1.45%
14	Finance Management	19	5	24	0.77%
15	Geology	0	52	52	1.67%
16	Human Anatomy and Physiology	11	370	381	12.26%
17	Human Resources Management	3	48	51	1.64%
18	Library Science	53	4	57	1.83%
19	Marketing Management	15	133	148	4.76%
20	Mathematics	48	201	249	8.01%
21	Mechanical Eng.	7	65	72	2.32%
22	Military Science	3	100	103	3.31%
23	Mining Eng. & Metallurgy	0	16	16	0.51%
24	Motor Vehicle, Aeronautics	16	2	18	0.58%
25	Ocean and Hydraulic Eng.	0	16	16	0.51%
26	Operations Management	0	5	5	0.16%
27	Physics	2	159	161	5.18%
28	Psychology	3	148	151	4.86%
29	Zoology	2	82	84	2.70%

Table 3: Collections and their leads

Slno	Collection Name	Resources type	Leads
1	Arms, Ammunition and Defence Technology	Thesis, Articles, eBooks, Thesis	6,367
2	CAPS - Aerospace Newsletters	News Letter	8
3	CAS Recommended eBooks	Book reviews	4
4	Defence Think Tank	Thesis, Articles, eBooks, Reports, Journals	1,68,363
5	Defence Strategy and Doctrines	-do-	724
6	Engineering and Technology	-do-	8,725
7	International and Social Studies	-do-	1,504
8	Management and Leadership	-do-	1,142
9	Military History	-do-	118

Recommended eBook' in which Chief of Air Staff (CAS) has given a list of eBooks recommended to be read by the readers. Think tank ideas and unique innovations from all over the world in the felid of defence strategies are covered by 'Defence Think Tank'[13] in this section we find the largest leads of sources which cross 1.5 lakhs. 'Defence Strategy and Doctrines'[14] In this collection we can find exclusive articles and theses on defence strategy from all over the world. Last, three sections deal with the exclusive in-depth lead to International Studies, Management and History concerning the military.

7. IAF Subscriptions

After general indexing of all contents, IAF eLibrary facilitates uniformed scholars[1] and research users separate sections for some core concentrated subjects as 'IAF Subscriptions'.[15] Under this part, they are four major and three minor contributors. Let's look into these major depositories, 'Defence and Security Collection'[16] we can find various videos, eBooks, monographs and journals segregated into a single place topic related to defence, internal and external security and geo-militarisation, etc. JSTOR[6] share the largest report and journal collection 'Paper Boy'[17] and Press Reader[9] e Newsstand provides the largest collection of magazines, and newspaper in various language catered for the user's daily needs. Strat News Global,[8] Taylor & Francis[18] and The Diplomat[19] are minor members providing database.[20–25]

Table 4: IAF Subscriptions section

Slno	Depository	Different Types of Media
1	Defence & Security Collection	eBooks-424 Video-20695 Monograph-129 Journals-30
2	JOSTOR	Reports - 23670 Journals -82 Database -01
3	Paperboy e Newsstand	eNewspaper-116 Magazines- 60 Journals-11
4	Press Reader e Newsstand	eNewspaper-2928 Magazine-4238 Database -01
5	Strat News Global	Database - 01
6	Taylor & Francis	Database-01 Journals -43
7	The Diplomat	Database - 01

8. Other Features

IAF eLibrary offers different types of features like SDI, News Headlines based on library staff and publisher, and personalised profiles for storing publications, monographs and periodical collections under different headings. There is a section 'Browse Media' under which they are two sub-sections Classics and Poetry offer us an exclusive collection of classical music, dance, literature and poetry from different parts of the world with a collection of 248 and 273 respectively. The 'Important Think Tank' section is available under browse media in which 33 sources are provided to give different information pertaining to national and international issues on defence and situations for the user's perusal.

9. Conclusion

At last, we have seen the initiation of the Indian Airforce towards digitalisation providing access to knowledge to every member of their organisation and their peers. This initiation helped uniformed scholars and researchers to dig, access and retrieve archives in their free time. IAF eLibrary is available on desktop and mobile versions which will help students and young kids study while on the move. In this library, we have seen different types of data retrieval available on the bases of title, author, subject and publisher in the form of eBooks, monographs, eThesis, reports, articles, databases, journals magazines, audiobooks, and videos. Being a military backgrounded library large collection of aviation, security and defence material is available for users' need apart from regular subjects. There is a large collection of e-newspaper covering all corners of the globe in different languages, SDI (Selective Dissemination of Information) facility is a great tool to research scholars to reach their destined sources. At last, this initiation helped society to reduce the distance between the book and its reader and preservation of greenery.

10. Source of Funding

11. Conflict of Interest

12. Acknowledgment

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