

Analysis of Subject Gateways with Special Emphasis on 'Jute-Gate'

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Abstract

A detailed survey of 166 subject gateways across the world was conducted to check for existence of any subject gateway on Jute fibre. In addition to that, 54 websites on Jute were also examined for assessing the volume and quality of jute-related information. A comparative analysis of 15 jute-related databases, information systems and subject gateways was also conducted for assessing the uniqueness of prototype subject gateway on Jute (i.e. 'Jute-Gate') in disseminating qualitative Jute information to stakeholders. It was found that, out of 166 subject gateways that existed between 1996 and 2017, 102 were active and 64 were closed as on 31.03.2017. Average age of the active gateways was 14.52 years though 5 gateways were found to have existed for 21 years and 3 gateways lasted for only 1 year. It was concluded that number of gateways is dependent on the subject category but average age of subject gateways is independent of subject category. It was also found that no dedicated subject gateway for jute fibre is available and the proposed prototype 'Jute-Gate' is a pioneering effort.

Keywords: Subject Gateway, Survey, Subject Gateway Analysis

1. Introduction

Today's information seekers are looking for customized information service on specialized subject domain. Despite years of existence, stake holders in the Jute industry have been finding it difficult for getting access to the desired information. The non-existence of Jute information sharing network has made the situation more challenging. In order to develop such a system (i.e. Jute-Gate) it was decided to examine subject gateways across the world and analyze Jute related websites, databases and information systems on Jute.

2. Review of Literature

In 1999, John Kirriemuir conducted a brief survey (Koch, 2000) on 50 subject gateways for Resource Discovery Network Centre. The survey found that most of the gateways were maintained, hosted and funded by academia. He also raised the question of sustainability of the subject gateways.

Robinson and Bawden reviewed the development of subject gateways as discovery tools for online resources. According to them, subject gateways are value added products which require intellectual efforts. They discussed the history and current status of subject gateways in UK. They also elaborated the nature and characteristics of subject gateways. Although collaboration was an increasing trend, still a few gateways were maintained through individual efforts (Robinson & Bawden, 1999).

Bawden and Robinson (2002) suggested that subject gateways had been under-valued and under-utilized. According to them, important role of information specialists would be to promote of the value of these subject gateways.

Subject gateway service came into existence with the development of Internet especially the World Wide Web (WWW). Rapid proliferation of digital resources compelled libraries across the world to initiate subject specific customized information dissemination services. Kanetkar (2014) reviewed the development of 77 subject

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gateways that existed between 1999 till 2013 and discussed their features.

3. Hypothesis

1. Number of Subject Gateways is dependent on the Subject Category, and
2. Average Age of Subject Gateways is independent of Subject Category.

4. Data Collection and Methodology

The present study is a further elaboration of a study by Kanetkar in 2014. Here, 166 subject gateways, which had existed between 1996 and 2017, were surveyed through the Internet Archive - Way back Machine (Internet Archive, 2017) (<http://archive.org/web/>). Data was collected from the web pages of the subject gateways crawled by Way back Machine. Details of the subject gateways are given in tabular form (Table 1).

Table 1. Review of subject gateways across the world (166 Nos.) as on 31.03.2017

Sl. No.	Name of Subject Gateways	Subjects Covered	Web-address of Subject Gateways	Originator	Year of First Occurrence	Year of Last Occurrence	Year of Existence	Remarks
1	123 Help Me	Social Science	http://www.123helpme.com/	123HelpMe.com	2000	2017	17	
2	A Guide to Selected Population Resources on Government Web Sites	Population Resources	http://stokeslib.princeton.edu/popstatsgrv.htm	Princeton University	2005	2016	11	
3	A Reasoned Index to Political Philosophy	Political Science	http://lgxserver.uniba.it/lei/filpol/filpole/homefpe.htm	Maria Chiara Pivatolo University of Pisa, Italy	1998	2015	17	Closed/ Not-Updated
4	A Socio-logical Tour through Cyberspace	Sociology	http://www.trinity.edu/~mkearl/index.html	Michael C. Kearnl, Department of Sociology & Anthropology Trinity University San Antonio, Texas	1997	2017	20	
5	About.com	Multi-Subject	http://home.about.com/education/index.htm	About.com, Inc	1999	2014	15	Closed/ Not-Updated
6	Academic Info	Multi-Subject	http://www.academicinfo.net/index.html	Librarian, Michael Madin	1998	2017	19	
7	Access To Law	Law	https://www.accesstolaw.com/	Inner Temple Library, London	1999	2016	17	
8	Aerospace Resources on Internet (AERADE)	Aerospace	http://aerade.cranfield.ac.uk/	Cranfield University	2000	2017	17	
9	Age Info - Worldwide Resources in Ageing	Social Work	http://www.cpa.org.uk/ageinfo/worldres.html	Centre for Policy on Ageing	1998	2017	19	

10	Agriculture Network Information Collaborative: A Knowledge Discovery System for Agriculture Formerly Agriculture Network Information Centre	Agriculture	http://www.agric.org/agdb/	Agriculture Network Information Centre	1998	2017	19	
11	AGRIGATE	Agriculture, Forestry, Environ-ment, Food, Science, Horticulture	http://www.agrigate.edu.au/	University of Melbourne	2000	2006	6	Closed/ Not-Updated
12	al-bab: An open door to the Arab world	Arab	http://www.al-bab.com/arab/comp.htm	Individual Brian Whitaker	1999	2017	18	
13	Alex Catalogue of Electronic Texts	American and English Literature	http://www.infomotions.com/alex/	Individual Eric Lease Morgan	2000	2017	17	
14	All India Libraries and Librarians Management Information System (ALLMIS)	Library and Information Science	http://www.aillmis.net/index.php	University of Delhi, Department of Library and Information Science	2014	2016	2	#
15	ALTIS (Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Hospitality, Leisure, Sport, Tourism	http://www.altis.ac.uk/	University of Gloucestershire	2001	2011	10	Closed/ Not-Updated
16	Anthropology Resource Page	Anthro-pology	http://www.usd.edu/anth	Larry J. Zimmerman of University of South Dakota	1997	2016	19	
17	Archaeology Data Service (ADS)	Archaeo-logy	http://archaeologydataservice.ac.uk/	Consortium of University Departments of Archaeology	2009	2017	8	
18	ArchNet	Islamic Archite-cture, Urban Design and Develop-ment	www.archnet.org	MIT School of Architecture and Planning and Aga Khan Trust for Culture	2000	2017	17	
19	Art History Resources	Art History	http://witcombe.sbc.edu/ARTHLinks.html	Individual Dr. Christopher L.C.E. Witcombe	1999	2017	18	
20	Art, Design and Media (ADAM) Gateway	Art, Design, Architecture & Media	http://adam.ac.uk/	ADAM Consortium Partners (Academic Institutions)	1996	2014	18	Closed/ Not-Updated
21	Artchive	Art Links to art movements, artists & images	http://www.artchive.com/ftp_site.htm	Individual Mark Harden	1998	2017	19	

22	Artifact (Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Arts and Creative Industries	http://www.artifact.ac.uk/	Jisc (UK Higher Education)	2003	2011	8	Closed/ Not-Updated
23	Arts and Humanities Data Service (AHDS)	Archaeology, History, Literature, Languages and Linguistics, Performing Arts and Visual Arts	http://www.ahds.ac.uk/	King's College London, Library Arts & Humanities Research Council and JISC	1997	2016	19	
24	ArtSource	Art & Architecture Networked resources on art and architecture.	http://www.ilpi.com/artsource	Interactive Learning Paradigms Incorporated	2000	2017	17	
25	Best of the Web - Social Sciences	Social Science	http://botw.org/top/Science/Social_Sciences/	Best of the Web	2003	2017	14	
26	BioethicsWeb(Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Biomedical Ethics, Including Ethical, Social, Legal and Public Policy	http://bioethicsweb.ac.uk	Jisc (UK Higher Education)	2003	2011	8	Closed/ Not-Updated
27	Biogate	Biological Sciences	http://biogate.lub.lu.se/	Lunds University	2001	2001	1	Shortest survived closed subject gateway
28	BIOME(Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Health and Life Sciences	http://biome.ac.uk/	Jisc (UK Higher Education)	2001	2001	1	Shortest survived closed subject gateway
29	BioMedNet	Life-Sciences	http://www.bmn.com/	Elsevier	1998	2004	6	Closed/ Not-Updated
30	Biz/ed: Business education on the Internet	Business, Management and Economics	http://bized.ac.uk/	Institute for Learning and Research Technology, University of Bristol	1996	2007	11	Closed/ Not-Updated
31	Board of Governors of the Federal Reserve System	Political Science	http://www.federalreserve.gov/econresdata/statisticsdata.htm	Federal Reserve Board	2012	2017	5	
32	British Academy Portal	Humanities & Social Science	http://www.britac.ac.uk/	The British Academy	1998	2017	19	
33	BUBL Link: Catalogue of Internet Resources	Multi-Subject	http://bubl.ac.uk/link	Strathclyde University	1997	2013	16	Closed/ Not-Updated
34	Careers Guide	Career Advice and Job Vacancies	http://careers-guide.com	careers-guide.com	2005	2016	11	

35	Census and Demographic Information	Social Science, Economics, Census	http://www.mnsfld.edu/depts/lib/census.html	Mansfield University of Pennsylvania	2000	2013	13	Closed/ Not-Updated
36	Centre for Social and Economic Research on the Global Environment (CSERGE)	Environment and Sustainable Development	http://www.cserge.ac.uk/	University of East Anglia	2011	2017	6	
37	ChemDex	Chemistry	http://www.chemdex.org/	University of Sheffield	1999	2017	18	
38	ChemistryWeb: Internet resources	Chemistry	http://www.ssc.ntu.edu.sg:8000/chemweb/htmlj/	Thiam-Seng KOH	1999	2001	2	Closed/ Not-Updated
39	ChemWeb: Central to science	Chemistry	http://www.chemweb.com/	Chemindustry.com Inc.	1996	2017	21	Longest Surviving active subject gateway
40	Civil Rights Litigation Clearinghouse Formerly ARGUS Clearing House	Arts, Humanities, Media & Social Sciences, civil Rights	http://www.clearinghouse.net/	University of Michigan Law School	1996	2017	21	Longest surviving active subject gateway
41	Clio-Online: Historical Resources in the Internet	History	http://www.clio-online.de/site/lang_en-US/1/Default.aspx	Clio-online	2007	2017	10	
42	Communication and Media Studies (Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Mass Communication	http://www.intute.ac.uk/communication/	Jisc (UK Higher Education)	2009	2011	2	Closed/ Not-Updated
43	Computational Fluid Dynamics	Fluid Dynamics	http://www.cfd-online.com/Resources/	CFD-Online	1998	2017	19	
44	Conflict Archive on the Internet (CAIN)	Conflict Studies	http://cain.ulst.ac.uk/	University of Ulster	1997	2017	20	
45	Consortium for Educational Communication (CEC)	Educational Communication Social Sciences	http://cec.nic.in/Pages/Home.aspx	University Grants Commission, Ministry of HRD, Govt. of India	2012	2017	5	#
46	Council of Professional Associations on Federal Statistics (COPAFS)	Statistics	http://www.copafs.org/	The Council of Professional Associations on Federal Statistics	2001	2017	16	
47	Cyber-Infrastructure for Phylogenetic Research (CIPRES) Science Gateway	Evolutionary biology	https://www.phylo.org/	National Science Foundation (NSF)	2004	2017	13	
48	Cyburbia: The urban planning portal Formerly Planning and Architecture Internet Resource Center	Planning, Architecture & Urbanism	http://www.arch.buffalo.edu/pairc/	Dan Trasman	1997	2005	8	Closed/ Not-Updated

49	Data Zone	Statistics	http://www.epinet.org/datazone/	The Economic Policy Institute	1998	2012	14	Closed/ Not-Updated
50	Design Library	Industrial Design, Interaction Design, Graphic Design, Environmental Design & Design Schools.	http://www.dh.umu.se/design_lib/design_library.html	Umeå University	1997	2002	5	Closed/ Not-Updated
51	DeutscherBildungs-Server	German Education System	http://dbs.schule.de/db/listen.html	DBS	1997	2016	19	
52	Diagnostic Enhancement of Confidence by an International Distributed Environment (DECIDE)	Medical Science	http://www.eu-decide.eu	European Union under its Seventh Framework Program	2010	2017	7	
53	Digital Librarian	Multi-Subject General Annotated Index of Internet Resources	http://www.digital-librarian.com/	Individual Margaret Vail Anderson	2000	2016	16	
54	Discover Society: Measured – Factual – Critical	Social Work	http://discoversociety.org/	Social Research Publications	2013	2017	4	
55	DMOZ: the Open Directory Project	Multi-Subject (Web Directory)	http://www.dmoz.org/	AOL Inc.	1999	2017	18	Closed after Mar 17, 2017 (Static Mirror site available)
56	Dutch Electronic Subject Service (DutchESS)	Multi-Subject	http://www.konbib.nl/dutchess/	Koninklijke Bibliotheek (the National Library of the Netherlands)	1998	2007	9	Closed/ Not-Updated
57	Edinburgh Engineering Virtual Library (EEVL) (Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive). Most of the services incorporated in TechXtra	Engineering	http://www.eevl.ac.uk/	Jisc (UK Higher Education)	1997	2011	4	Closed/ Not-Updated
58	EdNA: Online, Network Australia	Education	http://www.edna.edu.au/	Commonwealth of Australia	1996	2017	21	Longest surviving active subject gateway
59	Edward Lowe Foundation	Business and economics	http://www.lowe.org/smbiznet/sites/index.htm	Edward Lowe Foundation	1997	2005	8	Closed/ Not-Updated
60	EdWeb : Exploring Technology and School Reform	Educational Reform and Information Technology	http://www.edwebproject.org/	Individual Andy Carvin	2001	2017	16	

61	ELDIS	Development	http://www.eldis.org/	Institute of Development Studies	2000	2017	17	
62	E-library for Global Welfare	International & Comparative Policy Analysis, Research & Teaching	http://www.bath.ac.uk/gwlibrary/	Open University, University of Sheffield, University of Bath & STAKES Finland.	2006	2016	10	
63	Energy Information on the Internet (EII)	Energy	http://www.ecn.nl/eii/main.html	Netherlands Energy Research Foundation	1997	2016	19	
64	Engineering Electronic Library (EELS)	Engineering	http://eels.lub.lu.se/	Swedish Universities of Technology Libraries	2000	2007	7	Closed/ Not-Updated
65	EnviroLink	Environment	http://library.envirolink.org/	Josh Knauer, Carnegie Mellon University.	1998	2016	18	Closed/ Not-Updated
66	e-PgPathshala: A gateway to all Post Graduate courses	Multi-Subject	http://epgp.inflibnet.ac.in/about.php	INFLIBNET	2013	2016	3	#
67	European IPR-Help-desk (2011-2017) Formerly IPR-Help= desk (1999-2012)	Intellectual Property Rights	https://www.iprhelpdesk.eu/ Formerly http://www.ipr-helpdesk.org	European Union	1999	2017	18	
68	Fidmath (2015-2017) Formerly ViFaMATH: the Virtual Library of Mathematics(2007-2016) & MathGuide (1999-2014)	Mathematics	http://fidmath.de/ Formerly http://vifamath.de & http://www.sub.uni-goettingen.de/ssgfi/math/	German Research Foundation (DFG)	1999	2017	18	
69	Financial Resources on the Internet	Economics, Finance	http://people.ischool.berkeley.edu/~hal/pages/finance.html	Individual Hal R. Varian	2007	2016	9	Closed/ Not-Updated
70	Finding Statistics and Data	Statistics	http://guides.lib.umich.edu/c.php?g=283068	University of Michigan School of Information and Library Studies	2015	2017	2	
71	Forced Migration Online (FMO): a world of information on human displacement	Refugee Studies	http://forcedmigration.org	University of Oxford's Department of International Development	2001	2017	16	
72	German Education Portal	Education	http://www.fachportal-paedagogik.de/start_e.html	German Institute for International Educational Research (DIPF)	2007	2017	10	
73	GESource(Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Geography & Environment	http://www.gesource.ac.uk/home.html	Jisc (UK Higher Education)	2005	2011	6	Closed/ Not-Updated

74	Go-Geo	Geospatial Information	http://www.gogeo.ac.uk	University of Edinburgh & University of Essex	2003	2016	13	Closed/ Not-Updated
75	HDS :History Data Service	History	http://hds.essex.ac.uk	University of Essex	1996	2017	21	Longest surviving active subject gateway
76	Healio Formerly Medical Matrix	Clinical Medicine	http://www.healio.com Formerly http://www.medmatrix.org/	Healthtel Corporation	1997	2016	19	
77	Health on the Net (HON)	Medicine and Healthcare	http://www.hon.ch	Health on the Net Foundation	1997	2017	20	
78	History Guide Formerly Anglo-American History Guide	Anglo-American History	http://www.sub.uni-goettingen.de/ssgfi/aac-hist/index.html	SSG-FI, SUB Göttingen	1999	2014	15	Closed/ Not-Updated
79	HISTORY: On Line	History	http://www.history.ac.uk/	Institute of Historical Research	2000	2017	17	
80	HUMBUL (Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Humanities (Archaeology, Classics, History, Language, Literature and Religion)	http://www.humbul.ac.uk/	Jisc (UK Higher Education)	1999	2011	12	Closed/ Not-Updated
81	iLove Languages: Your guide to languages on the Web (2001-2017) Formerly The Human-Languages Page	Languages	http://www.ilovelanguages.com/ Formerly http://www.june29.com/HLP	Tyler Chambers	1997	2017	20	
82	Indian Library Association-LIS Gateway	Library and Information Science	http://www.ilaindia.net	Indian Library Association	2009	2017	8	#
83	InfoLaw: Internet for lawyers	Law	http://www.infolaw.co.uk/	Infolaw Limited	1998	2016	18	
84	Infoliberalian	Library Science	http://www.infolibrarian.com/	infoliberalian	2000	2017	17	#
85	INFOMINE: Scholarly Internet Resource Collection	Multi-Subject (General, including, Arts, Humanities & Social Sciences)	http://infomine.ucr.edu/Main.html	University of California Riverside Library	1998	2014	16	Closed/ Not-Updated
86	INFOPORT: INFLIBNET Subject Gateway for Indian Electronic-Resources	Multi-Subject	http://infoport.inflibnet.ac.in	INFLIBNET Centre	2012	2016	4	#
87	Info Quest	Multi-Subject	http://roads.itc.gu.edu.au	Griffith University and Queensland University of Technology Libraries	1999	2004	5	Closed/ Not-Updated

88	International Economics Network	Economics	http://www.internationaleconomics.net/index.html	Jamus Jerome Lim	2001	2016	15	
89	Internet Crossroads in Social Science Data	Social Science	http://www.disc.wisc.edu/newcrossroads/index.asp	University of Wisconsin, Data & Information Service Centre	2007	2017	10	
90	Internet Directory for Botany	Botany and Ecology	http://www.botany.net/	Harvard University Herbarium, University of Helsinki, Botanical Museum, Oakridge	1998	2014	16	Closed/ Not-Updated
91	Internet Library for Librarians	Information Resources for Librarians	http://www.itcompany.com/inforettriever	Vianne Tang Sha	1997	2017	20	
92	Internet Public Library (ipl2): Information you can trust (2009-) Formerly Internet Public Library: Information you can trust (1995-2008)	Multi-Subject	http://www.ipl.org/	Drexel University Formerly University of Michigan, School of Information	1995	2015	20	Longest surviving closed subject gateway
93	Intute (Closed on July, 2011, details of project can be found in UK Web Archive)	Multi-Subject (Engineering, Mathematics, Computing, Agriculture, Law, Physical Science, Social Science, Management, Biological Science, Geography, Medicine)	http://www.intute.ac.uk/	Jisc (UK Higher Education)	2006	2011	5	Closed/ Not-Updated
94	Iowa State Entomology Index of Internet resources	Entomology	http://www.ent.iastate.edu/List/	John VanDyk, Univ. of Iowa State University	1996	2016	20	
95	IREON: The International Relations and Area Studies Gateway	Political Science	https://www.ireon-portal.eu/IREON/Portal/ireon_en.aspx?lang=en-US	Information Network International Relations and Area Studies (FIV-IBLK) consortium.	2013	2017	4	
96	Jyvaskyla Virtual Library	Multi-Subject	http://www.jyu.fi/library/virtuaalikirjasto/engroads.htm	Jyväskylä University Library	1999	2011	12	Closed/ Not-Updated
97	Karger Open Access : Searchable Gateway	Bio-medical Articles	http://www.karger.com/OpenAccess	Karger Publishers	2013	2017	4	
98	Law and Legal	Law	http://www.lawandlegal.co.uk	Law and Legal, UK	2009	2016	7	

99	Lawlinks	Law	http://www.kent.ac.uk/library/subjects/lawlinks/	University of Kent	2012	2017	5	
100	Library & Information Science Gateway	Library and Information Science	http://www.lisgateway.com	Dr. M. Masoom Raza of Dept. of Library Information Science Aligarh Muslim University, Aligarh	2004	2016	12	#
101	LibrarySpot.com	Library and Information Science	http://www.libraryspot.com/	StartSpotMediaworks, Inc.	1998	2017	19	
102	LIS Learning	Library and Information Science	http://lislearning.in/	Aligarh Muslim University, Dept. of Lib. & Info. Science	2014	2016	2	#
103	MCS	Media, Communication Studies	http://www.aber.ac.uk/media/Functions/mcs.html	Aberystwyth University	2000	2012	12	Closed/ Not-Updated
104	MedHist (Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Medical and Allied Sciences	http://medhist.ac.uk/	Jisc (UK Higher Education)	2002	2011	9	Closed/ Not-Updated
105	Media UK	Mass Communication, Media	http://directory.mediauk.com/	Not At All Bad Ltd.	2000	2004	4	Closed/ Not-Updated
106	MetaChem	Chemistry	http://metachem.ch.adfa.edu.au/	University of NSW, ADFA, DSTC Pty Ltd.	1999	2002	3	Closed/ Not-Updated
107	MetaMatters (Australia-based Gateways)	Multi-Subject	http://metabrowser.dtdns.net/dcanz2/mb.aspx	Dublin Core Australia & New Zealand and National Library of Australia	2005	2005	1	Shortest survived closed subject gateway
108	Minnesota Library Information Network (MnLINK)	Multi-Subject	http://www.mnlinkgateway.org	OCLC	2005	2017	12	
109	Moving Images Gateway	Moving Image and Sound Materials	http://www.buafc.ac.uk/gateway	British Universities Film & Video Council	2001	2017	16	
110	Multimedia Authoring Web	Multimedia	http://www.mcli.dist.maricopa.edu/authoring	Maricopa Center for Learning and Instruction (MCLI)	1996	2013	17	Closed/ Not-Updated
111	NBS Ersthilf: Aecportico	Building Construction, Engineering Services and Landscape Design	http://thenbs.com	RIBA Enterprises Ltd.	2003	2017	14	
112	NMAP(Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Medical Science (Nursing and Midwife)	http://www.nmap.ac.uk	Jisc (UK Higher Education)	2001	2011	10	Closed/ Not-Updated

113	NOVAGate	Forestry, Veterinary, Agriculture, Food Sciences and Environmental Sciences	http://nova-university.org/	NOVA University Network	1998	2017	19	
114	OFFSTATS: Official Statistics on Web	Statistics	http://www.offstats.auckland.ac.nz/	University of Auckland Library	2008	2017	9	
115	OMNI - Organizing Medical Networked Information (renamed BIOME and later changed to Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Clinical research, Health and Medicine	http://www.omni.ac.uk/	Jisc (UK Higher Education)	1996	2011	15	Closed/ Not-Updated
116	Online Reference Zone: A Gateway to Reference Resources in Science & Technology	Library Science	http://www.isibang.ac.in/~library/onlinerz/index2.html	Indian Statistical Institute, Bangalore	2011	2017	6	#
117	Open Journal Access System (OJAS)	Multi-Subject	http://www.inflibnet.ac.in/ojs/	INFLIBNET	2010	2016	6	#
118	Oxford Text Archive	Literary and Linguistic Resources	http://ota.ox.ac.uk/	University of Oxford	1998	2017	19	
119	Philosophy Around The Web	Philosophy Studies	http://users.ox.ac.uk/~worc0337/phil_index.htm	University of Oxford	1997	2017	20	
120	Philosophy in Cyberspace	Philosophy	http://www-personal.monash.edu.au/~dey/phil/	Monash University	1999	2006	7	Closed/ Not-Updated
121	physicsworld.com Formerly PhysicsWeb	Physics	http://physicsworld.com	Institute of Physics	1998	2017	19	
122	PICK: Library and Information Science Resources on the Internet	Librarianship and Information Science	http://www.aber.ac.uk/~tplwww/e/	Thomas Parry Library, University of Wales Aberystwyth	1998	2007	9	Closed/ Not-Updated
123	Political Science Resources	Political Science	http://www.politicsresources.net/	Richard Kimber	2009	2017	8	
124	Poly-Cy: Internet Resources for Political Science	Political Science	http://crl.du.ac.in/Publication/E-Resources%20in%20Public%20Domain-Final/Political%20Science/Bird's%20Eye%20View/Websites/Internet%20Resources%20for%20Political%20Science.htm	Bob Duval, Dept. of Political Science, West Virginia University	1996	2005	9	Closed/ Not-Updated

125	Population Index on the Web	Political Science	http://popindex.princeton.edu/index.html	Office of Population Research, Princeton University	1997	2017	20	
126	Port	Maritime Studies	http://www.port.nmm.ac.uk/	National Maritime Museum	1999	2012	13	Closed/ Not-Updated
127	Portal to Legal Resources in the UK and Ireland	Law	http://venables.co.uk/	Delia Venables	1998	2017	19	
128	Preserving Access to Digital Information (PADI) (including ICADS)	Library & Information Science	http://pandora.nla.gov.au/tep/10691 Formerly http://nla.gov.au/padi	National Library of Australia	1998	2010	12	Closed/ Not-Updated
129	Proquest Erstwhile: Dialog Information Services	Social Science	http://www.proquest.com/Erstwhile: http://www.dialog.com/	ProQuest	1996	2017	21	Longest surviving active subject gateway
130	psci-com	Science, Communication & Society	http://psci-com.org.uk/	The Wellcome Trust	2000	2005	5	Closed/ Not-Updated
131	PSIgate (Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Physical Sciences, Astronomy, Chemistry, Earth Sciences, Materials Sciences, Physics, And Science History And Policy	http://www.psigate.ac.uk/	Jisc (UK Higher Education)	2000	2011	11	Closed/ Not-Updated
132	Psych Web	Psychology	http://www.psywww.com/	Russell A. Dewey	1998	2017	19	
133	Psychology (Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Psychology	http://www.intute.ac.uk/psychology/	Jisc (UK Higher Education)	2009	2011	2	Closed/ Not-Updated
134	Psychology.org Formerly: Encyclopaedia of Psychology	Psychology	http://www.psychology.org/	Individual Dr. William Palya	1997	2017	20	
135	Renardus	Multi-Subject	http://www.renardus.org/	Information Society Technologies (IST) programme of European Commission	2000	2002	2	Closed/ Not-Updated
136	Research Resources for the Social Science	Social Science	http://socsciresearch.com/	McGraw-Hill Ryerson Limited	1997	2017	20	
137	Resource Discovery Network (RDN)	Multi-Subject (General, including, Humanities and Social Sciences)	http://www.rdn.ac.uk/	RDN Centre, King's College, London and The University of Bath.	1999	2011	12	Closed/ Not-Updated

138	Resource for Urban Development International (RUDI)	Urban Design Resource	http://www.rudi.net/	Landor Links Ltd.	2001	2017	16	
139	Rice Knowledge Management Portal (RKMP)	Agriculture (Rice)	http://www.rkmp.co.in/	Indian Council of Agricultural Research (ICAR)	2011	2017	6	#
140	Sapling: Architecture, Planning and Landscape information gateway	Architecture, Planning and Landscape	http://www.sapling.org.uk/	Individual: Graham Sout	2001	2015	14	Closed/ Not-Updated
141	SciCentral: Gateway to the best science news sources	All Scientific Disciplines	http://www.scicentral.com	Individual Guy Orgambide	1997	2017	20	
142	Science Accelerator	Science (R&D results, project descriptions, accomplishments)	http://www.scienceaccelerator.gov/	U.S. Department of Energy, Office of Scientific and Technical Information (OSTI)	2007	2015	8	Closed/ Not-Updated
143	SciGate	Science	http://www.ncsi.iisc.ernet.in/	Indian Institute of Science (IISc), Bangalore	1998	2008	10	# Closed/ Not-Updated
144	Scott's Botanical Links	Botany	http://www.ou.edu/cas/botany-micro/bot-linx/	Dr. Scott Russell, Dept. of Botany & Microbiology, Univ. of Oklahoma	1998	2017	19	
145	Scout Report Archives (2002-2017) Formerly Scout Report Signpost (1998-2016)	Computer Science and Library Resources	https://scout.wisc.edu/archives/ http://www.signpost.org/signpost/	The Internet Scout Research Group, University of Wisconsin-Madison	1998	2017	19	
146	Social Science Information Gateway (SOSIG)	Social Sciences	http://www.sosig.ac.uk/	Economics and Social Research Council (ESRC)	1996	2010	14	Closed/ Not-Updated
147	SocioSite	Social Science	http://www.pscw.uva.nl/sociosite/TOPICS/index.html	Albert Benschop	1997	2011	14	Closed/ Not-Updated
148	SSG-FI	Multi-Subject	http://www.SUB.Uni-Goettingen.de/ssgfi/index.html	``Deutsche Forschungsgemeinschaft'' (DFG)	1998	2013	15	Closed/ Not-Updated
149	Statistical Sites on the World Wide Web	Statistics	http://www.bls.gov/bls/other.htm	U.S. Bureau of Labour Statistics	2001	2017	16	
150	Subject Information Gateway in Information Technology (SIGIT)	Information Technology	http://www.itsubjectgateway.info	Department of Library and Information Science, Aligarh Muslim University	2012	2017	5	#
151	TechXtra	Engineering, Mathematics and Computing	http://www.techxtra.ac.uk/	Institute for Computer Based Learning (ICBL), Heriot Watt University	2006	2017	11	

152	The European Library: connecting knowledge (2012-2016) Formerly: Gabriel (Gateway and Bridge to Europe's National Libraries) (1997-2016)	Multi-Subject	http://www.theeuropeanlibrary.org/tel4/ Formerly http://portico.bl.uk/gabriel/en/welcome.html	The European Library	1997	2016	19	Closed/ Not-Updated
153	The Gateway: performing arts centre of Suffolk County Formerly The Gateway to 21 st Century Skills & The Gateway to Educational Materials (GEM)	Education	http://thegateway.org/	The U.S. Department of Education's National Library of Education	1998	2017	19	
154	The Math Forum Formerly The Internet Mathematics Library	Mathematics	http://mathforum.org/library/ Formerly http://forum.swarthmore.edu/library/	The Math Forum	2000	2017	17	
155	TIPTOP : The internet pilot to Physics (Transferred to Institute of Physics Website)	Physics	http://physicsweb.org/TIPTOP/	Institute of Physics	1998	2017	19	
156	UK Data Service	Social and Economic Data Resources	https://www.ukdataservice.ac.uk/	Economic & Social Research Council	2013	2017	4	
157	Vetgate(Renamed Intute which was closed on July, 2011, details of project can be found in UK Web Archive)	Animal Health	http://vetgate.ac.uk/	Jisc (UK Higher Education)	2000	2011	11	Closed/ Not-Updated
158	ViFaTec	Engineering	http://vifatec.tib.uni-hannover.de	University Library/ Technical Information Library (UB/TIB) of the University of Hanover	2001	2014	13	Closed/ Not-Updated
159	Visual Arts Data Service (VADS)	Visual Arts	http://www.vads.ac.uk/index.php	University for the Creative Arts, Farnham Campus	2008	2017	9	
160	Voice of the Shuttle	General, including, Arts, Humanities & Media Web	http://vos.ucsb.edu/	Alan Liu and a development team of English Department of University of California, Santa Barbara	1999	2017	18	
161	Wales on the Web	Multi-Subject (Welsh Studies)	http://www.walesontheweb.org	The National Library of Wales	2002	2014	12	Closed/ Not-Updated

162	World Lecture Hall	Multi-Subject Free online course materials	http://www.utexas.edu/world/lecture/index.html	Academic Computing and Instructional Technology Services of Univ. of Texas	1998	2010	12	Closed/ Not-Updated
163	World Wide Art Resources	Arts	http://wwar.com/	World Wide Arts Resources, Corp.	1999	2017	18*	Period is taken from (Kanetkar, 2014)
164	WorldWideScience.org: The global science gateway	Science Subjects (Global science gateway comprised of national and international scientific databases and portals)	http://worldwidescience.org/	Office of the Scientific and Technical Information, US Dept. of Energy & the British Library	2007	2017	10	
165	WWW Virtual Library	Multi-Subject (Catalogue of the Web)	http://vlib.org/	Tim Berners-Lee Later The Council of The WWW Virtual Library	1998	2017	19	
166	www.plastics.com Formerly Polylinks	Chemistry, Physics, Engineering	www.plastics.com Formerly http://www.polymers.com/dotcom/polylink/	WorldWideWebLabs	1997	2017	20	.

Note: # Indian Subject Gateway, * Not Displayed due to robots.txt

5. Analysis and Findings

- The Survey was conducted on 166 Subject Gateways that existed between 1996 and 2017
- 102 Subject Gateways (61.45%) were active and 64 Subject Gateways (38.55%) were closed or not updated as on 31.03.2017.
- 13 (7.83%) Subject Gateways were Indian. Out of which 12 (92.31%) were active and 1 (7.69%) was closed or not updated.
- Longest serving Active Subject Gateways across the world (21 years) are:
 - Proquest erstwhile Dialog Information Services
 - HDS: History Data Service
 - EdNA :Online, Education Network Australia;
 - Civil Rights Litigation Clearinghouse erstwhile ARGUS Clearing House
 - ChemWeb: Central to science
- Longest serving Closed Subject Gateway across the world (20 years)
 - Internet Public Library (IPL 2)
- Longest serving Active Indian Subject Gateway (12 years)
 - Library and Information Science Gateway
- Longest serving Closed Indian Subject Gateway (10 years)
 - SciGate
- Shortest serving Closed Subject Gateways (1 year)
 - MetaMatters
 - Biogate
 - BIOME
- Average age of Active Subject Gateways is 14.52 years
- As on 31.03.2017 no Subject Gateway on Jute was found

In the Table 2, subject gateways are arranged according to their age and number. Data is arranged separately on Active Subject Gateways, Closed Subject Gateways and for Total. A comparative analysis among them has been conducted based on the result of Mean, Median, Mode and Standard Deviation shown in Table 3. Age wise distribution Subject Gateways has been demonstrated through graphs and trend lines have also been shown separately for each type (i.e. Active Subject Gateways, Closed Subject Gateways and for Total).

Table 2. Analysis of 166 subject gateways across the world as on 31.03.2017

Age of Subject Gateways (Years)	Numbers of Active Subject Gateways	Numbers of Closed Subject Gateways	Total Numbers of (Active + Closed) Subject Gateways
1	0	3	3
2	3	4	7
3	1	1	2
4	5	1	7
5	4	5	8
6	4	3	7
7	2	2	4
8	3	5	8
9	2	5	7
10	5	3	8
11	3	3	6
12	2	7	9
13	1	4	5
14	2	5	6
15	1	3	5
16	7	3	10
17	10	2	12
18	8	3	11
19	22	1	23
20	12	1	13
21	5	0	5
Total	102	64	166

Table 3. Comparative analysis of statistical data among different types of subject gateways

	Active Subject Gateways	Closed Subject Gateways	(Active + Closed) Subject Gateways
Mean	14.52 Years	10.14 Years	12.83 Years
Median	17 Years	10 Years	14 Years
Mode	19 Years	12 Years	19 Years
Standard Deviation	5.82	4.999	5.92

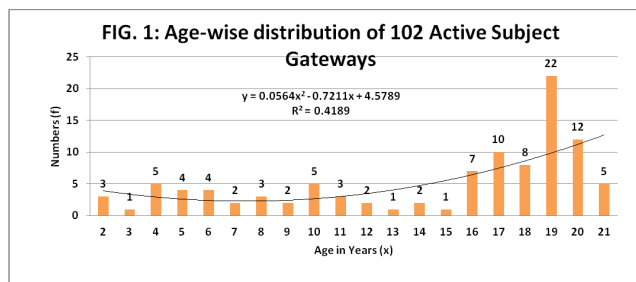


Figure 1. Age-wise distribution of 102 active subject gateways.

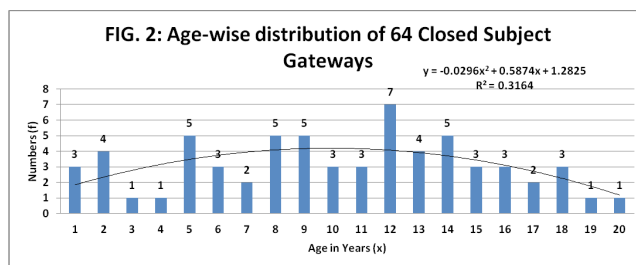


Figure 2. Age-wise distribution of 64 closed subject gateways.

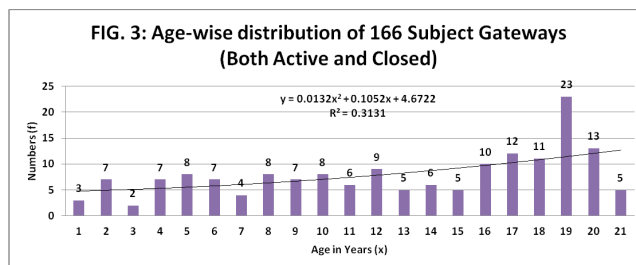


Figure 3. Age-wise distribution of 166 subject gateways (both active and closed).

In the Table 4, subject gateways have been analyzed according to subject coverage. Subjects have been clustered into four broad categories.

Table 4. Subject-wise distribution of 166 subject gateways across the world

Category	Subjects	No. of Subject Gateways (Observed)	Average Age as on 31.03.2017 (Observed)
1	Computer Science & Technology, Information Science & Technology, Science, Technology	45	12.00

2	Philosophy & Psychology, Language, Literature, Religion, Arts & Recreation	25	15.44
3	Social Sciences, History & Geography, Library Science	67	12.82
4	Multi-Subjects Gateway, General Works	29	11.38

Based on the calculation, following two hypotheses have been tested through Chi-square Test:

1st Null Hypothesis: Number of Subject Gateways is independent of the Subject Category.

Chi-Square (X^2) = 26.28916

Degree of Freedom (DF) = 3

P- Value = Probability (right-tail): 0.00008296 is significant at 5% level (Soper, 2017).

It has been observed that P- Value of the first Null Hypothesis is significant at 5% level. Hence the 1st Null

Hypothesis is rejected. Therefore, we can conclude that number of subject gateways is dependent on subject category.

2nd Null Hypothesis: Average Age of Subject Gateways is independent of Subject Category

Chi-Square (X^2) = 0.76073

Degree of Freedom (DF) = 3

P- Value = Probability (Right-Tail): 0.858835065 is not significant at 5% level (Soper, 2017).

In case of 2nd Null Hypothesis, it has been observed that P-Value is not significant at 5% level. Hence 2nd Null Hypothesis is accepted. Therefore we can conclude that average age of subject gateway is independent of subject category.

In the Table 5, details of 54 subject gateways on Jute have been given. These sites were surveyed for their (Websites/Portals) scope in disseminating Jute-related information. The URL of these sites and their broad features are mentioned in the Table 5. It has been found that most of the sites are not comprehensive and only deal with small part of Jute information.

Table 5. Review of websites/ portals (54 nos.) on jute as on 31.03.2017

Sl. No.	Type	Web Address	Features
1.	Websites (Government)	www.jutecomm.gov.in	<ul style="list-style-type: none"> Official site of the Office of the Jute Commissioner, Ministry of Textiles, Govt. of India Official facts and figures of Jute Contains policy, acts, orders, rules, statistics, Govt. notifications, information about Jute Mills etc.
		www.jute.com	<ul style="list-style-type: none"> Official site of National Jute Board, Ministry of Textiles, Govt. of India Covers few areas of Jute Absence of any kind of Jute Taxonomy Detailed information are not given Highlights only on Marketing and promotions of Jute Products Articles on Jute Geotextiles are given Import and export data on Jute is given
		www.njmc.org.in	<ul style="list-style-type: none"> Official site of National Jute Manufactures Corporation Ltd. (A Govt. of India Undertaking, Ministry of Textiles) Details of Jute are not given Only information related to branches of NJMC are given
		www.ijira.org	<ul style="list-style-type: none"> Official site of Indian Jute Industries' Research Association(IJIRA) Present R& D projects and past achievements are given Details of institutional activities are given Details of infrastructural facilities are given List of publications of IJIRA

		www.djd.dacnet.nic.in	<ul style="list-style-type: none"> • Official site of Directorate of Jute Development, Ministry of Agriculture, Govt. of India • Official agricultural statistics are given • Information about Kishan Call Centre • Guidelines about Centrally Sponsored Schemes • Publications of the Directorate are given
		www.jci.gov.in	<ul style="list-style-type: none"> • Official site of Jute Corporation of India (JCI) • Only company related information are given
		www.ijtdia.org http://www.caluniv.ac.in/academic/department/Jute.html	<ul style="list-style-type: none"> • Official site of Department of Jute and Fibre Technology, Institute of Jute Technology(IJT), Calcutta University • Information about Jute related courses offered by the Institute • Information about the publication of the institute are given • Information about the Laboratories and equipment of the Institute are given
		www.nirjaft.res.in	<ul style="list-style-type: none"> • Official site of ICAR - National Institute of Research on Jute and Allied Fibre Technology (NIRJAFT) • Information about projects are given • Information about Institute are given • Some information about Jute Fibres, Jute Data, Production, Mechanical Processing, Nonwoven, Paper Making, Composite Making, Chemical Processing, Products, Instrumentation, Only few information about jute products and processes are given
		www.texmin.nic.in or www.ministryoftextiles.gov.in	<ul style="list-style-type: none"> • Official site of Ministry of Textiles, Govt. of India • Single window information about Govt. Acts, Notification, Policies and Schemes related to textiles (Including Jute) are given • Official textile data including Jute are given
		http://agritech.tnau.ac.in/agriculture/agri_cropproduction_fibre_jute.html	<ul style="list-style-type: none"> • TNAU Agritech Portal on Agriculture gave basic information on Jute fibre
		www.crijaf.org.in	<ul style="list-style-type: none"> • Official site of ICAR – Central Research Institute for Jute and Allied Fibres (CRIJAF) • Information on different projects and research achievements are given • Information about development of different Jute variety • CRIJAF -Publications
		http://jafexpert.crijaf.icar.gov.in/	<ul style="list-style-type: none"> • JAFexpert is a web-based Expert System (ES) • It deals with Jute and allied fibre crops • This web-based Client-Server Expert System on Jute and allied fibres will provide information on management of the crops for increasing productivity to Jute growers and technicians
2.	Websites (International)	www.jute.org	<ul style="list-style-type: none"> • Official site of International Jute Study Group – An Inter-governmental organization established under UNCTD • World Jute Statistics are given • World Jute Information are given • Information resources on Jute are given • Different activities of IJSG are highlighted • International Partnership with other organization are given • Information are not classified as per Jute taxonomy • Absence of Web.2.0 features
		www.eurojute.org	<ul style="list-style-type: none"> • Official website of Association for Textile Packaging Materials and other Industrial Textiles • List of international traders on Jute and their addresses are mentioned • Latest Jute Market Report is available to the members

		http://www.pjma.com.pk/ www.motj.gov.bd	<ul style="list-style-type: none"> • Official website of Pakistan Jute Mills Association • Details of Member Mills are given • Year-wise Jute production statistics of Pakistan is given • Official website of Ministry of Textiles and Jute, Govt. of Bangladesh • Details of the Textiles and Jute Ministry are given • Links to different Jute organization of Bangladesh are given • Details of completed, existing and forthcoming projects are given
		www.bjmc.gov.bd	<ul style="list-style-type: none"> • Official website of Bangladesh Jute Mills Association • Details of the Association are given • Details of member Jute mills are given • Highlights marketing and promotion of Jute
		http://www.fao.org/economic/futurefibres/fibres/jute/en/	<ul style="list-style-type: none"> • Official site of Food and Agriculture Organization of the United Nations • Under the page of “Future Fibre” basic information of Jute plant and its fibres are given
		www.bjri.gov.bd	<ul style="list-style-type: none"> • Official website of Bangladesh Jute Research Institute (BJRI) • Details of the institute are given • Details of Jute agricultural and technical research are given
		www.juteyarn-bjsa.org	<ul style="list-style-type: none"> • Official website of Bangladesh Jute Spinners Association • Details of Jute Spinning Mills • Some information about Bangladeshi Jute are given
3.	Websites (Commercial)	www.worldjute.com	<ul style="list-style-type: none"> • Commercial website on Jute since 2002 • Detail information on Jute are given (Mostly unstructured) • Information are not classified as per Jute taxonomy • Contents are not updated • Absence of Web 2.0 features
		http://www.ijma.org/	<ul style="list-style-type: none"> • Official site of Indian Jute Mills Association(IJMA) • Statistics on Jute are given • Members contact information are given • Acts, Rules, Policies related to Jute mills in India are given
		www.glosterjute.com	<ul style="list-style-type: none"> • Commercial website of Gloster Ltd. (Formerly Gloster Jute Mills Ltd.) • Company Information including their products are given
		www.jute-india.com	<ul style="list-style-type: none"> • Commercial website of Muralidhar Ratanlal Exports Ltd.(MREL) • Details of manufacturing units and their products are given
		www.ballyjute.com	<ul style="list-style-type: none"> • Commercial website of Bally Jute Company Ltd. • Company information and the product range of the company are highlighted
		www.earthbags.com	<ul style="list-style-type: none"> • Commercial website of Camilla International • Different types of Jute bags are highlighted
		www.thejuteshop.com	<ul style="list-style-type: none"> • Commercial website of “Ballyfabs International Ltd.” of Kankaria Group • Different types of Jute bags are highlighted • Limited Web 2.0 feature
		www.ludlowjute.com	<ul style="list-style-type: none"> • Commercial website of “Ludlow Jute & Specialities Ltd.” • Different types of Jute products (both conventional & diversified) are demonstrated • Company information are given
		www.jutecottage.co.in	<ul style="list-style-type: none"> • Commercial website of “Jute Cottage” • Information about Jute products and Jute Retail Stores are given
		www.jute-lab.org	<ul style="list-style-type: none"> • Official website of “Gold of Bengal” – A NGO working Jute lab Programme between France and Bangladesh • Information about the development of a composite application by use of jute as natural fiber as an alternative to fibre-glass

	www.gangesjute.com	<ul style="list-style-type: none"> Commercial website of Ganges Jute Pvt. Ltd. Different Jute products of the company are showcased
	www.jute-world.com	<ul style="list-style-type: none"> Commercial website of AI Champdany Industries Ltd. Information about different Jute products are given Limited Web 2.0 feature
	www.birlacorporation.com	<ul style="list-style-type: none"> Commercial website of Birla Corporation Company related information and Jute products are highlighted
	www.jutepalace.in	<ul style="list-style-type: none"> Commercial website of Jute Palace Information about Jute Bags and Jute Fabrics are given
	www.groupcheviot.net	<ul style="list-style-type: none"> Commercial website of Cheviot Company Ltd. Information about their production (i.e. Jute Yarn, Jute Fabrics, Jute Bags, Sacking Bags, Jute Cloth) are given
	www.himanshujutefab.com	<ul style="list-style-type: none"> Commercial website of Himanshu Jute Fab Information about different Jute products are given
	www.steerworld.com	<ul style="list-style-type: none"> Commercial website of STEER Information about Jute filled thermoplastics are given
	www.purejute.com	<ul style="list-style-type: none"> Commercial website of M/s Pure Jute Information about environment friendly Jute products are given
	www.kankariagroup.com/jute.aspx	<ul style="list-style-type: none"> Commercial website of Kankaria Group Different Jute products of their Jute Business Division are highlighted
	www.craftsvilla.com	<ul style="list-style-type: none"> It is a marketing website of Indian Handicrafts meant for global markets named craftsvilla.com Different Jute bags are highlighted for selling
	www.hkjalangroup.in	<ul style="list-style-type: none"> Contain information about Jute division of Shree Hanuman Jute Mills Pvt. Ltd. Company profile is given
	www.paramjute.com	<ul style="list-style-type: none"> Commercial website of Param Jute Products for selling of different products including different Jute bags Supports Web 2.0 features (i.e. Blog Posts)
	www.eiccltd.com	<ul style="list-style-type: none"> Commercial website of East India Commercial Co. Ltd. (Consists of Three Jute Mills of East India Group) Contain some information about Jute processing and Jute bags
	www.kamarhatty.com	<ul style="list-style-type: none"> The Commercial website of Kamarhatty Company Ltd. Contain information about their Jute products
	www.ecojuteindia.com	<ul style="list-style-type: none"> The Commercial website of Eco Jute Pvt. Ltd. of Lohariwal Family Showcased different commercial Jute bags
	www.heyjute.com	<ul style="list-style-type: none"> Commercial website of “HeyJute” Demonstrates Jute Geotextiles products Demonstrate packaging and promotional Jute products
	www.cheviotjutebags.com	<ul style="list-style-type: none"> Marketing website of Cheviot Company Ltd. Different types of Jute bags and their description are given
	www.juteemporium.com	<ul style="list-style-type: none"> History of Jute after independence are described Different Jute products are highlighted
	http://www.wildfibres.co.uk/html/jute.html	<ul style="list-style-type: none"> Commercial site named “Wild Fibres” Under the heading “Plant fibre” basic information about Jute plant and its fibre is given

	http://www.mesh.org.in/section540476_690994.html	<ul style="list-style-type: none"> • Official site of MESH (Maximising Employment to Serve the Handicapped) is an Indian organisation practicing Fair Trade with disabled and leprosy affected crafts artisans, for their rehabilitation. • Demonstrates different Jute bags
	http://www.westelm.com/shop/rugs-windows/natural-rugs/	<ul style="list-style-type: none"> • “west elm” is a branch of Williams–Sonoma, Inc, • Different Jute Rugs are shown
	http://www.extraweave.com/product-category/jute/	<ul style="list-style-type: none"> • Official site of Extra Weave Pvt. Ltd. (EWPL) • Different Jute Rugs and Jute Carpets are shown
	http://gojute.co.uk/about-us/jute-juco-and-cotton/	Official site of Go Jute International Demonstrates Jute and Juco Bags, Jute Sheets and Jute Fabric Roles Supports Web 2.0 features
	www.mjindia.com	Commercial website of EMJAY Group consists of different Jute Mills Demonstrates different Jute Products including Geotextiles

In Table 6, comparative analysis among contemporary Databases, Subject Gateways and Information Systems on Jute is shown. Their Name, URL, Developer Name, Type of Information, Coverage, Cost, Search Method, User Type and Name of the

Funding Agency are mentioned in the Table 6. Differences between ‘Jute-Gate’ and other Jute related databases, subject gateways and information systems can be ascertained through this analysis in order to prove its uniqueness.

Table 6. Comparative analysis of jute-gate with the other databases and information systems on jute

Sl. No.	Name of the Database/ In-formation system/ Subject Gateway	Developed & Maintained by	Type of Information	Jute Related information	Cost	Search Method	User type	Remarks
1	AGRICOLA (AGRICultural OnLine Access) https://agricola.nal.usda.gov/	United States Department of Agriculture, National Agricultural Library	Bibliographic Data and abstract	Bibliographic Database containing data about 290 books & 1220 Articles on Jute	Fee basis through Commercial vendors and it is free for personal use	Keyword	Any	Funded by United States Department of Agriculture, National Agricultural Library
2	PubAg https://pubag.nal.usda.gov	United States Department of Agriculture, National Agricultural Library.	Search Engine for Published Agricultural Research	291 citations and 5 full text article on Jute	Free	Keyword	Any	Funded by United States Department of Agriculture, National Agricultural Library.
3	AGRIS http://agris.fao.org/agris-search/index.do	Food and Agriculture Organization of the United Nations	Bibliographic Data with linked web resource	3642 articles retrieved on Jute	Free	Keyword	Any	Funded by FAO
4	AGROVOC http://aims.fao.org/standards/agrovoc/access-agrovoc	Food and Agriculture Organization of the United Nations	Multilingual thesaurus / Controlled Vocabulary on Agriculture	Not Applicable	Free	Keyword	Scientist, Teachers, Students	Funded by FAO

5	Arca-Net http://www.arca-net.info/index.htm	SAVE Foundation	A travelling guide (Relevant Web Pages) to livestock breeds and rare cultivated plants and products	Not Applicable	Free	Animal Species, Plants or Product Category	Travel-ers, Veterinarian, Farmers, Teachers, Students	Funded by SAVE Foundation & Margarethe and Rudolf Gsell Foundation, Basel
6	Destatalk http://des-tatalk.com/	Destatalk Global	Online information portal on agriculture and agribusiness	Not Available	Free	Search-ing facility is not available	Farmers	Funded by Destatalk Global
7	FAOSTAT (Food and Agriculture Organization Corporate Statistical Database) http://www.fao.org/faostat/en/#home	Statistics Division of the Food and Agricultural Organization of the United Nations	Filtered Statistical information as per Choice on food and agriculture data for over 245 countries from 1961 to the most recent years (i.e.2014)	FAO Statistical data available on Area harvested, Yield, Production Quantity and Seeds	Free	Search based on Country, Element, Item, Year	Statistician, Policy Makers, Govt Officials, Industrialists, etc	Funded by Food and Agriculture Organization
8	NASD (National Agricultural Safety Database) http://nasdonline.org/	United States National Institute for Occupational Safety and Health (NIOSH)	Information related to occupational hazards associated with agriculture-related injuries, deaths and illnesses, it also provide prevention information, dissemination of information related to safety and health issues in agricultural operations,	NIOSH Related safety documents retrieved from the database	Free	Keyword	Workers and managers in agriculture sector	Funded by NIOSH and U.S. Dept. of Agriculture
9	SADB (Syrian Agriculture Database) http://www.agriportal.gov.sy/public/sadb.htm	National Agricultural Policy Centre (NAPC)	data on areas such as trade, national economic data, census, inputs and outputs, production, natural resources, fertilizers, machinery etc.	Not Available	Free	NA	NA	Funded by NAPC
10	Krishi (ICAR Research Data Repository for Knowledge Management) http://krishi.icar.gov.in/	ICAR (Indian Council of Agricultural Research)	A centralized data repository system of ICAR consisting of Technology and Data generated through Experiments/ Surveys/ Observational studies, Geo-spatial data, Publications, Learning Resources etc.	Repository Documents on Jute are available	Freely available to Member Institutions of ICAR	Keyword	Scientists, Teachers and Students	Funded by ICAR

11	CeRA (Consortium for e-Resources in Agriculture) http://cera.iari.res.in/index.php/en/	Directorate of Knowledge Management in Agriculture, Indian Council of Agricultural Research	e-Journal articles from more than 2900 journals	Jute related articles are available	I.P. Based access available only to the members of CeRA	Keyword	Scientists and Teachers	Funded by ICAR
12	World Textiles -Research Database https://www.ebscohost.com/academic/world-textiles	EBSCO Industries	Bibliographic data and Abstract of the articles on Textiles	Jute related Bibliographic data and Abstracts are available	Subscription based access	Key-words	Scientists, technologists and Teachers	Funded by EBSCO Industries
13	Textile Technology Complete- research Database https://www.ebscohost.com/academic/textile-technology-complete	EBSCO Industries	Bibliographic data, Abstract and Full Text of the articles on Textile Production and Processes	Jute related Bibliographic data, Abstracts and Full Text articles on Jute are available	Subscription based access	Key-words	Scientists, technologists and Teachers	Funded by EBSCO Industries
14	JAFexpert http://jafexpert.crijaf.icar.gov.in/	ICAR-CRIJAF	A web based expert system to emulate functions of human experts on Jute and Allied Fibres	Information related to Jute Cultivation is given	Free	Menu Driven	Jute Growers and Technicians	Funded by CRIJAF
15	Jute-Gate: A Prototype Subject Gateway on Jute Information	Individual Effort	Relevant Web pages based on search Topic with Full Text Open Source Document and other linked resources with references from which contents of the web pages are taken	All kinds of Jute related information are available	Free	Keywords, Menu Driven Taxonomy, Other Search Engine and Subject Gateways	All stake holders of Jute irrespective of their knowledge level	Built with Open source Content Management Software with no external funding ; Supports Web 2.0 features

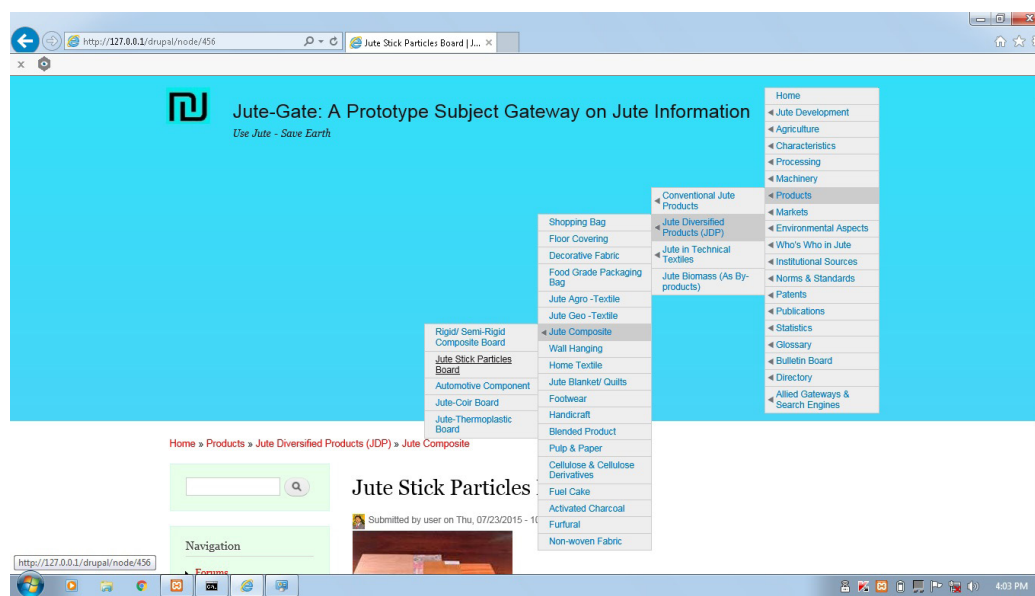


Figure 4. Screen shot of jute-gate.

6. Features of Jute-Gate

Though Jute-Gate was developed by individual effort, it has some definite advantages over other systems. Its contents were structured based on Jute Taxonomy developed for the purpose with the flexibility to add new web pages under a particular Jute term or to be able to shift a particular page from one module to another module. Contents of the web pages have been written by a panel of subject experts. Every content page has a basic write up, illustration and web links to similar web documents. Above all it has references cited at the end of every content page to demonstrate content's authenticity. As Jute-Gate supports Web 2.0 features, users have the flexibility to post any comments, questions or suggestion on any particular topic and they can also start new discussion forum on any topic of their choice. Jute-Gate also provides regular updates to registered users through RSS feed. User can search using keywords through Jute search engine. Moreover, they have the flexibility to search directly through menu driven Jute Taxonomy. They can also search allied areas of Jute by other related search engines and related subject gateways incorporated into Jute-Gate to enhance its coverage. Jute-Gate has been developed in such a way as to cater to all kinds of users irrespective of their knowledge level.

7. Conclusion

Review of published literature, analysis of subject gateways around the world, examination of websites on

Jute and finally comparative analysis of Jute databases and information systems with 'Jute-gate' helped in development of the prototype subject gateway on Jute. After analyzing the subject it is concluded that at present there is no dedicated subject gateway or database or information system on Jute fibre. Thus the prototype gateway reported in this paper is a pioneering effort.

8. References

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