Mind the Google gap: How to ensure that researchers adopt the latest tools and techniques

Oliver Renn, PhD, ETH Zürich, Chemistry | Biology | Pharmacy Information Center

SpringerNature Meet the Experts Webinar 23.3.2017
Welcome

The Chemistry | Biology | Pharmacy Information Center is a joint facility of both the Department of Chemistry and Applied Biosciences (D-CHAB) and the Department of Biology (D-BIOL). It supports

- Bachelor and Master students
- PhD students and Post-Docs
- Senior scientists and Professors

from those two departments as well as from the Department of Materials regarding all questions on scientific information as well as information and knowledge management.

The Information Center acts as a “scientific information” skill center within a diverse teaching and research environment. Thus, teaching is also our major task. The curriculum the Information Center has developed ensures that students acquire the necessary skills in information management and retrieval as part of their education in chemistry, life sciences and materials science. This includes the capacity to judge the relevancy of scientific information as well as the development of knowledge management expertise.

In addition, information consultants who are chemists, biologists or pharmacists and information scientists support researchers and lecturers and also scout and evaluate new information solutions. A team of library professionals complements their work.

And last but not least, the Information Center is also a place to learn and study, and a library with tailored subject-specific services.
The gap, why and what it is and how to possibly bridge it.
What publishers and information solution providers provide:

>25'000 journals, >2000 Databases, >>10'000 Tools

... and what users use
23.3.2017 Meet the Expert Webinar: Oliver Renn
23.3.2017 Meet the Expert Webinar: Oliver Renn
Meet the Expert Webinar: Oliver Renn
Changing research workflows
Opportunities for researchers, librarians and publishers

Bianca Kramer & Jeroen Bosman
SpringerNature webinar, February 2, 2017

@MsPhelps
@jeroenbosman

(except logo's)
20,663 respondents

- Discipline(s)
  - Social Sciences & Economics
  - Life Sciences
  - Medicine
  - Engineering & Technology
  - Arts & Humanities
  - Physical Sciences
  - Law

- Research role
  - Professor / Associate professor / Assistant Professor
  - PhD student
  - Postdoc
  - Bachelor/Master student
  - Librarian
  - Industry / Government
  - Other

- Year of first scholarly publication
  - from 2011 to 2016
  - from 2006 to 2010
  - from 1991 to 2000
  - I haven't published (yet)
  - before 1991
  - from 2001 to 2006
DATA NOTE

Innovations in scholarly communication - global survey on research tool usage [version 1; referees: 2 approved]

Bianca Kramer, Jeroen Bosman
Utrecht University Library, Utrecht, Netherlands


Abstract
Many new websites and online tools have come into existence to support scholarly communication in all phases of the research workflow. To what extent researchers are using these and more traditional tools has been largely unknown. This 2015-2016 survey aimed to fill that gap. Its results may help decision making by stakeholders supporting researchers and may also help researchers wishing to reflect on their own online workflows. In addition, information on tools usage can inform studies of changing research workflows. The online survey employed an open, non-probability sample. A largely self-selected group of 20,663 researchers, librarians, editors, publishers and other groups involved in research took the survey, which was available in seven languages. The survey was open from May 10, 2015 to February 10, 2016. It captured information on tool usage for 17 research activities, stance towards open access and open science, and expectations of the most important development in scholarly communication. Respondents’ demographics included research roles, country of affiliation, research discipline and year of first publication.
A model of the research workflow

- **preparation**
  - funding & project management
  - discovery: search information & getting access
  - analysis: data collection, experimenting & analyzing
  - writing: including reference management & citing
  - publication: also including sharing papers and data sets
  - outreach: incl. communication with the general public
  - assessment: including being assessed/evaluated
Changing research workflows
23.3.2017 Meet the Expert Webinar: Oliver Renn 18
This is the gap! And it is huge!
Poll 1
Mind the Gap!

But how?
The challenge: Bridging the Google gap

Requirements

> Scouting

> Qualification

> Translation
Infocus is our “translational” engine
Poll 2
The challenge: Bridging the Google gap

Our first attempt:

A new A-to-Z List – which is no longer an A-Z List
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Chemistry | Biology | Pharmacy Information Center
WE WANT YOU TO WORK SMARTER
Integrating information solutions into learning, teaching and research.

Databases & Tools
Find databases and useful tools:
- Databases
- Tools

News

Coffee Lectures: The 10th series!
Published: 08.11.2016
During Advent we celebrate the 10th Coffee Lecture series.

Events

Quick and easy: Screencasts and videos made on the Mac (No. 47)
- Type of Event: Coffee Lecture
- Language: English, Deutsch
- Time: 12:00
- Place: HCI, Seminar Room G3

Extended opening hours during the examination period January/February 2017

Newsletter Infozine: Subscribe for free
Your e-mail adress
> subscribe
Databases & Tools

Databases

Find the right database by using search terms and by selecting research areas and questions:

Search Terms

Discipline

Chemistry

Biological Sciences

Pharmaceutical Sciences

Materials Science

Research Areas/Question

Physical Properties | Drugs
Chemical Properties | Publication on specific topics
(Sub) Structure Search | Drug Interactions
Toxicity | Genes and Sequences
Patents | Authors
Proteins and Sequences | Suppliers
Spectroscopic Data | Taxonomy

81 Results

Filter by type of database

AccessEngineering

AccessEngineering is an engineering reference tool that provides seamless access to a collection of authoritative, regularly updated engineering reference information.

Antibodies-online.com

Searching and ordering of antibodies, immunokits and other substances.
Databases & Tools

Databases

Find the right database by using search terms and by selecting research areas and questions:

Search Terms

Discipline
Chemistry
Biological Sciences
Pharmaceutical Sciences
Materials Science

Research Areas/Question

Physical Properties | Drugs
Chemical Properties | Publication on specific topics
(G) Structure Search | Drug Interactions
Toxicity | Genes and Sequences
Patents | Authors
Proteins and Sequences | Suppliers
Spectroscopic Data | Taxonomy

81 Results

Special Database
Encyclopedias & Dictionaries
Pharmacopoeia
Gateways
Literature Databases
Chemical Catalog
Methods/Current Protocols

Filter by type of database

AccessEngineering

AccessEngineering is an engineering reference tool that provides seamless access to a collection of authoritative, regularly updated engineering reference information.
### Search Terms

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Biopharmacy</th>
<th>Clinical Chemistry</th>
<th>Drug Discovery</th>
<th>Drug Development</th>
<th>Drug Effects</th>
<th>Manufacturing</th>
<th>Pharmaceutical Analytics</th>
<th>Pharmaceutical Biotechnology</th>
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</table>

### Research Areas/Question

- Drugs
  - Drug Interactions
- Drugs in Development
  - Authors
- Bibliographic Information
  - Patents
- Specific Alerts
  - Publication on specific topics
- Toxicity
  - Clinical Studies
- Drug Targets
  - Suppliers
- Chemical Properties
  - Proteins and Sequences

### 22 Results

- Special Database
- Encyclopedias & Dictionaries
- Pharmacopoeia
- Gateways
- Literature Databases
- Chemical Catalog
- Methods/Current Protocols

### Filter by type of database

- Arzneimittelkompendium der Schweiz

  Swiss Reference Work by Documed, since 1979 the leading source for approved drugs in Switzerland, acknowledged both by Swissmedic and the pharmaceutical industry.

### BIOSIS Previews

BIOSIS Previews combines journal content from Biological Abstracts® with supplemental, non-journal coverage from Biological Abstracts/BIAM® (Reports, Reviews, Meetings). Specialized indexing helps you discover more accurate, context-sensitive results.

### British Pharmacopoeia
Databases & Tools

Tools

Find the right database by using search terms and by selecting research areas and questions:

Search Terms

Research Areas/Question

6 Results

Filter by tool

ACS ChemWorx
A free research management, collaboration and publishing tool from the American Chemical Society.

Citavi
Citavi is a reference management software package, used to manage bibliographies and references when writing essays and articles.
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Poll 3
The challenge: Bridging the Google gap

Our second attempt:

“Push” instead of “Pull”

More interaction!
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- Knowledge Discovery
  - Text Mining
  - Data Mining
- Software, Tools
- Reference Management Software
- Specialized Databases
- Chemistry Databases
- Literature Databases
- Journal Articles
- Books
- Scripts

Semester
What we are not doing

How to use the Online Public Access Catalog (OPAC)

Information Literacy 1 – Search and Find E-Books and E-Journals

Being prepared is half the battle: Getting started with studies will be easier for you if you know how you find important literature - we show you how it works! In our introductory course you will learn what the university library offers in addition to printed books - we provide you with eBooks, eJournals, specialised databases and a range of services to help you in your studies and working routine from day one.

Topics
You’ll learn how to ...

- analyse bibliographies
- search for literature in the Online Catalogue OPAC
- use printed and electronic media from our library
- order media via interlibrary loan
- tips for Internet search

Course Details

Upcoming dates
- Monday, 10. April 2017 - 10:00 to 12:00
- Tuesday, 30. May 2017 - 14:00 to 16:30

Webinar
What we are not doing

How to use the Online Public Access Catalog (OPAC)

Information literacy 1 – Search and Find E-Books and E-Journals

Being prepared is half the battle: Getting started with studies will be easier for you if you know how you find important literature - we show you how it works! In our introductory course you will learn what the university library offers in addition to printed books - we provide you with eBooks, eJournals, specialist databases and a range of services to help you in your studies and working routine from home.

Topics
You’ll learn how to ...

- analyse bibliographies
- search for literature in the Online Catalogue OPAC
- use printed and electronic media from our library
- order media via interlibrary loan
- tips for Internet search

Course Details

Upcoming dates:

- Monday, 10. April 2017 - 10:00 to 12:00
- Tuesday, 30. May 2017 - 14:00 to 16:30

Webinar
F2F Format 1: Coffee Lectures

- 10 min at max
- Coffee or tea
- entertaining (!)
- Slide desks are not available respectively live presentation
- More than 50 topics
- Attendees receive a Collector’s Card
- Collectors Card Album
- You need to advertise through many channels
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23.3.2017
Coffee Lectures

The 10. Series

Tuesday to Thursday, 1:00 pm, HCI G2 – Free coffee or tea!

Tuesday, 6.12.2016
Science of Synthesis (No. 23)
Learn about Science of Synthesis (SoS), the only chemistry information that does not link to papers only but has the full-text of the synthetic methods – with didactic reviews by experts.
Presenter: Dr. Zojica Dolenc

Wednesday, 7.12.2016
3D images with PyMOL in publication quality (No. 54)
With PyMOL, you can create stunning 3D images of biomolecules. We show you the tricks, how to make these graphics in no time, and how to export them in the best quality for your publications, posters, and presentations.
Presenter: Dr. Joachim Schnabl

Thursday, 8.12.2016
Get to know KnowItAll: A database with over 2 million spectra (No. 6)
Are you searching for the IR spectrum of your compound? Would you like to identify your ‘NMR spectrum using chemical shifts? Do you think your spectrum is a composite of multiple components?
Presenter: Dr. Zojica Dolenc

Each Lecture 10 min only!

Tuesday, 13.12.2016
ORCID (No. 55)
Why each researcher should have an ORCID, an Open Researcher and Contributor ID and how to easily get one.
Presenter: Dr. Oliver Reina

ChemSpider (No. 26)
There is not only Reaxys and SciFinder. ChemSpider is a freely available database with nearly 60 million structures, freely provided by the British Royal Society of Chemistry.
Presenter: Dr. Joachim Schnabl

Thursday, 15.12.2016
Substructure searches and data queries in the new Reaxys (No. 19)
A new release of Reaxys with a completely redesigned user interface has been launched in October 2016. We will present the new drag-and-drop query builder interface and demonstrate how to set up substructure queries.
Presenter: Dr. Zojica Dolenc

Grow and complete your collection of Coffee Lecture Collector’s Cards!

23.3.2017 Meet the Expert Webinar: Oliver Renn

Thirsty for coffee? Thirsty for knowledge? Get both. For free.

Coffee Lectures

Tuesdays, Wednesdays and Thursdays
HCI G2 | 13:00 - 13:10 | 10 minutes only
www.infozentrum.ethz.ch
Coffee Lectures
The 8. Series

Tuesday, Wednesday, Thursday, 1:00 pm, HCI G2

Thursday, 25.2.2016
ChemDraw – for beginners and professionals (No. 49)
Do you draw molecules for presentations, posters, or publications? We’ll introduce you to the capabilities of ChemDraw: learn how to draw perfect structures, reaction schemes and much more faster than before.
Presenter: Dr. Joachim Schnabl

Tuesday, 1.3.2016
Perinorm – the world's leading database of standards (No. 50)
Perinorm offers targeted access to the information on standards and technical regulations from 24 countries. Data are updated monthly.
Presenter: Dr. Jozeca Dolenc

Wednesday, 2.3.2016
Downloading PDFs of articles with reasonable naming (No. 5)
You are downloading articles from journals and have to deal with numerous PDFs with cryptic names on your desktop? There is a solution.
Presenter: Dr. Oliver Ren

Grow and complete your collection of Coffee Lecture Collector's Cards!

Thursday, 3.3.2016
ISSUU – getting publications online easily (No. 51)
With ISSUU, you are a publisher within minutes. A few clicks and your publication is online, joining 25 million titles. The basic version is free, including usage stats.
Presenter: Dr. Oliver Ren

Tuesday, 8.3.2016
What's your h-index? (No. 3)
Would you like to know how big your impact factor is, how large your h-index is – or that of your peers?
Presenter: Dr. Oliver Ren

Wednesday, 9.3.2016
Google's hidden tools (No. 34)
Everybody is using Google. Google is, however, much more than Google Scholar. Maybe you are aware of Google Translate or Google Trends. We are sure you have not heard of the many other hidden Google tools.
Presenter: Dr. Oliver Ren

Thursday, 10.3.2016
Mendeley: A seamless software for managing citations and PDF files. A real-life example. (No. 8)
Mendeley is an alternative to the well-known EndNote citation management system.
Presenter: Lea Betschart, Institute of Pharmaceutical Sciences

Coffee Lectures
The 9. Series

Tuesday to Thursday, 1:00 pm, HCI G2 – Free coffee or tea!

Tuesday, 14.6.2016
Using the full power of Scopus (No. 17)
Scopus offers many opportunities to expand your searches, to make them more specific and to analyze results in several ways. We’ll show you when it is worth to do additional clicks.
Presenter: Dr. Oliver Ren

Wednesday, 15.6.2016
Kudos (No. 43)
Do you want to spread out words about your paper not only through the journal in which you have published? Kudos helps researchers explain, enrich and share their publications for greater reach, impact – especially for the D-CHAB members.
Presenter: Dr. Joachim Schnabl

Thursday, 16.6.2016
Doodle the best slot for a meeting! (No. 53)
Getting to the optimal date for a meeting or doing a survey is easy to do online by using a Swiss software: Doodle. At ETH Zurich even the Premium version is available. For surveys we present additionally a free online survey builder SurveyMonkey, which allows you to also graphically analyze the results.
Presenter: Dr. Oliver Ren

Tuesday, 21.6.2016
Stay up-to-date with journal eTocs and Google Alerts (No. 4)
Almost every research area has its core journals which contain the contents you should know, preferably by setting up e-mail alerts to receive information on new issues.
Presenter: Dr. Oliver Ren

Wednesday, 22.6.2016
ResearchGate (No. 14)
ResearchGate is a combination of Facebook, Twitter and LinkedIn for scientists, with 7 million members, >80 million abstracts and >19 million full texts. We’ll show you the most important features.
Presenter: Dr. Oliver Ren

Thursday, 23.6.2016
3D images with PyMol in publication quality (No. 54)
PyMol is a 3D-graphics software for biomolecules. Different representation modes allow you to display individualized models of proteins, DNA and RNA molecules. Images can be rendered in high quality for publications.
Presenter: Dr. Joachim Schnabl

Import Coffee Lectures directly into your calendar:
http://www.infozentrum.ethz.ch/en-whats-up/events/
Meet the Expert Webinar: Oliver Renn
23.3.2017
Meet the Expert Webinar:
Oliver Renn
F2F Format 2: Research Group Menus Card Seminars

- The „blue“ menu card with starters, main courses and desserts as well as specials is for chemists.
- The „green“ menu card is for life sciences.
- Menus are tailored towards the research area and topics of the group.
- The exact Menus is pre-discussed with representative of the group.
- Duration: 45 to 90 min max.
- Advertisement (!)
23.3.2017

Meet the Expert Webinar: Oliver Renn
Meet the Expert Webinar:
Oliver Renn

Starters

Mix and match:
Choose among the following 10-minute starters. Starters labeled with ☺ can also be served as a main course. We serve also multiple starters.

- Scopus: Stay tuned with topic alerts
  By setting up alerts in Scopus you stay informed about the developments in your research area

- Stay up-to-date with journal eTocs and, yes, also Google Alerts
  Stay tuned to the contents of the core journals in your field

- Full text search in Google Books
  Do you really have time to read books to find out whether a particular topic is covered in the text?

- What's your h-index?
  Would you like to know your h-index – or those of your peers?

- Downloading PDFs of articles with reasonable naming
  Do you know how to automatically download journal articles without cryptic names?

- Utopia
  A free PDF reader that provides direct links to scientific databases

- Mendeley: Software not only for managing citations and PDF files ☺
  Mendeley is an alternative to the well-known EndNote and much more

- Papers – iTunes for publications ☺
  Are you a fan of iTunes? Similarly, Papers can help you manage your collections of PDFs.

- Visit the Engineering Village ☺
  Introduction to a powerful search platform in the field of engineering

- ResearchGate ☺
  ResearchGate is a combination of Facebook, Twitter and LinkedIn for scientists

- Where to look up or confirm publication titles and abbreviations
  CASCI and find e Journal are two resources to quickly search for publication information

- Drugbase
  Access Friedler, Hages, Index Nominum and Handbook of Injectable Drugs

- MedicinesComplete
  Access Clarke’s Analysis of Drugs and Poisons, Martindale – Pharmaceutical Encyclopedia,
  Stockley’s Herbal Medicines: Interactions through the Medicines Complete platform

- Open Access and Copyright ☺
  Learn about the basics of Open Access and get your copyright related questions answered

- ChemSpider ☺
  ChemSpider is a freely available database from the Royal Society of Chemistry with more than 30 million compounds

Chemists de Cuisine:
Dr. Jozica Dolenc, Dr. Oliver Renn and guest chefs

How it works:
1. Select from the menu card
2. Discuss the menu with us

Please book your group training event in time. Capacities are limited. For a reservation, please contact remm@chem.ethz.ch

www.infozentrum.ethz.ch
Main Courses

Mix and match:
Choose among the following ca. 20-minute topics – with any combination of starters.
Main courses labeled with ☑ can also be served as starters.

Using the full power of Scopus
Scopus offers many opportunities to expand your searches, to make them more specific and to analyze results in several ways. We will show you when it is worth to make additional clicks.

Web of Science reloaded
Special topics training based on your request

Reaxys for advanced users
Special topics training based on your request

SciFinder for advanced users
Special topics training based on your request

Science of Synthesis
Get to know the database of methodologies for synthesis of organic compounds

Encyclopedia of reagents for organic synthesis (e-EROS)
A systematic coverage of reagents and catalysts used in organic synthesis

Get to know KnowItAll: A database with over 1.4 million spectra
How to access various spectra of organic and inorganic compounds

WebCSD – the online portal to the Cambridge Structural Database
Learn how to search for small molecule organic and metal organic crystal structures

Inorganic Crystal Structure Database Web (ICSD)
A comprehensive database of high quality crystal structure data of inorganic compounds

NIST Chemistry WebBook
Freely accessible database of spectroscopic and thermophysical data on chemical compounds

IUPAC – NIST Chemistry Solubility Database
Mutual solubilities and liquid-liquid equilibria of binary, ternary and quaternary systems

NIST/TRC Web Thermo Tables
A collection of critically evaluated thermodynamic data primarily for pure organic compounds

Infotherm: A thermo-physical property database
Properties of pure chemical compounds and their mixtures along with full bibliographic data

Springer Materials
The world’s largest resource for physicochemical properties database

Our Specials

Specials are extraordinary topics you cannot find elsewhere

Select ☑

Getting non-licensed journal articles (2 min)
Learn how to order the articles you need with minimal typing

Knowledge Organization: How to easily build an exchange and alerting system from the available ETH Resources (10-20 min)
With WordPress you can set up Journal Clubs or distribute important information and tasks within a research group. Live examples of how the Info Center uses WordPress will be shown.

CLICAPS, NEDIS and Wissensportal: What is the difference? (5-15 min)
How not to get lost in too many library catalogues

Why should I have an author ID? (5-10 min)
Learn why and how to obtain an Author ID

iScience Search (10-30 min)
iScienceSearch is a federated search service that retrieves chemical compound information from a wide variety of databases

Altmetrics (5-15 min)
Everything you always wanted to know about the alternative article impact metrics.

Integrity (5-15 min)
The resource for drug developers in industry – limited access at ETH Zürich only

Desserts

Although science is supposed to be very serious we also offer some 10-minute lectures that are particularly entertaining and light.

Select ☑

Basics In Design
Meet the basic principles of typography and design so that your text, brochure, flyer or poster will not only get noticed but will also be read

Google Trends
Would you like to know what others are interested in, what is a trend or what could become one?

Generating Word Clouds
Would you like to visualize the content of lengthy textual information? This is easy to do with Wordle.

Can’t find your favorite topic?
Just let us know when we discuss your menu with you – we are sure we can prepare what you want.
Scientists in the life sciences and chemistry need to deal with vast amounts of information (books, journals, databases, social web etc.).

In this lecture, you will learn how to fully utilize the power of scientific information.
Meet the Expert Webinar: Oliver Renn
529-0195-00L  Scientific Information Retrieval & Management in Life Sciences and Chemistry

Semester: Autumn Semester 2016
Lecturers: O. Renn
Periodicity: yearly course
Language of Instruction: English

Abstract
Students will learn how to effectively retrieve, critically judge, analyze and manage published scientific information - important skill sets in chemistry and life sciences where scientists need to deal with vast amounts of information. The course, being based on practical examples, also covers scientific writing & communication and state-of-the-art technologies for analysis such as text mining.

Objective
Ability to select appropriate, subject-specific databases or tools for a given specific scientific question based on a sound understanding on how a tool or database has been developed and maintained, thus building the personal capacity of doing research effectively and efficiently by integrating scientific information into the research process when needed. Ability to communicate own scientific results using additional distribution channels. Ability to easily write-up the Ph.D. thesis or first paper.

Content
The course has been primarily designed for Ph.D. students, also for the Life Science Zurich Graduate School, but is also open to Master students. In a series of 13 lectures, which always include practical examples (for some lectures an own notebook is required), the use of scientific information is taught not in a database-centric view but corresponding to the steps through which scientific research is conducted - including the dissemination of scientific results. This is particularly interesting for students who are about to write-up their first paper or thesis. Students will learn about the different types of information resources and tools, get an insight into the numerous databases and tools that exist and how those are built and maintained, enabling them to critically judge the value and trustworthy of an information resource. Additionally, they will learn how to communicate their own scientific results properly, using also additional measures that are reflected by alternative metrics.

The following topics are covered:
1. The World of Scientific Publishing
2. Searching and Retrieving Scientific Information Using Search Engines and Using Literature Databases
3. Searching and Retrieving Scientific Information Using Subject-specific Databases in Chemistry
4. Searching and Retrieving Scientific Information Using Subject-Specific Databases in Life Sciences
5. Tools for Managing the Retrieved Scientific Information
7. Patents
8. Text(Literature) and Data Mining
9. Communicating & Analyzing the Impact of (Your) Science
10. Scientific Writing & Good Scientific Practice

Lecture notes
The slide deck and supplementary materials will be made available in the teaching document repository (IIAS) after each lecture.

Literature
Additional literature and reference are provided in the course material.
How to explain
How to entertain
Social media competitive analysis and text mining: A case study in the pizza industry

Wu He a,*, Shenghua Zha b,1, Ling Li a,c,2

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b Center for Instructional Technology, James Madison University, Harrisonburg, VA 22807, USA
c College of Business and Public Administration, Old Dominion University, Norfolk, VA 23529, USA

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Facebook
Twitter
Case study
Pizza industry
Competitive analysis
Competitive intelligence
Competitor intelligence
Actionable intelligence
Text mining
Content analysis

ABSTRACT

Social media have been adopted by many businesses. More and more companies are using social media tools such as Facebook and Twitter to provide various services and interact with customers. As a result, a large amount of user-generated content is freely available on social media sites. To increase competitive advantage and effectively assess the competitive environment of businesses, companies need to monitor and analyze not only the customer-generated content on their own social media sites, but also the textual information on their competitors’ social media sites. In an effort to help companies understand how to perform a social media competitive analysis and transform social media data into knowledge for decision makers and e-marketers, this paper describes an in-depth case study which applies text mining to analyze unstructured text content on Facebook and Twitter sites of the three largest pizza chains: Pizza Hut, Domino’s Pizza and Papa John’s Pizza. The results reveal the value of social media competitive analysis and the power of text mining as an effective technique to extract business value from the vast amount of available social media data. Recommendations are also provided to help companies develop their social media competitive analysis strategy.

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Text analysis of Trump's tweets confirms he writes only the (angrier) Android half

I don’t normally post about politics (I’m not particularly savvy about polling, which is where data science has had the largest impact on politics). But this weekend I saw a hypothesis about Donald Trump’s twitter account that simply begged to be investigated with data:

When Trump wishes the Olympic team good luck, he’s tweeting from his iPhone. When he’s insulting a rival, he’s usually tweeting from an Android. Is this an artifact showing which tweets are Trump’s own and which are by some handler? Others have noted Trump’s tweeting and noticed this tendency, and
Thus, Trump’s Android account uses about 40-80% more words related to 
**disgust, sadness, fear, anger,** and other “negative” sentiments than the iPhone account does. (The positive emotions weren’t different to a statistically significant extent).

We’re especially interested in which words drove this different in sentiment. Let’s consider the words with the largest changes within each category:

This confirms that lots of words annotated as negative sentiments (with a few exceptions like “crime” and “terrorist”) are more common in Trump’s Android tweets than the campaign’s iPhone tweets.

**Conclusion: the ghost in the political machine**

I was fascinated by the recent New Yorker article about Tony Schwartz, Trump’s ghostwriter for The Art of the Deal. Of particular interest was how Schwartz imitated Trump’s voice and philosophy:
Meet the Expert Webinar:

Oliver Renn

Search results

Items: 16

1. Power and Attraction to the Counternormative Aspects of Infidelity.
   Lammers J, Maner J.
   PMID: 25658700
   Similar articles

2. Validity of silhouette showcards as a measure of body size and obesity in a population in the African region: A practical research tool for general-purpose surveys.
   Yepes M, Viswanathan B, Bovet P, Maurer J.
   PMID: 26689150 Free PMC Article
   Similar articles

3. The attractive lip: A photomorphometric analysis.
   Penna V, Fricke A, Ibiher N, Eisenhardt SU, Stark GB.
   PMID: 25921652
   Similar articles

   Coutinho T.
   PMID: 24970788
   Similar articles

5. Socio-demographic determinants of worsening in frailty among community-dwelling older people in 11 European countries.
   Elman A, Burdorf A, Van der Cammen TJ, Mackenbach JP, Van Lenthe FJ.
   PMID: 22544921
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I know my h-index.

If we have the function \( f \) ordered in decreasing order from the largest value to the lowest one, we can compute the h index as follows:

\[
h\text{-index}(f) = \max \min(f(i), i)
\]

- It is between 0.4 and 1.9
- It is between 2.1 and 2.9.
- It is either 0, 1, 2 or 4.
- Don't know.
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From broad to narrow
Community Management 1: Infozine

- published German and English
- 4 to 6 x annually
- magazine-style, short articles, high degree of entertainment
- Recurring sections such as interviews, App tips
- PDF, no a HTML newsletter
- PhD students, Post-Docs and department members receive an e-mail with a link
- Bachelor and master students and externals need to subscribe
- Builds awareness and shows competence
23.3.2017

Meet the Expert

Webinar: Oliver Renn

Berlin Declaration on Knowledge in the Sciences and Humanities for Sustainable Development

On the occasion of the APE 2017 (Academic Publishing in Europe) conference in Berlin the editor of the Lancet journal, Richard Horton, gave an emotional talk, the so-called APE Lecture. Entitled "The moral vacuum of modern medical and scientific publishing: is there a solution?", the lecture focused on presentations that dealt with the current shape of the publishing industry. While the CEO of the STM organization believed that STM publishers are in good shape, Rolf Schömann from the Max-Planck Society considered it a "deteriorating system" that nobody wants any longer and which is kept alive only due to the efforts of publishers and libraries. Horton pointed out "Faiths still matter. Liberties need to be defended" and called out for a new Berlin Declaration, which was received with mixed feelings and which is now published in this issue.

Also, in contrast to the impact factor, the CiteScore metric considers all kinds of contributions, not just original articles, such as, e.g., letters or editorials. And – to us the most important difference: There is no exclusive collection of journals that can present themselves with an impact factor at all. Almost every journal receives a CiteScore, i.e., practically all journals that are covered in Scopus and are published since 2014 have a CiteScore. This totals to exactly 22,256 journals, while there are only 8,022 journals which have an Impact Factor. The CiteScore is calculated annually but more frequent calculations may come in the future.

How big are the differences when looking at certain chemical journals? In Organic Chemistry, the top 3 in ICR are Advances in Organometallic Chemistry (12.625), Natural Products Reports (10.986), and Aldrichimica Acta (7.417). At CiteScore, Organic Chemistry Progress in Polymer Science (28.32) is leading, followed by the Journal of Photochemistry and Photobiology A: Photochemistry Reviews (14.29), and Aldrichimica Acta (10.43). JACS has an Impact Factor respectively CiteScore of 13.038 and 12.81, Angewandte Chemie 11.709 and 11.13. Important features and background information on CiteScore can be found in a 5-minute video.
The Infozine Interview

The benefits of well-designed slide decks

6 questions, today to Sarah Brajkovic [21], studying Biology in the 6. Semester

1. Which are the areas scientists should focus on more in-depth? In my opinion one should not focus the research just on one topic. Researchers should continue exploring all the research areas—just as it used to be. One never knows when a particular discovery will get useful and applied. There is a good chance that findings from now will make a huge impact in 50 years. Right now, I believe, the environmental issues are an important topic. Likewise cancer research. These are research areas one should invest into, funding as well as research hours.

2. When do you consider a lecture fascinating? When I experience the wow effect in the course. This, however, does not necessarily depend on the lecturer. If a lecturer is able to teach in a clear and concrete style the lecture is already very good. For me, the wow effect happens when I realize that I understand a concept. Then a course usually gets very exciting. In classes where I do not pay much attention I subsequently do not experience the

wow effect. However, if a course is not taught very well but the slide deck is designed extremely well I can still learn and memorize a lot.

3. Which tricks can you share for when your motivation hits the bottom or you are tired of learning? Here I have only one tip and this is doing sports. By doing sports I can best disconnect and blow away the cobwebs. When my motivation is really low I take one or two days off to do things that I always wanted to do.

4. Which information resources besides Google and Wikipedia do you know? Not really many. The only resource I use additionally is published where I search for articles. Apart from that I learn a lot from textbooks.

5. Where is your favorite place at ETH? The near forest and in particular the climbing walls for bouldering at the sports facility. Another favorite place is the lab. I really like working in the lab. Especially I enjoy to work with proteins.

6. Which book would you like to recommend? I can really recommend the book "Durch die Chirurgie" by Giulia Fasoli (ISBN 978-3-550-00840-8 in the Info Center's collection). I particularly enjoyed this book because it deals with a medical topic. The subject is explained quite simple and concise. The book is mostly about the bowel system. I recommend it especially when you want to give your brain a break and distract yourself from other things.

Sports & Learning

One of our Infozine Interview questions is about tips what to do when you are tired of learning and have low motivation. Frequently it is suggested to do sports. This is now proven to be scientifically sound. A Dutch study by Guine Fernandez et al., published in Current Biology, the learning success rate improves when you take a break every four hours and exercise. The paper is available online as "In Press, Corrected Proof".

Doing sports is also beneficial for other reasons. According to a scientific study, in this case from Great Britain, doing sports is the best measure to protect yourself from Morbus Alzheimer—at least in the Western Hemisphere. The study was already published in 2014 in Lancet Neurology, but has now been re-discovered by journalists and mentioned when covering the advantages of physical activities.

However, those who study a lot and graduate from university also experience side effects. According to a Swedish study, a university degree comes with an increased risk for brain tumors. Especially gliomas were more frequent in a group of people with at least three years of higher education than in a group with no higher education. Maybe you should try to study as quickly as possible. This study has been recently published in the Journal of Epidemiology & Community Health. The first two articles are freely available within the ETH Zurich network thanks to a license from ETH Library, the latter unfortunately not.

Are you skeptical about the interpretations of clinical trials results? Maybe this book, available at the Info Center, is of interest to you: Hummels: "Klinische Studien: Kriterien für Therapiestudien, Übersichtsarbeiten, Leitlinien. The book can be found in our CICAPS catalogue.

Order it online via CICAPS by clicking the NIHHS link, or the Knowledge Portal and pick it up at the Infodesk. The loan period is two weeks, with the first two renewals automatic.

Tips and Tricks

Accessing the web for free worldwide with Eduroam

Not everyone has heard of eduroam. eduroam (education roaming) is a secure, worldwide roaming access service developed for the international research and education community. eduroam allows students, researchers and staff from participating institutions to obtain internet connectivity across campuses and when visiting other participating institutions by simply opening their laptop—in 76 countries. Access is not only provided at university campuses.

In Norway and Sweden, for example, free internet access is also provided at all major airports. Once your mobile device has been configured for eduroam, your device will automatically connect to the web when an eduroam WLAN becomes available. And your new e-mails can be read. Information on how to connect via eduroam can be found on a website of ETH Information Services.

Program shortcuts the easy way: Application Shortcut Mapper

When it comes to getting the most out of the programs you use on a daily basis, you are probably familiar with some of its shortcuts. The problem is, there are so many for each program that it is almost impossible to remember them all. Especially with software that is rarely used one needs to click through context menus with the mouse to locate these functions. Application Shortcut Mapper is a very handy web application that allows you to view all keyboard shortcuts of a program visually. Simply choose the software you are using and your operating system (Windows, OS X or Linux are supported). The virtual keyboard is interactive too: if you press a modifier key such as "Shift", "Ctrl" or "Alt" the keyboard's appearance will change and the shortcuts combined with the pressed key are highlighted in a different color. The tool knows several programs, e.g. Photoshop, Illustrator and 3D software Blender. With a little knowledge of Python you can also add your own programs since the source code is freely available. Application Shortcut Mapper is a perfect solution if you want to know, e.g., how to create a new layer in Photoshop from a marked area (Ctrl+Shift+J) or how to directly select the eraser tool (E).

Permanent links in ETH Library Catalogue

You searched for a book in the ETH Library catalogue and found something you would like to forward? You copy the URL and end up with something lengthy like http://www.library.ethz.ch/ - er101_pr0001404152http://www.library.ethz.ch/ - er101_pr0001404152?stc=2&rest=1&ti-bibli&lg=de&manifest&ln=en&Iid=404152 Then you realize that the link does not work anymore? There is a solution, although it is hidden. In the result box on the very right click on "Action" and select "Permalink". This short link, www.library.ethz.ch/0AACGZ.default_scopeartikel_00041300517, is permanent and will work almost forever.

New Nature Journals

Free new titles will be published by Nature, now SpringerNature, in January 2017:
- Natural Biomedical Engineering
- Nature Ecology & Evolution
- Nature Human Behaviour
- Nature Reviews Chemistry
- Nature Astronomy

Article submission is already possible for the first three journals.
Infozine Special Issue on Research Metrics

Published on
December 12, 2016

With 18 contributions of professors, PhD students, research evolution managers from ETH Zürich and selected publishers and representatives of research metrics providers
Community Management 2: Infocus

- Allows us to inform even small target groups of about new developments and tools that match their interest
- Personalized newsletter, which contents are based on the subscribers expressed interests
- Registration and selection of the profile of interest through our website
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- HTLM e-mails
- Launched in June 2016
BrowZine: The best thing to happen to e-journals, ever.

Dear Oliver Renn,

BrowZine delivers thousands of academic journals to your web browser, iPad, iPhone or Android tablet for easy reading and browsing. Browzine is on trial at ETH Zurich until February 28, 2017 as the ETH-Bibliothek wants to find out if the tool provides added value for academic staff and students.
Infocus

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Infocus No. 005: New Release of Reaxys
26. Oktober 2016 um 11:27

Dear Oliviers weitere Identität,
on October 17, 2016, a new release of Reaxys has been launched. The new
Reaxys combines a completely new user interface (see below) with search and
indexing enhancements powered by machine learning algorithms to ensure
maximum discoverability and faster retrieval.
The new Reaxys combines

- A highly streamlined user interface with quick search options and a
drag-and-drop query builder interface
- Enhanced literature search
- Inclusion of Asian-language patents data from China, Taiwan, Japan and
South Korea
- Extended range of searchable content to include Reaxys index terms
and compounds from more than 15,000 chemistry-related periodicals
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Search substances, reactions, citations and bioactivity data

Infocus No. 007: Be a ChemDraw wizard
Heute um 10:11

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Other „Push“ Measures
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Meet the Expert Webinar: Oliver Renn
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