

Usage of E-Journals by the Users of Central University of Orissa, Koraput: An Analysis with INFISTATS (Usage Statistics Portal for e-Resource) for the Period 2012-2016

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Abstract

Central University of Orissa is getting 8500+ e-journals from e-ShodhSindhu consortia of INFLIBNET. The University was established by the Government of India, MHRD in the year 2009. However, the University is getting e-resources through consortia from the year 2012 onwards. To assess the usage of these e-journals by the users of Central University of Orissa, the author analyzed the statistics using INFISTAT of INFLIBNET. It was found that there are certain resources which are being utilized more by the users, which reflects the popularity of the journals as well as the publisher. The study also shows the trend and statistics of usage by month, by year, by databases, and by journals, etc.

Keywords: Central University of Orissa, Consortia, E-Journals, E-ShodhSindhu, Information and Library Network (INFLIBNET), Usage Statistics

1. Introduction

The Information and Library Network (INFLIBNET) Centre was established in May 1996 as an independent, autonomous Inter-University Centre (IUC) of the University Grants Commission (UGC). The centre has so many roles to play for the benefit of the University communities. The centre acts as a nodal agency for networking of libraries and information centres in Universities, institutions of higher learning and R&D institutions in India to promote scholarly communication.

Consortia-based subscription to e-resources is a primary responsibility through which researchers of the Universities and Institutions are accessing so many journals through a single window platform. Based on the recommendations of the expert committee on Library consortium constituted to survey the current scenario of government funded library consortia in India, the MHRD formed e-ShodhSindhu which is a consortium for Higher education Electronic Resources by merging three existing consortia initiatives, namely; UGC Infonet Digital Library Consortium, NLIST and INDEST-AICTE consortium. The e-ShodhSindhu provides current as

well as archival access to more than 15,000 core and peer-reviewed journals and a number of bibliographic, citation, legal and factual databases in different disciplines from a large number of publishers and aggregators to its member institutions including centrally funded technical institutions, universities and at present, the e-ShodhSindhu is offering access to more than 15000 full text journals from 25 publishers, 5 bibliographic databases, 2 legal database, 4 factual databases and one standard database to 356 institutions.

2. Central University of Orissa

The Central University of Orissa, Koraput was established by the Parliament under the Central Universities Act, 2009 (No. 3C of 2009). It is one of the 15 new Central Universities established by the Government of India to increase access to quality higher education for people in educationally less developed districts which have a Graduate Enrolment Ratio of less than the national average of 11%. The University has 14 undergraduate and postgraduate departments. At present, there are more than 700 students and research scholars enrolled in the University.

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2.1 E-Resources of Central University of Orissa

The following 14 e-resources are presently accessible by CUO through e-ShodhSindhu consortium of INFLIBNET⁸.

Sl. No.	Name of the Resources	Sl. No.	Name of the Resources
1.	Cambridge University Press	8.	MathSciNet
2.	Economic & Political Weekly	9.	Oxford University Press
3.	Emerald	10.	Project Muse
4.	Institute of Physics	11.	ScienceDirect (10 Subject Collection)
5.	ISID	12.	Springer Link
6.	JCCC	13.	Taylor & Francis
7.	JSTOR	14.	Wiley-Blackwell

3. Review of Literature

There are a number of usage studies of consortia e-resources.

Nikam and Pramodini (2007)⁵ studied the use of e-journals and databases (subscribed through UGC-Infonet) by the academic community of University of Mysore. The study reveals that although users are very much interested to use the e-resources of UGC-Infonet, there is a lack of awareness among the academic community. They suggested that libraries may take initiative to maximise the use of e-resources.

Chand and Arora (2008)¹ in a study on access to scholarly communication in higher education in India and found that there has been a qualitative increase in overall usage, but mentioned that usage of e-resources are mainly dependent upon the speed and bandwidth of the internet connection.

Kaur and Verma (2009)² studied the usage of e-resources of Thapar University and found that users are very much interested to use e-resources rather than printed resources and found a manifold increase in the use of e-journals.

Singh, Singh and Chandel (2009)⁶ studied the usage of e-resources of various publishers available under UGCINFONET by the academic community of Manipur University during 2007 and 2008. The study reveals that while there is an increase in the usage of the resources of most of the publishers in spite of certain problems of accessibility; resources of some of the publishers were

under-utilised. The study suggests that there is a need to find out usage of individual products of publishers.

Mukherjee and Kumar (2010)⁴ studied use of UGC-Infonet e-journals by the research scholars of the Banarus Hindu University, Varanashi and found that there is an increasing demand from the research scholars to access the e-resources.

Londhe and Deshpande (2013)³ made a Usage Study of UGC-INFONET E-resources at University of Pune and found that usage of e-resources is increasing in the University.

4. Objectives of the Study

To know the usage of different journals and databases accessed through INFLIBNET's e-ShodhSindhu consortia, this study has the following objectives

- To study the resource wise and year-wise use of e-resources by the users of Central University of Orissa for the period 2012-2016.

5. Scope and Limitations

The present study covers usage of full-text journal databases during 2015-16.

6. Methodology

For this study, the data were taken from the Infistats (Usage Statistics Portal for e-Resources)⁷ of INFLIBNET. The data has been taken for the period 2012-2016. The data were analyzed using excel format.

7. DATA ANALYSIS

7.1 Resource-wise Statistics for the Period 2012-2016

Table 1 shows the resource wise usage for the year 2016 and it shows that in the year 2016, the usage of JSTOR (6931) is more in comparison to other resources. It shows that users are more frequently using the JSTOR database in the year 2016 followed by ScienceDirect (5811), Taylor & Francis (4075), Springer Link (3755), Emerald Publishing (2372), Wiley Blackwell (1990), Cambridge University Press (1274), Project Muse (1009), Oxford University Press (828), Cambridge University Press (441) and Institute of Physics (238).

Table 1. Resource-wise usage statistics for 2016

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
JSTOR	1077	737	520	1021	997	289	212	665	570	180	316	347	6931
Science-Direct	859	464	320	574	300	1258	129	504	375	172	390	466	5811
Taylor and Francis	504	361	214	147	65	1827	114	66	266	238	170	103	4075
Springer Link	626	382	342	597	128	511	181	175	245	172	220	176	3755
Emerald Publishing	89	15	188	581	530	392	14	90	250	98	65	60	2372
Wiley-Blackwell	166	350	111	196	43	270	43	179	244	245	76	67	1990
Cambridge Univ. Press	248	59	8	157	180	454	60	108	0				1274
Project Muse	246	59	24	103	68	156		109	112	46	60	26	1009
Oxford Univ. Press	57	39	18	41	12	193	101	134	80	48	73	32	828
Cambridge Univ. Press									70	228	100	43	441
Institute of Physics	47	0	0	21	0	55	1	20	17	10	37	30	238

Table 2. Resource-wise usage statistics for 2015

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
JSTOR	1103	895	409	562	143	107	699	518	609	145	374	961	6525
Science-Direct	220	190	287	474	57	9	456	966	265	112	419	817	4272
Springer Link	347	122	221	165	131	18	804	384	198	136	100	473	3099
Cambridge Univ. Press	11	4	8	1	1	0	454	169	136	6	8	1048	1846
Emerald Publishing	76	0	1	31	59	1	240	113	27	1	8	968	1525
Taylor and Francis	17	17	28	30	24	4	257	293	47	26	144	493	1380
Project Muse	9	4	2	3	3	0	235	152	21	17	9	903	1358
Wiley-Blackwell	106	68	48	48	28	18	116	98	60	32	60	520	1202
Institute of Physics	0	0	0	0	0	0	0	0	85	0	9	666	760
Oxford Univ. Press	40	21	35	7	8	8	250	92	63	9	6	160	699

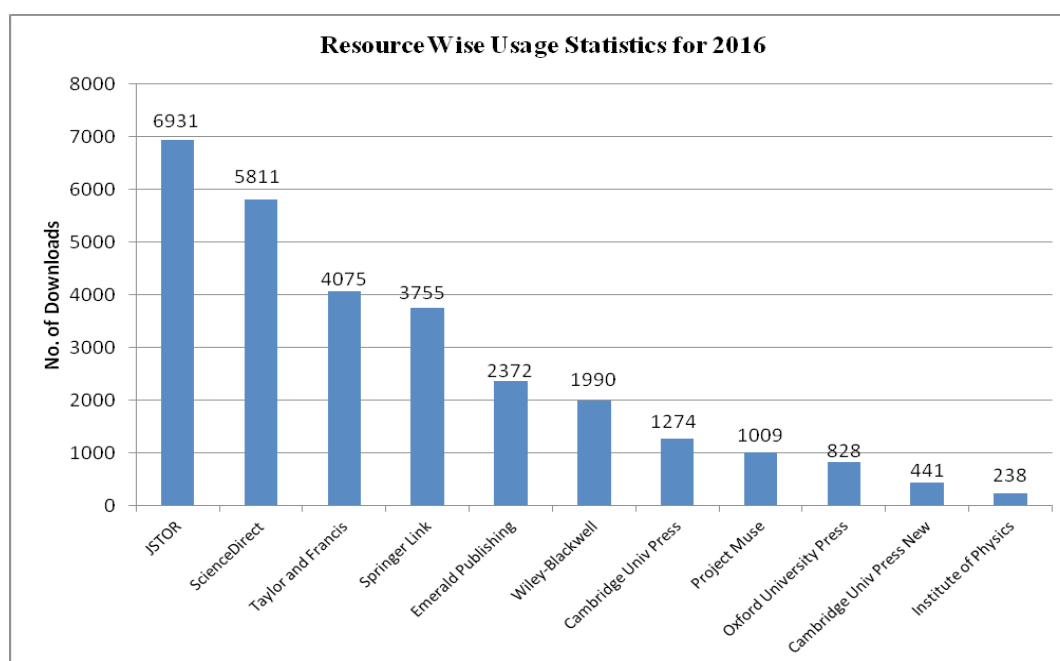
**Figure 1.** Resource-wise usage statistics for 2016.

Table 3. Resource-wise usage statistics for 2014

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
JSTOR	928	1123	782	651	185	26	313	745	867	174	541	299	6634
Springer Link	14	18	18	15	9	6	16	103	418	60	139	157	973
Wiley-Blackwell	8	32	14	9	5	2	7	46	217	49	84	73	546
Taylor and Francis	24	27	11	48	38	6	33	29	38	9	15	42	320
Oxford Univ. Press	2	45	5	3	1	0	0	13	10	21	25	38	163
Emerald	2		78	28	3	7							118
Project Muse	17	4	7	8	16	2	8	18	8	0	2	4	94
Emerald Publishing	0						0	1	0	0	1	82	84
Science-Direct	1	9	11	19	8	4	4						56
Cambridge Univ. Press	2	2	1	5	1	2	3	1	20	7	1	4	49
Institute of Physics	0	0	0	0	0	0	0	0	0	0	0	0	0

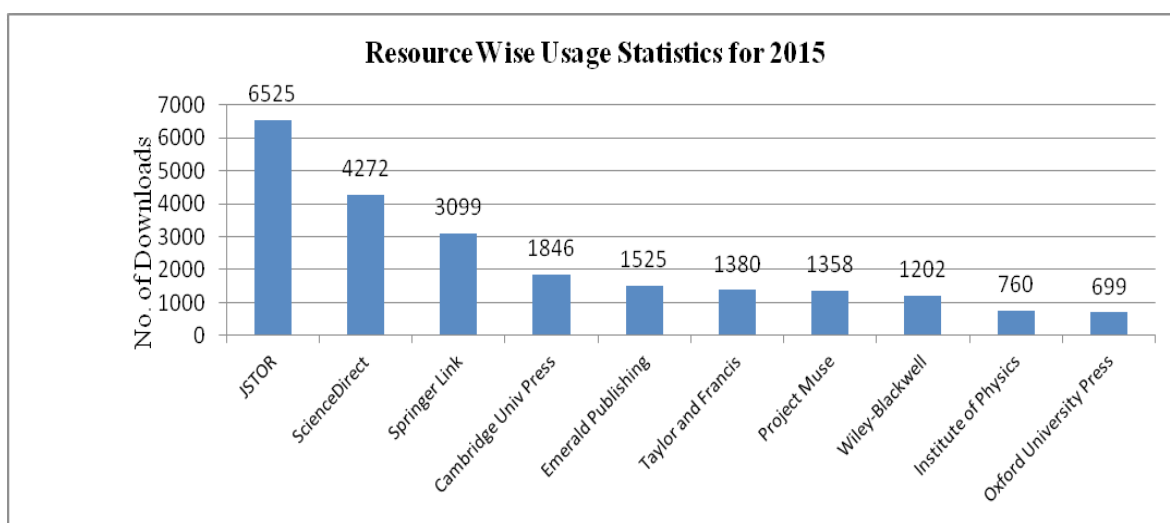


Figure 2. Resource-wise usage statistics for 2015.

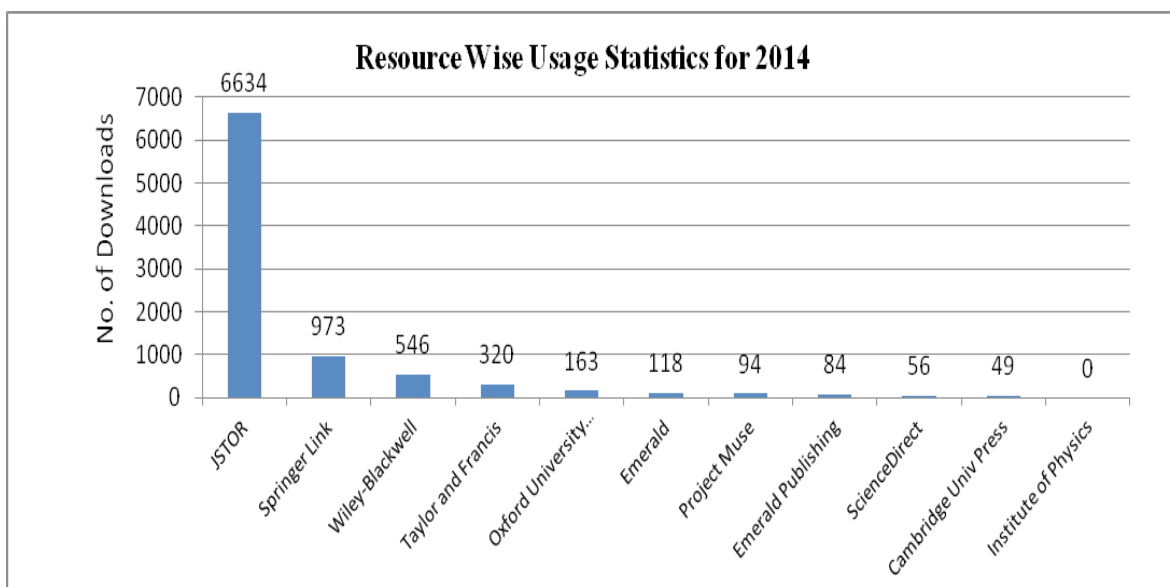


Figure 3. Resource-wise usage statistics for 2014.

Table 4. Resource-wise usage statistics for 2013

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
JSTOR	173	745	372	287	42	13	46	120	493	291	276	58	2916
Taylor and Francis	24	15	41	25	47	16	53	15	7	58	20	23	344
Wiley-Blackwell	16	5	3	27	3	8	14	7	12	15	115	2	227
Springer Link	4	0	0	26	8	5	22	53	17	14	28	4	181
Project Muse	0	2	18	39	1	0	6	8	13	3	4	0	94
Oxford Univ. Press	2	2	12	4	0	0	2	2	4	3	9	2	42
Cambridge Univ. Press	0	0	1	20	1	0	1	0	9	1	0	3	36
Emerald	0	0	0	0	1	2	0	9	4	6	3	1	26
Institute of Physics	0	0	0	0	0	0	0	0	0	0	0	0	0

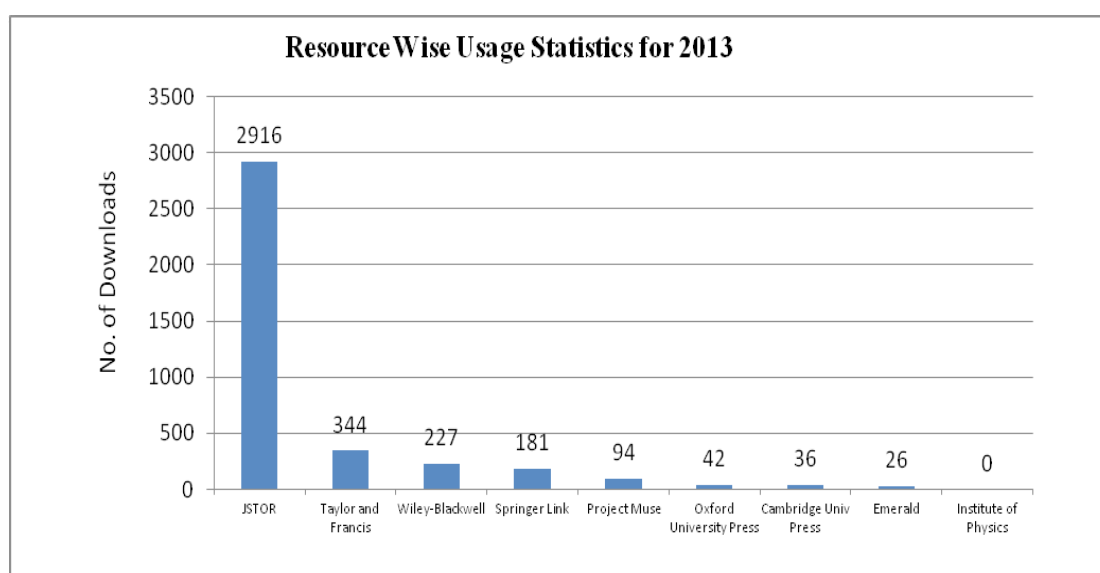
**Figure 4.** Resource-wise usage statistics for 2013.

Table 2 shows the resource wise usage for the year 2015 and it shows that in the year 2015, the usage of JSTOR (6525) is more in comparison to other resources. It shows that users are more frequently using the JSTOR database in the year 2015 followed by ScienceDirect (4272), Springer Link (3099), Cambridge University Press (1846), Emerald Publishing (1525), Taylor & Francis (1380), Project Muse (1358), Wiley Blackwell (1202), Institute of Physics (760) and Oxford University Press (699).

Table 3 shows the resource wise usage for the year 2014 and it shows that in the year 2014, the usage of JSTOR (6634) is more in comparison to other resources. It shows that users are more frequently using the JSTOR database in the year 2014 followed by Springer Link (973), Wiley Blackwell (546), Taylor & Francis (320), Oxford University Press (163), Emerald (118), Project Muse (94), Emerald Publishing (84), ScienceDirect (56), Cambridge University Press (49), and Institute of Physics having no downloads.

Table 4 shows the resource wise usage for the year 2013 and it shows that in the year 2013, the usage of JSTOR

(2916) is more in comparison to other resources. It shows that users are more frequently using the JSTOR database in the year 2013 followed by Taylor & Francis (344), Wiley Blackwell (227), Springer Link (181), Project Muse (94), Oxford University Press (42), Cambridge University Press (36), Emerald (26), and Institute of Physics having no downloads at all.

Table 5 shows the resource wise usage for the year 2012 and it shows that in the year 2012, only two resources are being used for downloads; JSTOR (1784) and Taylor & Francis (408). This is because in the year 2012, the service was initially started and the users are also not much aware of the e-resources. The research programmers were also not started during that year.

8. Trend in the Usage of Different E-Resources

The following statistics shows the trend report of the different e-resources during the period of study. From the

Table 5. Resource-wise usage statistics for 2012

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
JSTOR	0	0	298	95	84	2	233	127	214	361	281	89	1784
Taylor and Francis						15	144	10	51	59	122	7	408
Project Muse	0	0	0	0	0	0	0	0	0	0	0	0	0

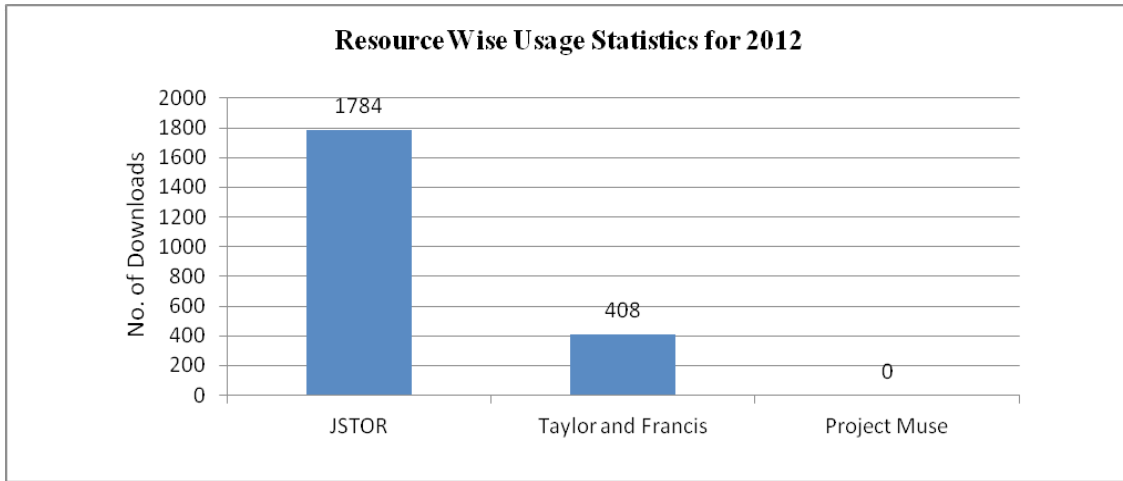


Figure 5. Resource-wise usage statistics for 2012.

Table 6. Downloads of e-resources of Cambridge University Press

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2016	248	59	8	157	180	454	60	108	0				1274
2015	11	4	8	1	1	0	454	169	136	6	8	1048	1846
2014	2	2	1	5	1	2	3	1	20	7	1	4	49
2013	0	0	1	20	1	0	1	0	9	1	0	3	36

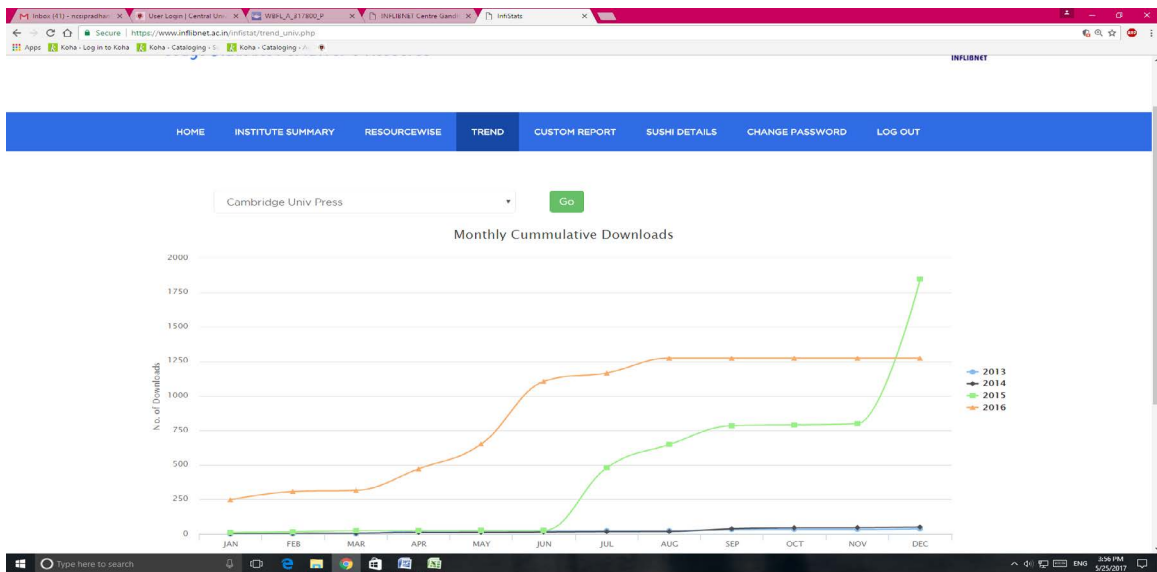
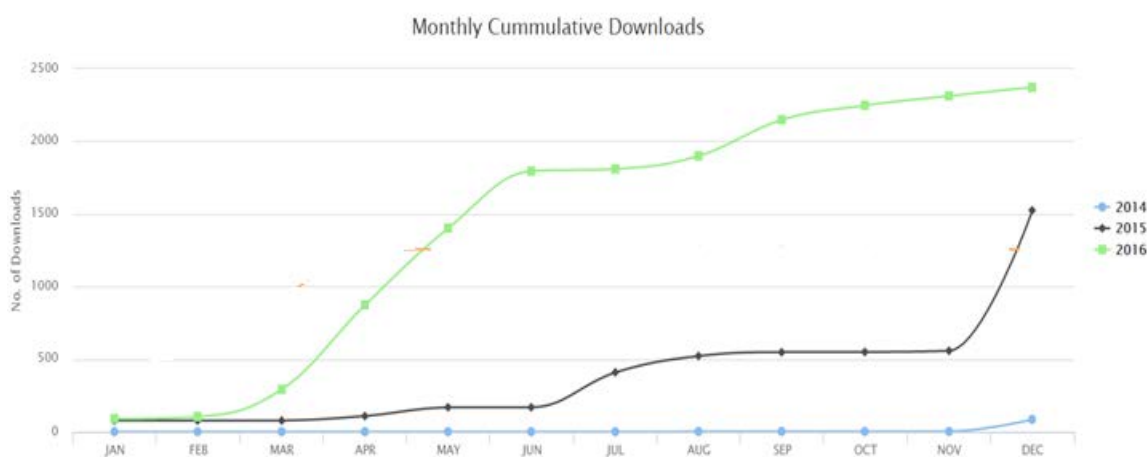


Figure 6. Downloads of Cambridge University Press e-resources for the period 2013-2016.

Table 7. Trend report of Emerald publishing for the period 2013-2016

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2016	89	15	188	581	530	392	14	90	250	98	65	60	2372
2015	76	0	1	31	59	1	240	113	27	1	8	968	1525
2014	0						0	1	0	0	1	82	84

**Figure 7.** Trend report of Emerald publishing for the period 2014-2016.**Table 8.** Trend report of institute of Physics for the period 2013-2016

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2016	47	0	0	21	0	55	1	20	17	10	37	30	238
2015	0	0	0	0	0	0	0	0	85	0	9	666	760
2014	2	45	5	3	1	0	0	13	10	21	25	38	163
2013	0	0	0	0	0	0	0	0	0	0	0	0	0

trend report of usage statistics, we can able to know what are the most useful and downloadable databases which are being used by the users of CUO. Accordingly we can add or delete the database as per the need of the users.

9. Cambridge University Press

Table 6 shows the number of downloads during the period 2013 to 2016 of Cambridge University Press, which clearly shows that in the year 2015 the downloads are more and there is no indication that the downloads are increasing over the years.

10. Emerald Publishing

Table 7 shows the number of downloads during the period 2014 to 2016 of Emerald Publishing, which clearly shows the increasing trend of the emereald resources by the users of Central University of Orissa. The data for the year 2013 are not available.

11. Institute of Physics

Table 8 shows the number of downloads during the period 2013 to 2016 of Institute of Physics, which shows that during the year 2015 there is maximum number of downloads

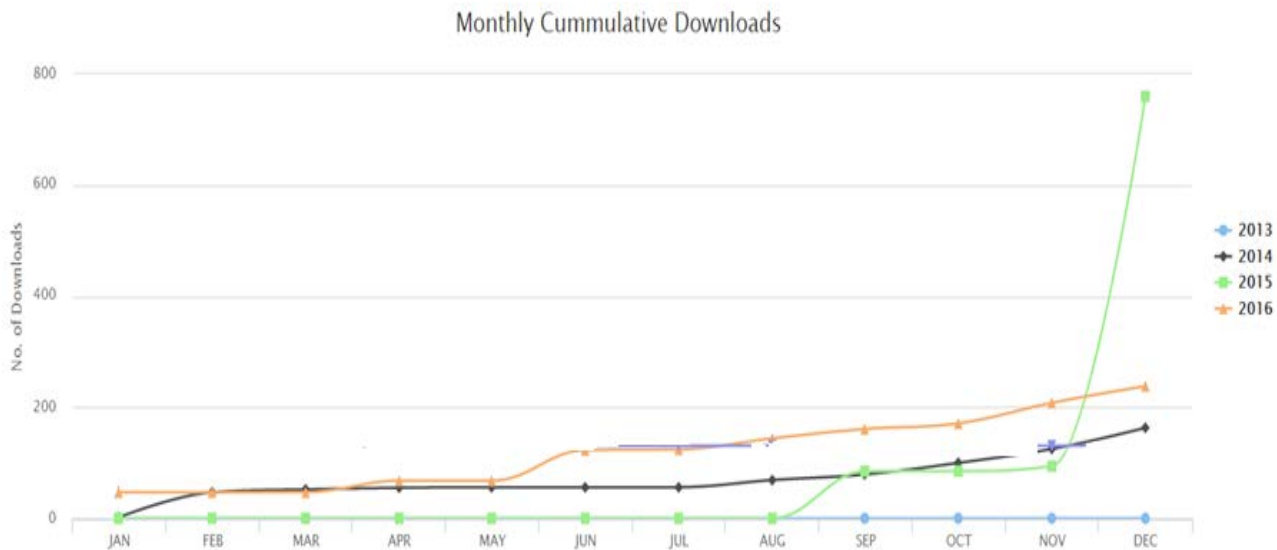


Figure 8. Trend report of institute of Physics for the period 2013-2016.

Table 9. Trend report of JSTOR for the period 2012-2016

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2016	1077	737	520	1021	997	289	212	665	570	180	316	347	6931
2015	1103	895	409	562	143	107	699	518	609	145	374	961	6525
2014	928	1123	782	651	185	26	313	745	867	174	541	299	6634
2013	173	745	372	287	42	13	46	120	493	291	276	58	2916
2012	0	0	298	95	84	2	233	127	214	361	281	89	1784

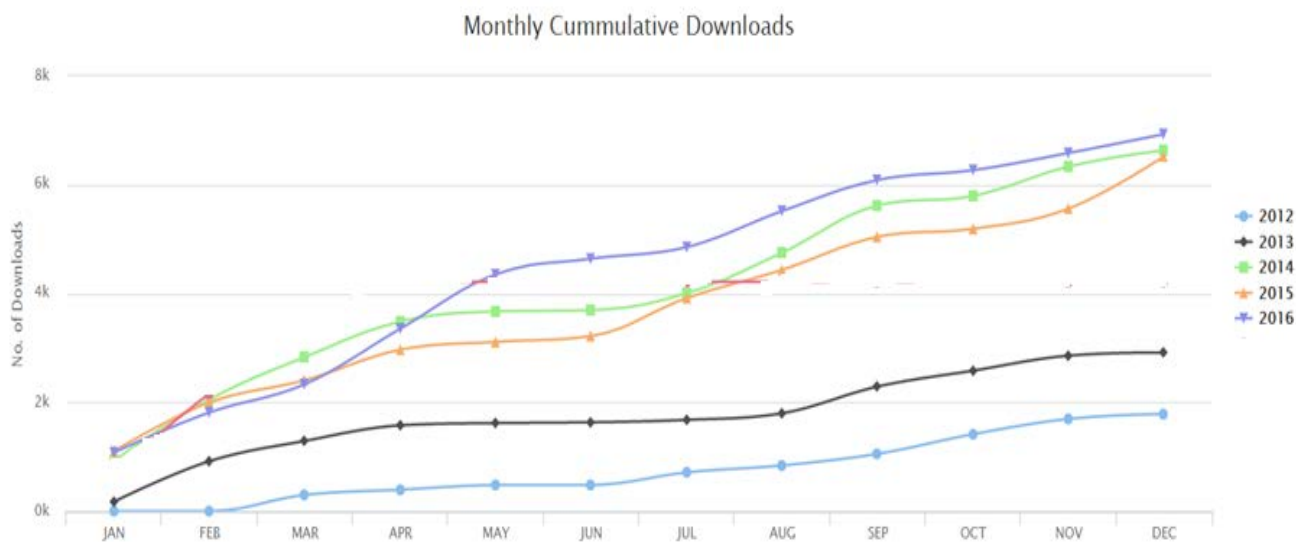


Figure 9. Trend report of JSTOR for the period 2012-2016.

followed by 2016 and 2014. There is no sign of increasing number of downloads over the years under study.

12. JSTOR

Table 9 shows the number of downloads during the period 2012 to 2016 of JSTOR, which shows that there is an increasing trend of usage over the years, however in the year 2015 the numbers of downloads are slightly lower than 2016.

13. Springer

Table 10. Trend report of springer for the period 2013-2016

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2016	626	382	342	597	128	511	181	175	245	172	220	176	3755
2015	347	122	221	165	131	18	804	384	198	136	100	473	3099
2014	14	18	18	15	9	6	16	103	418	60	139	157	973
2013	4	0	0	26	8	5	22	53	17	14	28	4	181

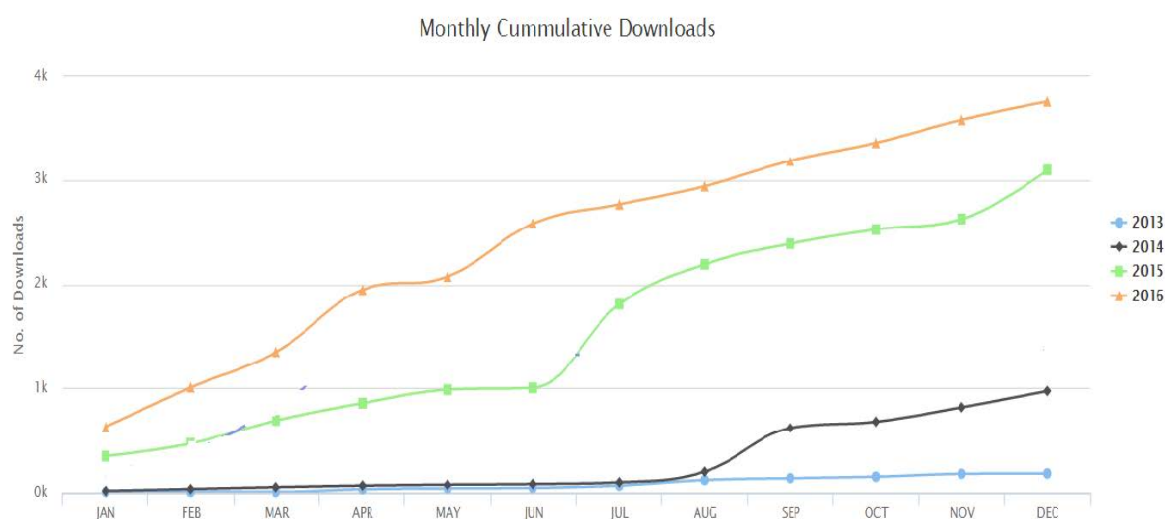


Figure 10. Trend report of springer for the period 2013-2016.

Table 11. Trend report of ProjectMuse for the period 2012-2016

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2016	246	59	24	103	68	156		109	112	46	60	26	1009
2015	9	4	2	3	3	0	235	152	21	17	9	903	1358
2014	17	4	7	8	16	2	8	18	8	0	2	4	94
2013	0	2	18	39	1	0	6	8	13	3	4	0	94
2012	0	0	0	0	0	0	0	0	0	0	0	0	0

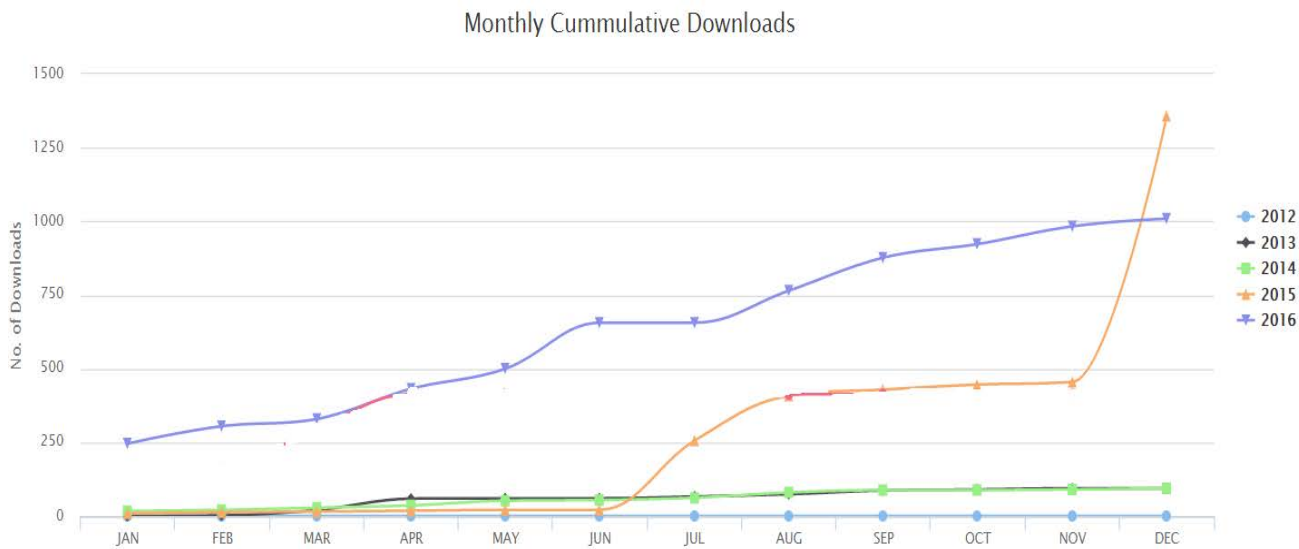


Figure 11. Trend report of ProjectMuse for the period 2012-2016.

Table 12. Trend report of Taylor & Francis for the period 2012-2016

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2016	504	361	214	147	65	1827	114	66	266	238	170	103	4075
2015	17	17	28	30	24	4	257	293	47	26	144	493	1380
2014	24	27	11	48	38	6	33	29	38	9	15	42	320
2013	24	15	41	25	47	16	53	15	7	58	20	23	344
2012						15	144	10	51	59	122	7	408

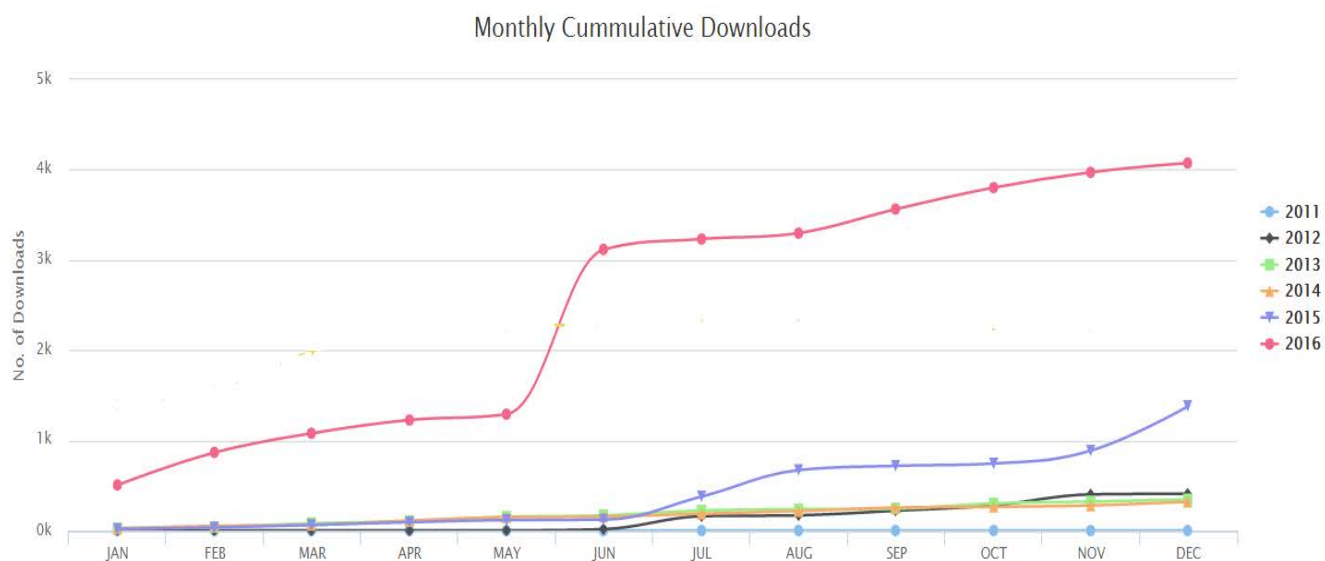


Figure 12. Trend report of Taylor & Francis for the period 2012-2016.

15. Taylor & Francis

Table 12 shows the number of downloads during the period 2012 to 2016 of Taylor & Francis, which shows that there is an increasing trend of usage over the years barring the year 2013 & 2014 where there is a declining trend for these years.

16. Wiley-Blackwell

Table 13 shows the number of downloads during the period 2013 to 2016 of Wiley-Blackwell, which shows that there is an increasing trend of usage over the years. The data for the year 2012 is not found from the database.

Table 13. Trend report of Wiley-Blackwell for the period 2013-2016

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2016	166	350	111	196	43	270	43	179	244	245	76	67	1990
2015	106	68	48	48	28	18	116	98	60	32	60	520	1202
2014	8	32	14	9	5	2	7	46	217	49	84	73	546
2013	16	5	3	27	3	8	14	7	12	15	115	2	227

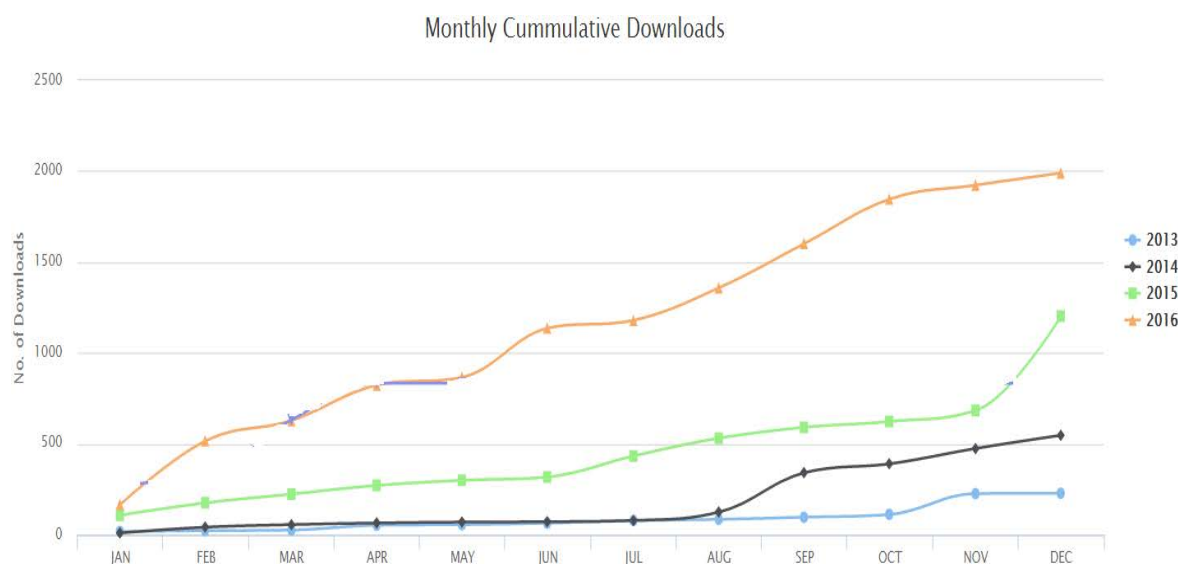


Figure 13. Trend Report of Wiley-Blackwell for the Period 2013-2016.

Table 14. Trend report of ScienceDirect for the period 2014-2016

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2016	859	464	320	574	300	1258	129	504	375	172	390	466	5811
2015	220	190	287	474	57	9	456	966	265	112	419	817	4272
2014	1	9	11	19	8	4	4						56

17. ScienceDirect

Table 14 shows the number of downloads during the period 2014 to 2016 of ScienceDirect, which shows that there is an increasing trend of usage over the years. As these resource has been subscribed from the year 2014, the data has been provided from the year 2014 onwards.

18. Oxford University Press

Table 15 shows the number of downloads during the period 2013 to 2016 of Oxford University Press, which shows that there is an increasing trend of usage over the years. The data for the year 2012 is not found from the database.

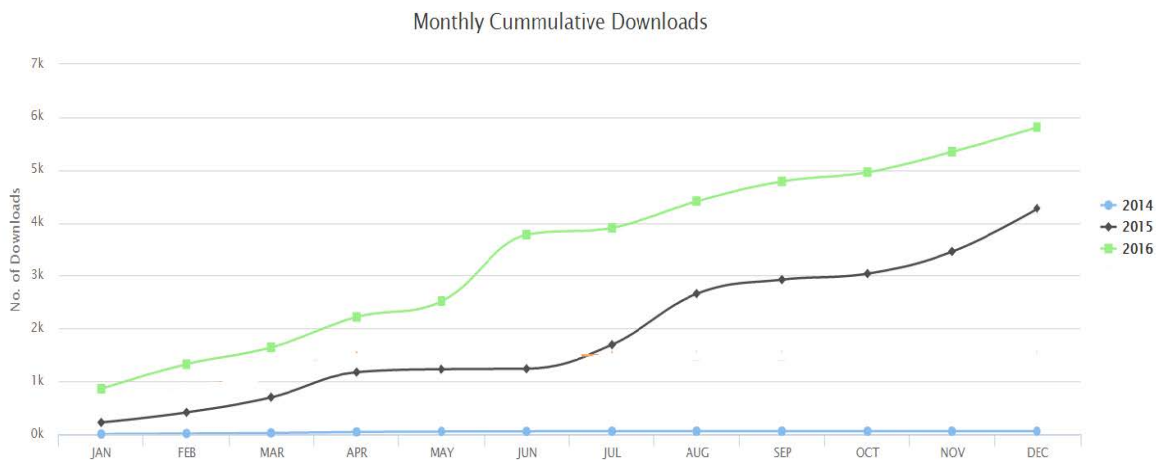


Figure 14. Trend report of ScienceDirect for the period 2014-2016.

Table 15. Trend report of Oxford University Press for the period 2013-2016

Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2016	57	39	18	41	12	193	101	134	80	48	73	32	828
2015	40	21	35	7	8	8	250	92	63	9	6	160	699
2014	2	45	5	3	1	0	0	13	10	21	25	38	163
2013	2	2	12	4	0	0	2	2	4	3	9	2	42

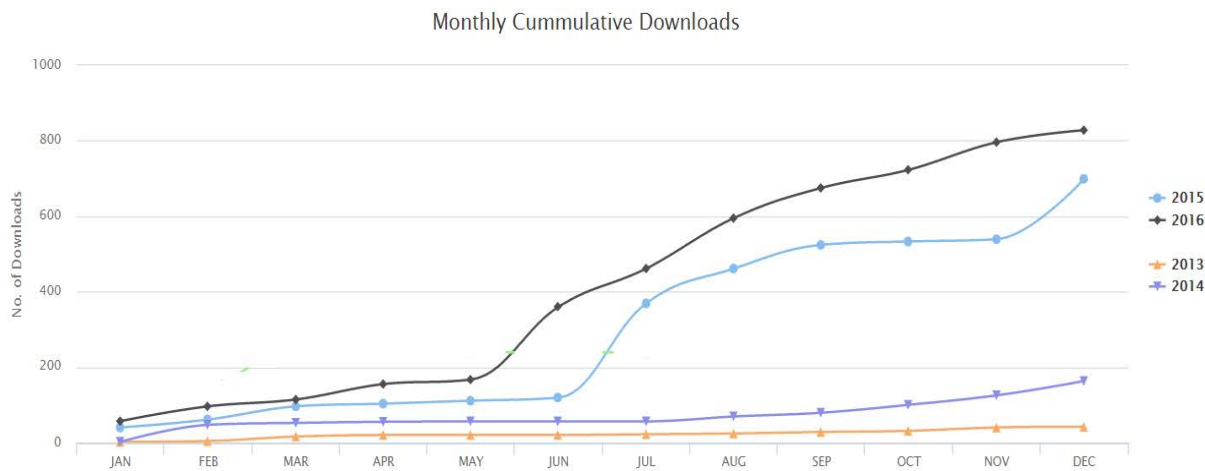


Figure 15. Trend report of Oxford University Press for the period 2013-2016.

19. Findings and Conclusion

From the above study, the following conclusions are:

- Since the Central University of Orissa is a newly established University, it became a member of the e-resources consortium only in the year 2012. In the initial years, no research programmes were introduced, hence in the year 2012 and 2013, the usage was very low as compared to other years. The low usage of e-resources among the users in

the initial years may also due to lack of awareness among the users.

- JSTOR (24790) is the most downloaded e-resource followed by ScienceDirect (10139), Springer (8008), and Taylor & Francis (6527). These are the most used e-resources among all the subscribed e-resources. The usage rate has increased over the years.
- The e-resources are accessible only in the campus and during office hours. This is one disadvantage for our users to access the resources. To overcome this problem University has taken a step to provide

24*7 accesses to e-resources.

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