

Using Google Analytics to Explore ETDs Use

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ABSTRACT

This poster presents preliminary Google Analytics usage data for a collection of electronic theses and dissertations (ETDs). Correlation of page views with page type, user location, and source (referring link) shows that, during the study period, most in-state users found the collection via internal sources (University links) and viewed mostly home and navigation pages, while most out-of-state users found the collection via external sources (search engines, databases) and viewed mostly bibliographic information pages. Nearly all of those who viewed actual ETDs were out-of-state “direct” users who may have bookmarked the collection during a previous visit.

Categories and Subject Descriptors

H.3.7 [Information Storage and Retrieval]: Digital Libraries – dissemination, user issues

General Terms

Management, Measurement, Human Factors

Keywords

ETDs; evaluation; Google Analytics; usage; web analytics; web metrics.

1. INTRODUCTION

There has been little published research on usage patterns for theses and dissertations. In 1995, surveys done at Oregon State University indicated that graduate students were the primary user of theses and dissertations held locally and that they were using these for general research and for research for their own theses and dissertations [3]. The transition to electronic versions should make these documents more accessible to a wider audience [1].

One of the few usage studies available for an ETDs collection is from the Korea Institute of Science and Technology Information, where researchers examined transaction logs and found that 20% of their users were located outside of Korea [4]. Web metrics

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tools may make it easier for librarians to analyze usage patterns for these collections [2]. This poster presents preliminary Google Analytics usage data for Auburn University’s ETDs collection.

2. METHODOLOGY

2.1 Description of AUETDs Collection

The Auburn University Electronic Theses and Dissertations (AUETDs) collection is a collaboration between the Graduate School at Auburn University (GSAU) and the Auburn University Libraries (AUL). All GSAU students are required to deposit their approved theses or dissertations into the dSpace repository (replacing the earlier requirement for two bound copies). As of January 31, 2013, AUETDs contained over 3,400 theses and dissertations in pdf format. Although students are allowed to place an access embargo on their documents for a period of up to five years, the system default is public access.

There are many avenues of access both to the AUETDs repository itself and to the individual documents in it. GSAU and AUL provide multiple links to the repository from their respective Web sites, as do some individual Colleges and departments within Auburn University. Some of the latter also provide direct links to their own students' individual theses and dissertations. The University Web site’s search function can also be used to locate the repository and its contents. All theses and dissertations are included in AUL’s Voyager and VuFind catalogs. Documents in the AUETD repository are also indexed by commercial search engines, by some scholarly databases, and by the Networked Digital Library of Theses and Dissertations (NDLTD) and Open Access Theses and Dissertations (OATD).

2.2 Data Collection

The structure of dSpace and its public interface results in different types of URLs for different page types (home page, search and advanced search pages, browse pages, bibliographic pages for individual items, pdf viewing pages, etc.). Google Analytics tracking code has been inserted into the AUETDs page template, and page views for each type can be counted.

Data were collected for a period of one year (13 January 2012 – 12 January 2013). Variables included page URL, user location, and source (referring link). Data were exported as comma-separated values text files which were opened in Excel for processing.

3. RESULTS AND DISCUSSION

3.1 AUETDs User Location vs. Page Type

Table 1. Page views for AUETDs: user location correlated with page type (13 January 2012 – 12 January 2013).

User location	Home page	Nav. pages	Bib. pages	PDF views
Local	8,610	42,833	27,954	4
Ala. (non-local)	1,443	8,391	3,934	1
US (non-Ala.)	3,569	18,764	38,337	48
World (non-US)	2,293	19,540	46,488	97

Local: Users with City = Auburn (Ala.) or Opelika (Ala.); Ala. (non-local): Users with Region = Alabama minus Local users; US (non-Ala.): Users with Country = United States minus Alabama users; World (non-US) = All users minus United States users. Nav. pages: Navigation pages (browse, search, and advanced search); Bib. pages: Bibliographic information pages for individual items (brief and full metadata); PDF views: Views in the browser window only (right-click downloads could not be counted at this time). Navigation pages constituted well over half of the pages viewed by in-state users, while bibliographic information pages for individual ETDs were only about a third of the pages viewed. These proportions were reversed for out-of-state users. Over 95% of the PDF views were from out-of-state users.

3.2 AUETDs User Location vs. Source

Table 2. Page views for AUETDs: user location correlated with source (referring link) (13 January 2012 – 12 January 2013).

User location	Direct	AU sources	Data-bases	Search engines	Other
Local	17,627	65,909	79	15,510	196
Ala. (non-local)	1,957	8,421	47	5,030	264
US (non-Ala.)	7,244	12,884	2,799	40,994	1,752
World (non-US)	12,870	4,063	4,834	46,211	3,111

User location designations are the same as for Table 1. Direct: users who access the repository via a bookmark or by typing the URL directly into a browser; AU sources: all GSAU and AUL links and links from AU Colleges and departments; Databases: Google Scholar, ETD directories such as NDLTD, WorldCat, etc.; Search engines: commercial search engines including Google, Yahoo!, Bing, etc. Auburn University sources were the referring links for the majority of pages viewed by in-state users but

significantly fewer for out-of-state users. The proportions were reversed for search engines and scholarly databases.

3.3 AUETDs Page Type vs. Source

Table 3. Page views for AUETDs: page type correlated with source (referring link) (13 January 2012 – 12 January 2013).

Page type	Direct	AU sources	Data-bases	Search engines	Other
Home page	3,316	8,102	91	3,972	434
Nav. pages	13,841	45,628	732	27,300	2,027
Bib. info. pages	11,248	26,078	6,856	70,073	2,458
PDF view pages	130	0	1	15	3

Page type designations are the same as those for Table 1, while source designations are the same as those for Table 2. Users who came to the repository via University links viewed home and navigation pages more than bibliographic information pages. The proportions are reversed for users who came via databases and search engines. Over 85% of users viewing ETD pdfs were “direct” users, that is, they came via a bookmark or by typing or pasting the URL into their browsers. Presumably some or all of these found the collection earlier and bookmarked it for future use.

4. CONCLUSIONS

During the study period, most in-state users found the collection via internal sources (University links) and viewed mostly home and navigation pages, while most out-of-state users found the collection via external sources (search engines, databases) and viewed mostly bibliographic information pages. Nearly all of those who viewed actual ETDs were out-of-state “direct” users who may have bookmarked the collection during a previous visit.

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