Welcome to the V18N12 December 2020 issue of the Awareness Watch™ Newsletter. This newsletter is available as a complimentary subscription and will be issued monthly. Each newsletter will feature the following:

**Awareness Watch™ Featured Report**  
**Awareness Watch™ Spotters**  
**Awareness Watch™ Book/Paper/Article Review**  
**Subject Tracer™ Information Blogs**

I am always open to feedback from readers so please feel free to email with all suggestions, reviews and new resources that you feel would be appropriate for inclusion in an upcoming issue of Awareness Watch™. This is an ongoing work of creativity and you will be observing constant changes, constant updates knowing that “change” is the only thing that will remain constant especially in today’s COVID-19 New Economy and New Normal world!!

**Awareness Watch™ Featured Report**

This month’s featured report covers *Online Research Browsers and Data Visualization Tools 2021* and is a comprehensive listing of world wide wide web and Internet research browsers and data visualization tools, including new economy search engines, directories, subject guides and index resources and sites on the Internet available for the 2021 year. The below list is taken partially from my white paper titled *Online Research Browsers and Visualization Tools 2021* and is constantly updated with Subject Tracer™ bots at the following URL:

https://www.zillman.us/white-papers/online-research-browsers/  
http://www.WhitePapers.us/

These resources and sources will help you to discover the many new pathways available through the Internet to find the latest new and existing world wide web and Internet online research browser resources, sources, tools and sites. As this site is constantly updated it would be to your benefit to bookmark and return to the above URLs frequently. The below resources and sources including the deep web will be your pathfinder to all the new research browser resources, tools and alerts!!
This Internet MiniGuide Annotated Link Compilation is dedicated to the latest and most competent sources for **Online Research Browsers and Data Visualization Tools 2021**. With the constant addition of new and pertinent information coming online every second it is very easy to go into information overload. The true key is to be able to identify the important information and how that information relates to other information resources through information visualization that will aid you in the creation of new intelligence and research data using online research browsers and tools. The following research browser and data Visualization tool sites offer excellent information on research and analysis to help you accomplish that research goal!

**22 Best Data Visualization Tools in 2020 (Free/Paid)**

Data visualization tools are cloud-based applications that help you to represent raw data in easy to understand graphical formats. You can use these programs to produce customizable bar charts, pie charts, column charts, and more. This is a handpicked list of Top Data Visualization Tools with their popular features and website links. The list contains both open-source (free) and commercial (paid) software.

**Amazon Browser**

Amazon Browser powered by TouchGraph is a tool for browsing the mass of literature, music and film contained in the Amazon database, by exploring links between related items. This will launch Amazon Browser in a new window, containing your search terms in the central node, with links to the first 10 search results in the surrounding nodes. Double-clicking on one of the surrounding nodes will expand the graph to include the first 10 related articles. Clicking on the 'inf' icon above each node will display a hint window containing the summary, a link to prices from international Amazon stores, one recommended customer review, and a link that will direct you to the item at Amazon.com, from where you can read more information, add to your shopping cart or wish list and checkout.

**ambiently - Discover Related Websites for Every Webpage You Browse**

Ambiently semantically connects webpages of similar or related meanings together. Click the Ambient Page” bookmarklet on your browser to find unexpected and useful websites for any webpage you are viewing. Ambiently is a startup company developing web applications. Envisioning the broad usage and benefits of creating a page-centric "ambient web" for every page on the web, Ambiently aims to create a new, richer web browsing and search experience for all web users.

**AuthorMapper**

AuthorMapper, an online tool for visualizing scientific research, enables document discovery based on author locations and geographic maps. Integrating content and
mapping technology, AuthorMapper provides an easy-to-use, dynamic interface that allows you to: a) Explore patterns in scientific research; b) Identify new and historic literature trends; c) Discover wider relationships; and d) Locate other experts in your field.

**BASE – Bielefeld Academic Search Engine**
https://www.base-search.net/
BASE is one of the world's most voluminous search engines especially for academic web resources. BASE provides more than 100 million documents from more than 5,000 sources. You can access the full texts of about 60% of the indexed documents for free (Open Access). BASE is operated by Bielefeld University Library. They are indexing the metadata of all kinds of academically relevant resources - journals, institutional repositories, digital collections etc. - which provide an OAI interface and use OAI-PMH for providing their contents (see their Golden Rules for Repository Managers and learn more about OAI at the Open Archives Initiative or Wikipedia). The index is continuously enhanced by integrating further sources (you can suggest a source which is not indexed yet). We are working on several new features like a claiming service for authors within the ORCID DE project.

**Better World Flux**
http://www.betterworldflux.com/
Better World Flux is a beautiful interactive visualization of information on what really matters in life. Indicators like happiness, life expectancy, and years of schooling are meaningfully displayed in a colourful flowing Flux. Better World Flux visually communicates the world state in terms of standards of living and quality of life for many countries and how this has changed, and mostly improved, over a period of up to 50 years. This site is a tool for building a consensus, telling a story and sharing it, all whilst raising awareness for the UN Millennium Development Goals.

**BibSonomy - The Blue Social Bookmark and Publication Sharing System**
http://www.bibsonomy.org/
BibSonomy helps you to organize your scientific work. Use BibSonomy to collect publications and bookmarks, to collaborate with your colleagues, and to discover interesting researches for your daily work. Features include: 1) Collect - Ready your browser for BibSonomy: Using BibSonomy you can easily create collections of bookmark and publication posts. Just insert bookmarks and publications. You can do this even faster with our BibSonomy browser add-ons or bookmarklets. In addition, you can also use ISBN, ISSN, DOI, or barcodes to have the insert publication form filled up automatically for you. Use tags to organize the posts in your collection. If you choose them carefully, tags are a very powerful instrument; 2) Manage - Easily create bibliographies: BibSonomy helps you create bibliographies for scientific papers. If you use a specific tag for each bibliography and assign it to all your paper posts accordingly, you can use the tag to find all papers of the bibliography. Afterwards, you can export your publication list in the desired format. BibSonomy supports a lot of formats, e. g.
Microsoft Word Reference Manager, EndNote, and BibTeX; 3) Collaborate - Find colleagues or fellow students and use groups for collaboration: Use the search to find other users. On a users page, you can add them as friends. In the friends overview you can see which posts you are sharing with you friends and which posts your friends are sharing with you. Groups offer easier means for collaboration. When adding new posts, set if the post should be private, visible for all, or only visible for certain groups. Because of copyright documents are only visible private. Within a group, they can be made visible to other group members; and 4) Discover - Find interesting content: Discover new interesting publications for your scientific activities. The fulltext search of BibSonomy helps you doing so. Beyond that, you can use the search field to filter your post lists by tags, authors and users. Be inspired by the tag clouds. Click on interesting tags, to filter the post lists for special topics. This way, you can browse through topics easily and find related contents by concept.

Business Intelligence Dashboards for Informed Decision Making
https://insightsoftware.com/promos/dashboard-software-demo/
Easily build custom data visualizations on a platform made for the complexity and dimensions of financial data. Designed for finance users who need to be able to drill into the underlying data without changing screens. Create real-time data visualizations. Get the data you need to create dashboards directly inside Excel that will empower your organization to make strategic decisions.

CORE
https://core.ac.uk/search
CORE’s mission is to aggregate all open access research outputs from repositories and journals worldwide and make them available to the public. In this way CORE facilitates free unrestricted access to research for all.

DataMelt – Computation and Visualization Environment
https://jwork.org/home/datamelt/
DataMelt ("DMelt") is a free software for numeric computation, mathematics, statistics, symbolic calculations, data analysis and data visualization. This program combines the simplicity of scripting languages, such as Python, Ruby, Groovy (and others), with hundreds of Java numerical and graphical packages. Unlike other similar programs, DataMelt can be used for scientific computations using Java, word's most-popular enterprise programming language. The program runs on Windows/Mac OS/Linux and Android platform. DataMelt is a modern version of jHepWork (2005-2013) and SCaVis (2013-2015) programs.

Data Visceralization: Enabling Deeper Understanding of Data Using Virtual Reality
A fundamental part of data visualization is transforming data to map abstract information onto visual attributes. While this abstraction is a powerful basis for data visualization, the connection between the representation and the original underlying data (i.e., what the
quantities and measurements actually correspond with in reality) can be lost. On the other hand, virtual reality (VR) is being increasingly used to represent real and abstract models as natural experiences to users.

**Data Visualization and Big Data Analytics**  

Datameer’s extensive library of widgets includes tables, graphs, charts, diagrams, maps, and tag clouds which enables users to create simple dashboards or beautiful visualizations. The end result, data visualizations that communicate data. Beyond static business intelligence dashboards, Datameer provides a Business Infographics™ designer where your data visualizations have no built-in constraints. With support for shapes such as arrows, icons and more, users can highlight or accent anything in an infographic or dashboard.

**Data Visualization Beginner’s Guide: A Definition, Examples, and Learning Resources**  
[https://www.tableau.com/learn/articles/data-visualization](https://www.tableau.com/learn/articles/data-visualization)

**Data visualization** is the graphical representation of information and **data**. By using visual elements like charts, graphs, and maps, **data visualization** tools provide an accessible way to see and understand trends, outliers, and patterns in **data**. In the world of Big Data, data visualization tools and technologies are essential to analyze massive amounts of information and make data-driven decisions.

**Data Visualizations, Challenges Community**  
[https://www.visualizing.org/](https://www.visualizing.org/)

A community of creative people making sense of complex issues through data and design

**Data Visualization Software by Zoho Analytics**  
[https://www.zoho.com/](https://www.zoho.com/)

Import data into Zoho Analytics from a variety of data sources such as local files, web URLs, cloud drives (Google Spreadsheets, Box, Microsoft OneDrive etc), local and cloud databases, popular business applications, custom applications etc., for in-depth analysis. Make use of a variety of charts, widgets, pivot tables and tabular view components to create insightful reports and dashboards with an easy drag-and-drop interface.

**Data Visualization – Wikipedia**  

**Data visualization** is the **graphic representation** of **data**. It involves producing images that communicate relationships among the represented data to viewers of the images. This communication is achieved through the use of a systematic **mapping** between graphic marks and data values in the creation of the visualization. This mapping establishes how data values will be represented visually, determining how and to what extent a property of a graphic mark, such as size or color, will change to reflect changes in the value of a datum. To communicate information clearly and efficiently, data
visualization uses statistical graphics, plots, information graphics and other tools. Numerical data may be encoded using dots, lines, or bars, to visually communicate a quantitative message. Effective visualization helps users analyze and reason about data and evidence. It makes complex data more accessible, understandable and usable. Users may have particular analytical tasks, such as making comparisons or understanding causality, and the design principle of the graphic (i.e., showing comparisons or showing causality) follows the task. Tables are generally used where users will look up a specific measurement, while charts of various types are used to show patterns or relationships in the data for one or more variables.

**Facebook Browser by TouchGraph**
http://www.touchgraph.com/facebook
TouchGraph Facebook Browser lets you see how your friends are connected, and who has the most photos together. Explore your networks by graphing photos from anyone's album, or view the connections between members of a group.

**Figshare - Store, Share, Discover Research**
https://figshare.com/
figshare is a repository where users can make all of their research outputs available in a citable, shareable and discoverable manner. figshare allows users to upload any file format to be previewed in the browser so that any research output, from posters and presentations to datasets and code, can be disseminated in a way that the current scholarly publishing model does not allow. The figshare team now spans 3 continents and specializes in building best of breed software to securely and persistently store, manage and visualize data in a robust and scalable manner. Get more citations for all of the outputs of your academic research over 5000 citations of figshare content to date.

**Gephi - The Open Graph Viz Platform**
https://gephi.org/
Gephi is the leading visualization and exploration software for all kinds of graphs and networks. Gephi is open-source and free. Runs on Windows, Mac OS X and Linux. Gephi is a tool for data analysts and scientists keen to explore and understand graphs. Like Photoshop™ but for graph data, the user interacts with the representation, manipulate the structures, shapes and colors to reveal hidden patterns. The goal is to help data analysts to make hypothesis, intuitively discover patterns, isolate structure singularities or faults during data sourcing. It is a complementary tool to traditional statistics, as visual thinking with interactive interfaces is now recognized to facilitate reasoning. This is a software for Exploratory Data Analysis, a paradigm appeared in the Visual Analytics field of research. Applications include: a) Exploratory Data Analysis: intuition-oriented analysis by networks manipulations in real time; b) Link Analysis: revealing the underlying structures of associations between objects; c) Social Network Analysis: easy creation of social data connectors to map community organizations and small-world networks; d) Biological Network analysis: representing patterns of biological data; and e) Poster creation: scientific work promotion with hi-quality printable maps.
Ggplot2
https://ggplot2.tidyverse.org/
ggplot2 is a system for declaratively creating graphics, based on The Grammar of Graphics. You provide the data, tell ggplot2 how to map variables to aesthetics, what graphical primitives to use, and it takes care of the details. ggplot2 is now over 10 years old and is used by hundreds of thousands of people to make millions of plots. That means, by-and-large, ggplot2 itself changes relatively little. When we do make changes, they will be generally to add new functions or arguments rather than changing the behaviour of existing functions, and if we do make changes to existing behaviour we will do them for compelling reasons.

Google Data Studio
https://datastudio.withgoogle.com/
Your data is beautiful. Use it. Unlock the power of your data with interactive dashboards and automated reports that inspire smarter business decisions. Features include: 1) Unite your data in one place - Easily import and visualize your data from spreadsheets, Google Analytics, Google Ads, BigQuery, and many other dashboards or databases. See up-to-date reports for multiple projects and data sources in one easy interface. Integrated with over 150 cloud, SQL, e-commerce, and digital advertising platforms, 2) Explore the data - Transform your advertising performance and other data into easy-to-understand reports and dashboards that fit your business intelligence needs. Monitor your progress for the business metrics you care about, including ad spend, site traffic, search rankings, and more; 3) Tell impactful stories - Create and share data visualizations that automatically turn numbers into insights through engaging charts and graphs. Easily understand your ROI from your business initiatives and digital advertising spend; and 4) Empower your teams - Share marketing and business data with your teams in real time so that everyone can find the answers they need. Boost productivity across teams by helping them access the business data they need to work better cross-functionally. When everyone on the team understands what's impacting the big picture, in real time, and works together to drive better data-driven results — that's teamwork.

IBM Data Refinery – Profile and Visualize Data
https://www.ibm.com/cloud/data-refinery
Available in IBM Watson® Studio and Watson™ Knowledge Catalog, the data refinery tool saves data preparation time by quickly transforming large amounts of raw data into consumable, quality information that's ready for analytics.

Information Visualization Resources on the Web
http://graphics.stanford.edu/courses/cs348c-96-fall/resources.html
A comprehensive site listing information visualization resources available on the Internet with heavy emphasis based on academic sources.
Integrating Information Visualization and Retrieval for WWW Information Discovery
http://portal.acm.org/citation.cfm?id=763071
An important technology in knowledge discovery is to access the desired information from the large amount of data stored on the WWW. At present, such information can be accessed by a browser itself or by using a keyword search function. However, browsing is a time-consuming task where a user must access individual pages one by one. Furthermore, in keyword searches, it is difficult for users to provide reasonable keywords in knowledge discovery processes. This paper outlines an approach for integrating information visualization and retrieval into WWW information discovery. In this approach, the link structure of a web site is displayed in a 3-D hyperbolic tree in which the height of a node (corresponding to a web page) within the tree indicates a user's "interest" for each page. Here, interest is calculated by a fitting function between a page and a user-supplied query (nested keywords). This measure can be used to filter uninteresting pages, reducing the size of the link structure. Furthermore, each web page is modeled as semi-structured data and can also be displayed as a hyperbolic tree in which the result of query evaluation is visible.

Kartoo
http://www.kartoo.com/
KartOO is a metasearch engine with visual display interfaces. When you click on OK, KartOO launches the query to a set of search engines, gathers the results, compiles them and represents them in a series of interactive maps through a proprietary algorithm.

Knoema Knowledge Platform
http://knoema.com/
Knoema is a knowledge platform. The basic idea is to connect data with analytical and presentation tools. As a result, we end with one uniformed platform for users to access, present and share data-driven content. Within Knoema, we capture most aspects of a typical data use cycle: accessing data from multiple sources, bringing relevant indicators into a common space, visualizing figures, applying analytical functions, creating a set of dashboards, and presenting the outcome.

Knowledge Discovery 2021 Subject Tracer™
http://www.KDResources.info/
A Subject Tracer monitoring knowledge discovery resources including a number of information visualization research browsers. Powered by bots and continually updated. Sources listed alphabetically with name and URL.

Lazy Scholar - Browser Extension
http://www.lazyscholar.org/
Finds free scholarly full texts, metrics, and provides quick citation and sharing links automatically. Features include: a) Automatic Full Text Search - Open any scholarly article and Lazy Scholar gets to work searching for a free full text; b) New
Recommendations - Lazy Scholar can learn what topics you like to read and scans new PubMed listings to suggest new papers; c) Metrics - Lazy Scholar provides various citation metrics. (Google Scholar, Microsoft Academic, Web of Science; Impact factor, Altmetric, etc); d) Search History - Can’t find that paper you opened yesterday? Lazy Scholar saves your history and provides an interface to find it; e) Quick Citation - A preformed citation available in over 900 citation styles; and f) Related Papers - Quickly identify other papers you may want to read.

**Matplotlib**
https://matplotlib.org/
Matplotlib is a plotting library for the Python programming language and its numerical mathematics extension NumPy. It provides an object-oriented API for embedding plots into applications using general-purpose GUI toolkits like Tkinter, wxPython, Qt, or GTK+

**Mirador**
https://fathom.info/mirador/
Mirador is a tool for visual exploration of complex datasets. It enables users to discover correlation patterns and derive new hypotheses from the data. Mirador is an **open source project** released under the GNU Public License v2. It is the result of a collaboration between the Sabeti Lab at Harvard University, the Broad Institute of MIT and Harvard, and Fathom Information Design. Initial support was provided by the Center of Communicable Disease Dynamics and the MIDAS network funded by the National Institutes of Health.

**Open Access Button**
https://openaccessbutton.org/
Free, legal research articles delivered instantly or automatically requested from authors. Give them a scholarly paper and they will search thousands of sources with millions of articles to link you to free, legal, full text articles instantly. If they can’t get you access, they will start a request for you. They request articles from authors, and guide them on making the work available to you and everyone who needs it. You can do this from their website, browser extensions, tools for libraries or their API. Take your pick ….

**Orange Data Mining**
http://orange.biolab.si/
Open source machine learning and **data visualization** for novice and expert. Interactive data analysis workflows with a large toolbox. Perform simple data analysis with clever data visualization. Explore statistical distributions, box plots and scatter plots, or dive deeper with decision trees, hierarchical clustering, heatmaps, MDS and linear projections. Even your multidimensional data can become sensible in 2D, especially with clever attribute ranking and selections. Interactive data exploration for rapid qualitative analysis with clean visualizations. Graphic user interface allows you to focus on exploratory data
analysis instead of coding, while clever defaults make fast prototyping of a data analysis workflow extremely easy. Place widgets on the canvas, connect them, load your datasets and harvest the insight!

**Nanocubes® - Fast Visualization of Large Spatiotemporal Datasets**
http://www.nanocubes.net/
The Nanocubes® technology provides you with real-time visualization of large datasets. Slice and dice your data with respect to space, time, or some of your data attributes, and view the results in real-time on a web browser over heatmaps, bar charts, and histograms. They have used it for **tens of billions** of data points: maybe you can push it even farther! The main Nanocubes program is a command-line utility that processes your data and starts a web server to answer query requests. They provide Javascript APIs for visualization. But the Nanocubes program can be used for fast analysis of your data as well: you can think of it as a very fast (if somehow limited) database query engine. As an illustrative example, we have used anomaly detection routines to query the Nanocubes engine and output potential outliers and hotspots.

**Panopticlick – Is Your Browser Safe Against Tracking?**
https://panopticlick.eff.org/
When you visit a website, online trackers and the site itself may be able to identify you – even if you’ve installed software to protect yourself. It’s possible to configure your browser to thwart tracking, but many people don’t know how. Panopticlick will analyze how well your browser and add-ons protect you against online tracking techniques. We’ll also see if your system is uniquely configured—and thus identifiable—even if you are using privacy-protective software.

**Point - Use Point To Send and Discuss Webpages with Friends**
http://www.getpoint.co/
Use Point To Send and Discuss Webpages with Friends. Features include: a) The quickest way to send a link - With Point, you can send a link without leaving the page or app you are in; b) Everyone’s on the same page - Point sits alongside what you’re sharing, allowing you to easily quote the best parts; c) All your links in one place - Point saves everything you send or receive in your inbox – accessible from our browser extension and iPhone app; and d) You don’t need friends on Point - While Point works best with a few close friends, it also works fabulously with email contacts.

**QueryTree – Open Source Ad Hoc Reporting and Visualization**
https://querytreeapp.com/
QueryTree is an open source ad hoc reporting and visualization solution for your app. Download and run it from Source, Binaries or using Docker, then connect it to any Microsoft SQL Server, MySQL or PostgreSQL database, and you’re good to go. As your app’s missing report screen, QueryTree enables technical and non-technical users alike can easily select, filter, group, aggregate and **visualize** data from any table in any
database. Users can export their results, share reports with their team, and set up schedule emails to keep everyone updated.

**Scientific Data Repository - Real Time Visualization and Exploration Techniques**  

This project is the first to combine the notion of a data repository with real-time visual analytics for interactive data mining and exploratory analysis on the web. State-of-the-art statistical techniques are combined with real-time data visualization giving the ability for researchers to seamlessly find, explore, understand, and discover key insights in a large number of public donated data sets. This large comprehensive collection of data is useful for making significant research findings as well as benchmark data sets for a wide variety of applications and domains and includes relational, attributed, heterogeneous, streaming, spatial, and time series data as well as non-relational machine learning data. All data sets are easily downloaded into a standard consistent format. They also have built a multi-level interactive visual analytics engine that allows users to visualize and interactively explore the data in a free-flowing manner.

**Seaborn**  
[https://seaborn.pydata.org](https://seaborn.pydata.org)

Seaborn is a library for making statistical graphics in Python. It is built on top of [matplotlib](https://matplotlib.org) and closely integrated with [pandas](http://pandas.pydata.org) data structures. Seaborn aims to make visualization a central part of exploring and understanding data. Its dataset-oriented plotting functions operate on dataframes and arrays containing whole datasets and internally perform the necessary semantic mapping and statistical aggregation to produce informative plots.

**SEO Browser by TouchGraph**  
[http://www.touchgraph.com/seo](http://www.touchgraph.com/seo)

TouchGraph SEO Browser reveals the network of connectivity between websites, as reported by Google's database of related sites.

**Sputnik – An Open Source Intelligence Browser Extension**  
[https://github.com/mitchmoser/sputnik](https://github.com/mitchmoser/sputnik)

Sputnik is an extension to quickly and easily search IPs, Domains, File Hashes, and URLs using free Open Source Intelligence (OSINT) resources.

**Tableau Data Visualization – Free Data Visualization Tool**  
[https://www.tableau.com/](https://www.tableau.com/)

Data visualization is the graphical representation of information and data. With visual elements like charts, graphs, and maps, data visualization tools provide an accessible way to see and understand trends, outliers, and patterns in data. In the world of big data, data visualization tools and technologies are essential to analyze massive amounts of information and make data-driven decisions. Their culture is visual, including everything
from art and advertisements to TV and movies, and our eyes are drawn to colors and patterns. Their interaction with data should reflect this reality.

The Best Data Visualization Tools for 2020
https://www.pcmag.com/picks/the-best-data-visualization-tools
Where business intelligence (BI) tools help with parsing large amounts of data, visualization tools help present that data in new ways to facilitate understanding and decision making. They test the latest crop of these business aids to help you get the most from your data.

The Open Observability Platform
https://grafana.com/
Grafana is the open source analytics and monitoring solution for every database.

ThinkMap
http://www.thinkmap.com/
Thinkmap is a software platform for developing customized visualization interfaces to complex data. The software provides a system for crafting visualizations with structured data in order to make the information more intuitive, accessible, manageable and meaningful. Thinkmap visualizations can make relationships in the data more apparent than can traditional line or column displays and can improve understanding and discovery.

Tinderbox – The Tool for Notes
http://www.eastgate.com/Tinderbox/
Tinderbox maps your notes as you make them. Build relationships by arranging notes, organizing them with shape and color, linking them. Tinderbox lets you record ideas quickly and keep them where you'll find them again when you need them.

TorchBrowser - Free and Unique Powerful Browsing
http://torchbrowser.com/
Torch is a free and unique software that offers you powerful browsing together with built-in media downloading and sharing features. Torch Browser is based on the Chromium technology platform, giving it fast browsing capabilities. With Torch, you can share sites you like, download torrents, accelerate downloads and grab online media - all directly from the browser. Everything you need is a just click away with Torch, so you don't have to use or download additional programs and tools. Their software has a user friendly interface, is easy to install, and safe to use.

Tor Project – Tor Browser
https://www.torproject.org/
The Tor software protects you by bouncing your communications around a distributed network of relays run by volunteers all around the world: it prevents somebody watching your Internet connection from learning what sites you visit, it prevents the sites you visit
from learning your physical location, and it lets you access sites which are blocked. The **Tor Browser** lets you use Tor on Windows, Mac OS X, or Linux without needing to install any software. It can run off a USB flash drive, comes with a pre-configured web browser to protect your anonymity, and is self-contained (portable).

**TouchGraph - Visualize and Interact with Information**
http://www.touchgraph.com/
TouchGraph was founded in 2001 with the creation of the original visual browser for Google. Since then, millions of people have used TouchGraph's tools to discover the relationships contained in Google, Amazon, Wikis, and other popular information sources. Our commercial applications include solutions for companies in management consulting, social networking, and mass media. TouchGraph's approach is unique because their highest priorities are utility and ease of use. They start with the premise of a scientific or business application, and work to create a clear and intuitive interface that gets their customers the results they need. They avoid superfluous artistic effects in favor of a clear presentation. Their applications are designed to simplify navigation, filtering, and visual metaphors. They reveal important relationships and details in your data without reducing the richness of the information itself.

**Tracking the State of Open Government Data**
https://index.okfn.org/
The Global Open Data Index provides the most comprehensive snapshot available of the state of open government data publication.

**Unpaywall – Research Papers for Free**
http://unpaywall.org/
Millions of research papers are available for free on government and university web servers, legally uploaded by the authors themselves, with the express permission of publishers. Unpaywall automatically harvests these freely shared papers from thousands of legal institutional repositories, preprint servers, and publishers, making them all available to you as you read. Unpaywall users are able to read over 52% of research papers for free--without having to pay money, fuss with a VPN, or use pirate sites like Sci-Hub. That's because we're built on a database of millions of open-access articles harvested from thousands of servers worldwide. When you browse to a paywalled paper, we check to see if we have a free copy. If we do, you'll see a green tab...just click, and read.

**Visualization Laboratory (VISLAB)**
https://www.tacc.utexas.edu/vislab
The TACC Visualization Laboratory (Vislab) is a state-of-the-art facility where staff explores the intersection between human perception and large-scale visual analysis through the study of visualization and interactive displays. The Vislab serves as a research hub for human-computer interaction, tiled display software development, and visualization consulting.
Visualizing Bibliographic MetaData – A Virtual (Book) Spine Viewer by Naomi Dushay
http://www.dlib.org/dlib/october04/dushay/10dushay.html
User interfaces for digital information discovery often require users to click around and read a lot of text in order to find the text they want to read—a process that is often frustrating and tedious. This is exacerbated because of the limited amount of text that can be displayed on a computer screen. To improve the user experience of computer mediated information discovery, information visualization techniques are applied to the digital library context, while retaining traditional information organization concepts. In this article, the "virtual (book) spine" and the virtual spine viewer are introduced. The virtual spine viewer is an application which allows users to visually explore large information spaces or collections while also allowing users to hone in on individual resources of interest. The virtual spine viewer introduced here is an alpha prototype, presented to promote discussion and further work. [Note: 2004 Publication but worth a read]

Visual.ly – Empowers People To Tell Stories With Data
http://visual.ly/
Visually is the largest data visualization showcase in the world, providing endless inspiration for designers, publishers and enthusiasts. Visually’s free tools make it easy for anyone to create beautiful, personalized infographics in minutes. What stories will you tell?

Vivaldi - Power User Browser
https://vivaldi.com/
You spend a lot of time on the web. You deserve a browser that is personal, has the functionality you need and the flexibility you crave. You deserve Vivaldi so we made it for you. Get an in-depth overview of your browsing habits, backed by statistics and visual data. With History more useful than ever before, you can quickly scan through visited websites and get helpful hints for finding old links. Found that perfect quote for your essay or article? Copy that text to the notes panel, adding a link at the same time. Add a screen shot, just in case the page changes. The world is a colorful place because we are all different and unique. We at Vivaldi believe in making software that lets you do things your way. We adapt to you! With Vivaldi you can customize the browser the way you want. Do you prefer the browser tabs placed at the bottom or on the side of the window? Or, a different location for the address bar? Whether it's your keyboard shortcuts, mouse gestures, appearance or a modification to address color blindness, Vivaldi gives you the tools. Do you tend to keep many tabs open in your browser? Organize the view using Tab Stacking. This feature lets you group multiple tabs into one. Just drag a tab over to another for an uncomplicated grouping. With Tab Stack Tiling, you can display multiple tabs side by side or in a grid layout. Through multiple tab stacks that are tiled, you have multiple desktops, which you can switch between with a single click. More power to you! When buying a new car, you are given a choice of colors and customized features. With Vivaldi, you aren’t limited to our sense of style. Drive your own style with our many included themes, or easily make your own! Do you like command line control? Then
Vivaldi is sure to delight. Quick Commands let you search through open tabs, bookmarks, history, settings and more from a command line interface. One of the things that makes Vivaldi unique is that it is built on modern web technologies. We use JavaScript and React to create the user interface with the help of Node.js and a long list of NPM modules. Vivaldi is the web built with the web.

**Website Downloader**  
https://websitedownloader.io/  
Download all the source code and assets of any website. Features include: a) Key Benefits - Easiest way to download a website; b) Platform Independent - The web based interface enables you to use website ripper straight in your browser on any operating system and without downloading or configuring any software. Use it when you need to quickly download website; c) Fast Previews - Website Downloader offers a fast preview of the download result hosted on our servers without consuming your computer's precious disk space. After the preview you can download web page or download entire website; and d) Simplicity - Website Downloader is super simple and easy to use, yet it comes with advanced functionality such as only downloading a subdirectory or certain pages from a website (as a web page downloader). Website grabber is the easiest way to download a website. Website Downloader, Website Copier or Website Ripper allows you to download websites from the Internet to your local hard drive on your own computer. Website Downloader arranges the downloaded site by the original websites relative link-structure.

**WhatRuns - Discover What Runs a Website**  
https://www.whatruns.com/  
WhatRuns is a new but advanced browser extension that helps you identify web technologies used on any website. Our proprietary pattern recognition algorithm efficiently detects even the latest web technologies and plugins used on websites. WhatRuns extension can be used for competitor analysis, sales intelligence and website profiling.

**Zotero – Personal Research Assistant**  
https://www.zotero.org/  
Zotero is the only research tool that automatically senses content in your web browser, allowing you to add it to your personal library with a single click. Whether you're searching for a preprint on arXiv.org, a journal article from JSTOR, a news story from the *New York Times*, or a book from your university library catalog, Zotero has you covered with support for thousands of sites. Zotero collects all your research in a single, searchable interface. You can add PDFs, images, audio and video files, snapshots of web pages, and really anything else. Zotero automatically indexes the full-text content of your library, enabling you to find exactly what you're looking for with just a few keystrokes.
Zeef – Data Visualization Resources
https://zeef.com/?query=Data%20Visualization&in=all
Found over 277 data visualization resources, sources and tools from individuals whose curated directories for development and tech resources are constantly updated.

Awareness Watch™ Spotters

New Normal Startup Resources 2021
http://www.NewNormalStartUpResources.com/
The white paper link dataset compilation of the New Normal Startup Resources 2021 Subject Tracer™ Information Resource by Marcus P. Zillman, M.S., A.M.H.A. has just been updated November 1, 2020 and is now a freely available 39 page .pdf document 660KB listing the latest and greatest online resources and sites for the new normal startup resources!. Other white papers are available by clicking here. This is a MUST publication for every business in today’s COVID-19 world!!

Updated> Deep Web Research and Discovery Resources 2020
I have just updated my white paper link dataset compilation and now titled Deep Web Research and Discovery Resources 2020 and it is now a 75 page 878KB PDF document freely available directly from the above URL. This update verified all links as well as reviewed all resources covered including adding additional links. Currently this has been downloaded over 8,000,000+ times!

Academic and Scholar Search Engines and Sources 2021
http://www.ScholarSearchEngines.com/
Internet Annotated Link Dataset Compilation titled “Academic and Scholar Search Engines and Sources 2021” is now a 82 page research paper listing selected resources both new and existing that will help anyone who is attempting to find academic and scholarly information and knowledge available on the Internet. Each source is described along with the URL address than can be accessed. It is freely available as a .pdf file (972KB) at the above link from the Virtual Private Library™ and authored by Marcus P. Zillman, M.S., A.M.H.A. [Completely Updated with all links validated and new URLs added: November 1, 2020]. Other white papers are available by clicking here.

Crowd Funding Resources 2021
http://whitepapers.virtualprivatelibrary.net/Crowd_Funding_Resources_2021.pdf
http://www.CrowdFundingResources.info/
The above white paper link dataset compilation of the Crowd Funding Resources 2021 Subject Tracer™ by Marcus P. Zillman, M.S., A.M.H.A. is a freely available 20 page .pdf document (528KB) listing the latest and greatest online resources and sites for crowd
JudyRecords – Largest Search Engine of U.S. Court Cases on the Internet

https://www.judyrecords.com/

JudyRecords is the largest search engine of United States court cases on the Internet. However, no database exists that offers complete coverage of all court cases. Some court records, for example, can only be found by searching at the courthouse in person. Additionally, court records accessibility in some jurisdictions is very limited. If you can’t find a record on this site, that doesn’t mean a record for a particular search doesn’t exist. If a record is returned for a particular search, that doesn’t necessarily mean the record pertains to the intended subject of the search. For example, if you are searching for records involving felony theft, a search for “felony theft” may return a record with the word “theft” — but only pertain to a misdemeanor theft — and the word felony — but which only pertains to another charge. Or, if you are looking for a person named Sarah Johnson, a search for “Sarah Johnson” may return a record for another person also named Sarah Johnson (or even a company named Sarah Johnson, LLC). A record in their database may not reflect the most accurate information about a particular case as information may have been added or removed. It is your responsibility to independently verify any information obtained from this website with official court records. All records on this site were made public by their respective agencies and are part of the public domain. Currently 409,229,861 United States Court Cases. This will be added to Finding People Resources Subject Tracer™. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Privacy Resources Subject Tracer™.

eMarketing MiniGuide 2021

http://www.eMarketingMiniGuide.com/

Freely available eMarketing MiniGuide 2021 by Marcus P. Zillman, M.S., A.M.H.A.
The 16 page (807KB) PDF miniguide updated November 2, 2020 covers the following areas: B2b Marketing, Book Self-Publishing, Content Marketing, Conversion Rate Optimization, Landing Page Optimization, Lead Generation, Lead Nurturing, Lead Scoring and Lead Management, Lead/Agile Software Development, Marketing Automation, Public Relations/Press Releases, Social Media Marketing, Web Marketing, and Internet Marketing, Web User Experience, Miscellaneous, and Subject Tracer™ Information Blogs. Visit this freely available eMarket MiniGuide 2021 today and use all these excellent resources. Please spread the word about this freely available MiniGuide to all your friends, associates and social media networks!!
Healthcare Bots and Subject Directories 2021
http://www.HealthcareBots.info/
Healthcare Bots and Subject Directories 2021 is a 34 page research paper listing selected resources both new and existing that will help anyone who is attempting to find the latest information about healthcare search engines and healthcare subject directories available on the Internet. It is freely available as a .pdf file (939KB) at the above link from the Virtual Private Library™ and authored by Marcus P. Zillman, M.S., A.M.H.A. It was updated November 1, 2020. Other white papers are available by clicking here.

WorkPatterns – Improving Workplace Relationships
https://www.workpatterns.com/
They empower people to work more effectively, transparently, and enjoyably by making best practices automatic. Their aspiration at WorkPatterns help people have better relationships at work. They are building a product that guides best practices to help people work effectively. They hope to create enjoyable work environments, and improved morale across organizations. This will be added to New Economy Resources Subject Tracer™. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™.

FileTransfer – Simple and Reliable File Transfers
https://filetransfer.io/
Their services including sending and receiving data packages are free of charge – in every data package you can send files up to 6 GB in size. With FileTransfer.io you can send any files you need – photos, videos, documents, presentations or any other files. This will be added to New Economy Resources Subject Tracer™. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™.

Drone Resources 2021 White Paper Link Dataset Compilation
http://www.DroneResources.info/
The above white paper link dataset compilation of the Drone Resources 2021 Subject Tracer™ by Marcus P. Zillman, M.S., A.M.H.A. is a freely available 16 page .pdf document (624KB) listing the latest and greatest online resources and sites for drones! Complete Update Including All Links Validated on November 6, 2020. Other white papers are available by clicking here.

VEED.io – The Only Screen Recorder You will Ever Need
https://www.veed.io/screen-recorder
The easiest way to record and capture your screen online. Works on your Windows or Mac computer, no software download or plugin required. Start your screen capture now. Choose a layout that best suits your content. Record your screen and mic at the same time. Add yourself in the scene with you webcam side by side or on top of each other.
Once your screen recording is finished, edit your videos online with our powerful video editor. Add subtitles, create overlays, cut between scenes and much more. Perfect for product demos, walk through videos, annotated videos and much more. The easy way to create stunning videos, add subtitles and grow your audience. This will be added to New Economy Resources Subject Tracer™. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™.

Open Texts – Opening Up a World of Digitized Texts
https://opentexts.world/
OpenTexts.World is an experimental service that helps you discover free digitised text collections from around the world. Think of it as a search engine for books. Every year, libraries worldwide digitize hundreds of thousands of books. Open Texts brings (some of!) those collections together, allowing you to search across a multitude of different libraries worldwide. OpenTexts.world helps you discover millions of free digitised texts from libraries around the world. Currently in beta. This will be added to New Economy Resources Subject Tracer™. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Academic and Scholar Search Engines and Sources 2021.

Theology Resources 2021
http://www.TheologyResources.info/
The above is the associated white paper link dataset compilation of the Theology Resources 2021 Subject Tracer™ Information Blog which is a 19 page paper listing selected resources both new and existing that will help anyone who is attempting to find the latest information about theology resources and sites that are available over the Internet. It is freely available as a .pdf file (669KB) at the above link from the Virtual Private Library™ and authored by Marcus P. Zillman, M.S., A.M.H.A. It was updated with all links validated and new links added on November 9, 2020.

Lavell Virtual Stores
https://ecxtech.io/
Lavell Virtual Stores is a web-based software platform that allows anyone to create their own e-commerce business and connect it to any number of commissioned online sellers. Anyone with a product or service can list their inventory, without worrying about building an audience from scratch. Now anyone can create an online storefront, with or without their own inventory. This will be added to New Economy Resources Subject Tracer™. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to eCommerce Resources Subject Tracer.
Podio – Content, Context and Conversations In One Place
https://podio.com/
Whether you’re completing a design project, or closing a sales lead – getting everything related to the job on one page, instantly makes collaboration easier. Attach files, view the status and add comments – everything’s updated in real time. There’s no cracks for pieces of your projects to fall through here. From simple tables to dynamic card boards, choose the view that best visualizes your work – and create reports that keep you up to date on your progress. Podio works seamlessly with many of the most popular file-sharing services, customer support products and marketing tools – to be the platform that ties all your team’s work together. Here are just a few of the products that integrate with Podio. This will be added to New Economy Resources Subject Tracer™. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™.

Green Files 2021 White Paper Link Dataset Compilation
http://www.GreenFiles.info/
The above white paper link dataset compilation of the Green Files 2020 Subject Tracer™ Information Blog by Marcus P. Zillman, M.S., A.M.H.A. is a freely available 22 page .pdf document (675KB) listing the latest and greatest online resources and sites for the environment and all things green! Complete Update Including All Links Validated on November 11, 2020. Other white papers are available by clicking here.

CryptPad – The Zero Knowledge Cloud
https://cryptpad.fr/
CryptPad.fr is the official instance of the open-source CryptPad project. It is administered by XWiki SAS, the employee-owned French company which created and maintains the product. CryptPad is a private-by-design alternative to popular office tools and cloud services. All the content stored on CryptPad is encrypted before being sent, which means nobody can access your data unless you give them the keys (not even us). With CryptPad, you can make quick collaborative documents for taking notes and writing down ideas together. This will be added to New Economy Resources Subject Tracer™. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™. This will be added to Privacy Resources Subject Tracer™.

Elder Resources 2021
http://www.ElderResources.info/
The above is the white paper link dataset compilation of Elder Resources 2021 by Marcus P. Zillman, M.S., A.M.H.A. It is a 21 page .pdf document 680KB. [Completely Updated With All Links Validated and New URLS added On November 12, 2020] Other white papers are available by clicking here.
Matrix – An Open Network for Secure, Decentralized Communication

https://matrix.org/

Matrix is an open source project that publishes the Matrix open standard for secure, decentralised, real-time communication, and its Apache licensed reference implementations. Maintained by the non-profit Matrix.org Foundation, they aim to create an open platform which is as independent, vibrant and evolving as the Web itself... but for communication. As of June 2019, Matrix is out of beta, and the protocol is fully suitable for production usage. Matrix is really a decentralised conversation store rather than a messaging protocol. When you send a message in Matrix, it is replicated over all the servers whose users are participating in a given conversation – similarly to how commits are replicated between Git repositories. There is no single point of control or failure in a Matrix conversation which spans multiple servers: the act of communication with someone elsewhere in Matrix shares ownership of the conversation equally with them. Even if your server goes offline, the conversation can continue uninterrupted elsewhere until it returns. This means that every server has total self-sovereignty over its users data – and anyone can choose or run their own server and participate in the wider Matrix network. This is how Matrix democratises control over communication. This will be added to Privacy Resources Subject Tracer™. This will be added to New Economy Resources Subject Tracer™. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™.

Intrapreneurial Resources 2021 White Paper DataSet Link Compilation

http://www.IntrapreneurialResources.info/

I have just updated my white paper link compilation of the Intrapreneurial Resources 2021 Subject Tracer™ Information Blog by Marcus P. Zillman, M.S., A.M.H.A. It is a 15 page .pdf document 652KB. [Completely Updated November 13, 2020] Other white papers are available by clicking here.

CodiMD – The Best Platform to Write and Share Markdown

https://demo.codimd.org/

CodiMD is a real-time, multi-platform collaborative markdown note editor. This means that you can write notes with other people on your desktop, tablet or even on the phone. You can sign-in via multiple auth providers like Facebook, Twitter, GitHub and many more. Features include: a) Real time collaboration, b) Works with charts and MathJax, and c) Supports slide mode. This will be added to New Economy Resources Subject Tracer™. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™.
December 2020 Zillman Column: ShoppingBots and Online Shopping Resources 2021
http://www.ZillmanColumns.com/
The December 2020 Zillman Column features **ShoppingBots and Online Shopping Resources 2021** by Marcus P. Zillman, M.S., A.M.H.A.; Executive Director of the Virtual Private Library. This is a comprehensive listing of shoppingbot and online shopping/coupon/deal resources and sites on the Internet. This is the 25th annual listing of this directory that has been produced and published by Internet Expert and Guru Marcus P. Zillman, M.S., A.M.H.A. since 1996. The below list of sources is taken from his Subject Tracer™ Information Blog titled ShoppingBots and is constantly updated with Subject Tracer™ bots at the following URL: http://www.ShoppingBots.info/ These resources and sources will help you to discover the many pathways available to you through the Internet to find the latest shoppingbot resources and sites. Download this excellent freely available 29 page 741KB pdf column today. This is another MUST have column to discover the latest 2021 competent online shoppingbot and online shopping resources to give you the information you need in today’s ever changing and fast paced 2020 New Economy business and academic research world and the New Normal.

Grant Resources on the Internet 2021
http://www.GrantResources.info/
The above is the white paper titled **Grant Resources 2021** Subject Tracer™ Information Blog by Marcus P. Zillman, M.S., A.M.H.A.. It is a freely available 18 page .pdf document (665KB) listing the latest and greatest online resources and sites for grants! **Updated with all links validated and new links added on November 15, 2020.** Other white papers are available by clicking here.

Drawpile Collaborative
https://drawpile.net/
Drawpile is a Free software collaborative drawing program that allows multiple users to sketch on the same canvas simultaneously. This will be added to New Economy Resources Subject Tracer™. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™.

Wikibility – When Wikipedia Meets Accessibility
https://oswaldlabs.com/platform/shravan/apps/wikibility/
Wikibility is when Wikipedia meets accessibility. Use Agastya’s award-winning web accessibility options on Wikipedia, the free encyclopedia, for easy browsing, reading, and referencing. Wikipedia is the world’s largest curated source of knowledge. You can find information about any and everything on Wikipedia, but this information is not always accessible to everyone. Using Wikibility, users with learning disorders like dyslexia, senior, blind users, etc., can all easily use Wikipedia. It automatically highlights difficult
words and works across all of Wikipedia’s languages. Wikibility is a proof-of-concept app which implements Agastya on Wikipedia. This will be added to Accessibility Resources Subject Tracer™. This will be added to New Economy Resources Subject Tracer™. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™.

2021 Directory of Directories
The above is a white paper link dataset compilation of the 2021 Directory of Directories Subject Tracer™ Information Blog by Internet Expert Marcus P. Zillman, M.S., A.M.H.A. This 2021 Directory of Directories covers all the competent and well maintained directories available from the Internet and makes for an excellent alternative search resource! It is now a 33 page .pdf document 758KB. [Created on November 17, 2021, 2020] Other white papers are available by clicking here.

BRASS Best Practices for Webinar and Online Presentations
https://brass.libguides.com/webinar_best_practices
This guide gathers advice for preparing for, presenting, and following up on a webinar or online presentation. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™.

Financial Sources 2021 Subject Tracer™ Information Blog White Paper Link Dataset Compilation
https://www.zillman.us/subject-tracers/financial-sources/
http://www.FinancialSources.info/
The above is the associated white paper link dataset compilation of the Financial Sources 2021 Subject Tracer™ Information Blog by Marcus P. Zillman, M.S., A.M.H.A. It is a 37 page .pdf document 777KB. [Created November 18, 2020] Other white papers are available by clicking here.

Business BRASS Guide: Accounting
https://brass.libguides.com/accounting
Basic accounting competencies for librarians listed in this guide are directories for finding accountants, various certifications, accounting standards, and regulatory bodies, as well as recommended sources to learn more about accounting basics. Accounting and tax questions are often related, and research of one area may include research in the other. Consult the BRASS Business Guide – Taxation guide for more information on that topic. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools
section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™. This will be added to Financial Sources Subject Tracer™.

Prediction Markets 2021
https://www.zillman.us/subject-tracers/prediction-markets/
The above is the associated white paper link dataset compilation of Prediction Markets 2021 Subject Tracer™ Information Blog by Marcus P. Zillman, M.S., A.M.H.A. It is a 22 page .pdf document 697KB covering sources, sites and tools required for market prediction [Updated including all links validated and new links added on November 19, 2020]. Other white papers are available by clicking here.

BRASS Business Guide: Advertising/Marketing
https://brass.libguides.com/AdMarketingResources
This guide covers both marketing and advertising. Marketing is the process of moving goods and services from the producer to the consumer. Advertising is one aspect of marketing and entails conveying a message to promote the sale or use of a good or service. For business reference purposes, marketing most often refers to market research and advertising. Other topics that commonly fall under marketing include: 1) Market research; 2) Market segmentation; 3) Media planning; 4) Public relations; 6) Product pricing; 7) Distribution; 8) Customer support. 9) Sales strategy, and 10) Community involvement. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™

eCommerce Resources On the Internet 2021
https://www.zillman.us/subject-tracers/ecommerce-resources/
http://www.eCommerceResources.info/
The above is the associated white paper link dataset compilation of the eCommerce Resources On the Internet 2021 Subject Tracer™ Information Blog by Marcus P. Zillman, M.S., A.M.H.A. It is a 31 page .pdf document (758KB) freely available from the above URL. [Updated with all links validated and new links added on November 20, 2020]. Other white papers are available by clicking here.

BRASS Business Guide: Banking
https://brass.libguides.com/banking
The U.S. banking industry is comprised primarily of commercial banks, along with savings banks and savings and loan institutions (also known as “thrifts”), credit unions, and Federal Reserve banks. Identifying and assessing financial institutions, both geographically and by type, and researching interest rates probably constitute the most common and predictable banking information needs of general library users. International banking is also referenced here, from a “global” perspective. This will be added to World
Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™. This will be added to Financial Sources Subject Tracer™.

ChatterBots Resources on the Internet 2021
https://www.zillman.us/subject-tracers/chatterbots-resources-on-the-internet-2021/
http://ChatterBots.info/
The white paper link dataset compilation of ChatterBots Resources on the Internet 2021 Subject Tracer™ Information Blog by Marcus P. Zillman, M.S., A.M.H.A. has been just updated and is now a 27 page .pdf document 727KB listing the latest and greatest online resources and sites for ChatterBots! [Complete Updated on November 21, 2020.] Other white papers are available by clicking here.

Citationsy – Perhaps the World’s Best Referencing/Tool
https://citationsy.com/
Citationsy lives in the cloud and is accessible from anywhere. Use our iPhone and Android apps to cite books on the go with our barcode scanner and add the Chrome or Firefox extensions to cite websites in 2 clicks. Your citation data is saved in the cloud and backed up every 10 minutes. Never worry about file formats, data loss, or updates ever again. Citationsy is a clean, annoyance-free environment to get your work done in. Say goodbye to flashing ads, notification, cookie banners, and downloads. It’s just you and your references. Features include: a) Cite Everything – With Citationsy you can cite websites, books, journals, videos, podcasts, images and more – within a few clicks. Or simply use our scanner app; b) Share Projects – rumor has it Citationsy is the only reference manager that allows collaborative referencing. Invite your co-authors to your Citationsy project and work on the bibliography together; c) Create Bibliography – Create citations and organize your references into different projects and bibliographies; d) Accessibility – They work hard to make Citationsy as accessible as possible. They test extensively on screen readers and take feedback from people who use accessibility tools with our products very seriously; e) Export References – Easily export your bibliography in one of over 9000 styles — APA citation, Harvard citation, MLA, DIN, Chicago, and 9000+ more; and f) Any Format! – Get your bibliography in plain text, ready to paste into any application. Export files for Word, Apple Pages, RTF, EndNote, BibTeX, RefWorks, or CSL. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™. This will be added to Education and Academic Resources Subject Tracer.
Directory Resources On the Internet 2021
https://www.zillman.us/subject-tracers/directory-resources/
http://www.DirectoryResources.info/
The above is a white paper link dataset compilation of the Directory Resources On the Internet 2021 Subject Tracer™ Information Blog by Internet Expert Marcus P. Zillman, M.S., A.M.H.A. This Directory of Directories covers all the competent and well maintained directories available from the Internet and makes for an excellent alternative search resource! It is now a 32 page .pdf document 767KB. [Completely updated including all links validated on November 23, 2020] Other white papers are available by clicking here.

Open Book Publishers
https://www.openbookpublishers.com/
They are the leading independent Open Access publisher in the Humanities and Social Sciences in the UK: a not-for-profit Social Enterprise run by scholars who are committed to making high-quality research freely available to readers around the world. All their books are available to read online and download for free, with no Book Processing Charges (BPCs) for authors. They publish monographs and textbooks in all areas, offering the academic excellence of a traditional press combined with the speed, convenience and accessibility of digital publishing. They also publish bespoke Series for Universities and Research Centers and invite libraries to support Open Access publishing by joining their Membership Programme. OBP is eligible to receive European Commission’s publication grants for research funded within the FP7 and Horizon 2020 frameworks, and their books have been submitted for the UK REF assessment exercise. This will be added to Open Educational Resources (OER) Sources. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™.

Agriculture Resources 2021 White Paper Link Dataset Compilation
https://www.zillman.us/subject-tracers/agricultural-resources/
http://www.AgricultureResources.info/
The above is the associated white paper link dataset compilation of the Agriculture Resources 2021 Subject Tracer™ Information Blog by Marcus P. Zillman, M.S., A.M.H.A. It is a 21 page .pdf document 690KB. [Completely Updated Including All Links Validated On November 24, 2020] Other white papers are available by clicking here.

IdeaBuddy – Bring Your Business Idea to Life
https://ideabuddy.com/
Build a business model. Plan and develop your idea. Forecast cash flow and profit. Start your business. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the
tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™. This will be added to Financial Sources Subject Tracer™.

**Financial Sources for the Family Office 2021**
http://whitepapers.virtualprivatelibrary.net/Financial_Sources_for_the_Family_office.pdf
http://www.FinancialSourcesFamilyOffice.com/
The above is a white paper link dataset compilation for Financial Sources for the Family Office 2021 by Marcus P. Zillman, M.S., A.M.H.A. It is now a 37 page .pdf document 787KB. [Released on November 25, 2020] Other white papers are available by clicking here.

**IREL8 – Peer to Peer Empowerment Platform**
https://irel8.org/
IREL8 is a global, anonymous peer empowerment platform focused on mental wellness. Our platform brings people together in a safe community with others who have “been there, done that”, with the goal of helping and healing each other. IREL8 believes people have an innate need to connect to one another and uses Microsoft technology to Stop the Stigma while making a positive impact on mental wellness. IREL8 provides access 24/7/365 in a confidential and safe mobile app, and brings communities of people together to help and heal each other. Thank you for visiting – be part of the solution by downloading the app today! This will be added to Healthcare Resources 2021. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™.

**Auction Resources 2021**
https://www.zillman.us/subject-tracers/auction-resources/
http://www.AuctionResources.info/
The above is the associated white paper link dataset compilation of the Auction Resources 2021 Subject Tracer™ Information Blog by Marcus P. Zillman, M.S., A.M.H.A. It is a 17 page .pdf document 681KB. [Completely updated including all link validation and new links added on November 23, 2020]. Other white papers are available by clicking here.

**Test Your Ideas – Guaranteed Answers to Research Questions**
Save significant time and money on creating market research questions, then sit back and watch the responses pour in from real people, automatically. Most research platforms only allow you to create a question before either asking you to recruit respondents yourself, or pay high fees to get respondents for you. At Test Your Ideas, the recruitment of random worldwide respondents is completely free while the recruitment of targeted respondents costs less than 1/10 of a typical research agency. Try the Test Your Ideas tool to create questions, get guaranteed answers, and view visual and data-based results.
This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™.

Astronomy Resources 2021 White Paper Link Dataset Compilation
https://www.zillman.us/subject-tracers/astronomy-resources/
http://www.AstronomyResources.info/
The above is the associated white paper link dataset compilation of the Astronomy Resources 2021 Subject Tracer™ Information Blog by Marcus P. Zillman, M.S., A.M.H.A. It is now a 29 page .pdf document 727KB. [Completely updated with all links validated and new links added on November 27, 2020] Other white papers are available by clicking here.

BRASS Business Guide: Small Business and Entrepreneurship
https://brass.libguides.com/SmallBusinessCore
This guide covers aspects of small business and entrepreneurship information that are most commonly sought after by library patrons. This includes, but is not limited to the following: how to start a small business, business forms, franchising information, acquiring funding, and business plans. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™.

Biological Informatics 2021
http://www.BiologicalInformatics.info/
I have just updated my Subject Tracer™ Information Blog white paper link dataset compilation titled Biological Informatics 2021 which is now a 378 page paper listing selected resources both new and existing that will help anyone who is attempting to find the latest information about biological informatics that are available over the Internet. It is freely available as a .pdf file (833KB) at the above link from the Virtual Private Library™ and authored by Marcus P. Zillman, M.S., A.M.H.A. It was completely updated including link validation and new links added on November 28, 2020. Other white papers are available by clicking here.

How to Empower and Support Young Entrepreneurs (Resources and Tips)
In times of economic uncertainty, it is easy to think that it is ‘impossible’ for anybody to make money. This is complete nonsense and the exact kind of thinking that new entrepreneurs should steer clear of. It is a poverty-based mindset that looks to respond defensively to conditions instead of looking for profit opportunities in all conditions. To understand how to support and empower young entrepreneurs, we must look at statistics and theoretical knowledge but have a strong emphasis on practical experience. This
guide aims to equip the global youth with **psychological tools** and **practical resources** so they can confidently build wealth without buying into all of the drama. Saying this, the correct method through which to teach the youth psychological success principles remains a little uncertain and is most definitely not actively fostered in the schooling system. This will be added to World Wide Web Reference Subject Tracer™. This will be added to Entrepreneurial Resources Subject Tracer™. This will be added to the tools section of Research Resources Subject Tracer™. This will be added to Business Intelligence Resources Subject Tracer™.

**Awarenesswatch™ Paper Review**

**Crowdfunding During COVID-19: An International Comparison of Online Fundraising** by Greg Elmer, Sabrina Ward-Kimola and Anthony Glyn-Burton  

**Abstract:**  
This article performs a digital methods analysis on a sample of online crowdfunding campaigns seeking financial support for COVID related financial challenges. Building upon the crowdfunding literature this paper performs an international comparison of the goals of COVID related campaigns during the early spread of the pandemic. The paper seeks to determine the extent to which crowdfunding campaigns reflect current failures of governments to suppress the COVID pandemic and support the financial challenges of families, communities and small businesses.

**Subject Tracer™ Information Blogs**

Subject Tracer™ Information Blogs created and developed by the Virtual Private Library™ combine the best of the latest tools on the Internet. Using bots, blogs and news aggregators the Subject Tracer™ Information blogs generate RSS feeds with the latest resources to create a current information resource flow through niched subject tracers. I am proud to be the creator of the Internet’s first Subject Tracer™ Information Blogs:

**Virtual Private Library™**  

Accessibility Resources  
[http://www.AccessibilityResources.info/](http://www.AccessibilityResources.info/)

Agriculture Resources  
[http://www.AgricultureResources.info/](http://www.AgricultureResources.info/)
Employment Resources
http://www.EmploymentResources.info/

Entrepreneurial Resources
http://www_EntrepreneurialResources.info/

Fact Checkers Directory
http://www.FactCheckers.us/

Financial Sources
http://www.FinancialSources.info/

Finding People
http://www.FindingPeople.info/

Games Resources
http://www.GamesResources.info/

Genealogy Resources
http://www.GenealogyResources.info/

Grant Resources
http://www.GrantResources.info/

Green Files
http://www.GreenFiles.info/

Grid, Distributed and Cloud Computing Resources
http://www.GridResources.info/

Healthcare Resources
http://www.HealthcareResources.info/

Information Futures Markets
http://www.InformationFuturesMarkets.com/

Information Quality Resources
http://www.InformationQualityResources.info/

International Trade Resources
http://www.InternationalTradeResources.info/

Internet Alerts
http://www.InternetAlerts.info/
Internet Demographics
http://www.InternetDemographics.info/

Internet Experts
http://www.InternetExperts.info/

Internet Hoaxes
http://www.InternetHoaxes.info/

Intrapreneurial Resources
http://www.IntrapreneurialResources.info/

Journalism Resources
http://www.JournalismResources.info/

Knowledge Discovery
http://www.KnowledgeDiscovery.info/

Military Resources
http://www.MilitaryResources.info/

New Economy Analytics, Resources and Alerts
http://www.NewEconomyAnalytics.com/

Outsourcing/Offshoring Information and Resources
http://www.OutsourcingOffshore.us/

Privacy Resources
http://www.PrivacyResources.info/

Reference Resources
http://www.ReferenceResources.info/

Research Resources
http://www.ResearchResources.info/

RestStress™
http://www.RestStress.com/

Script Resources
http://www.ScriptResources.info/

ShoppingBots
http://www.ShoppingBots.info/
Social Informatics
http://www.SocialInformatics.info/

Statistics Resources and Big Data
http://www.StatisticsResources.info/

Student Research
http://www.StudentResearch.info/

Theology Resources
http://www.TheologyResources.info/

Tutorial Resources
http://www.TutorialResources.info/

World Wide Web Reference
http://www.WWWReference.info/

Author Information: Marcus P. Zillman, M.S., A.M.H.A. Executive Director of the Virtual Private Library is an international Internet expert, author, keynote speaker and corporate consultant in the area of information retrieval, knowledge discovery, knowledge harvesting, artificial intelligence and bots/intelligent agents. He has created numerous world wide web sites including 54 Subject Tracer™ Information Portals and Blogs; written a number of internet miniguides, white papers, manuals and books; hosted over 160 weekly Internet television shows, writes a weekly and monthly column on Current Awareness on the Internet; writes a monthly newsletter Awareness Watch and delivers keynote presentations throughout the international marketplace. He also actively
delivers one and two day workshops for key industry sectors displaying how the Internet can be used as a tool to maintain current awareness and professional competencies.

Additional websites by Marcus P. Zillman, M.S., A.M.H.A.:

**Marcus P. Zillman's Blog (26,000+ Postings)**
http://www.zillman.us/

**Marcus P. Zillman Abbreviated Bio**
http://www.zillman.info/

**White Papers by Marcus P. Zillman**
http://www.WhitePapers.us/

**Internet MiniGuides™**
http://www.InternetMiniguide.com/

**Awareness Watch™ Newsletter**
http://www.AwarenessWatch.com/

**Marcus P. Zillman's Columns**
http://www.ZillmanColumns.com

**LinkSeries Publications**
http://www.LinkSeries.com/

**Links By Marcus™**
http://www.LinksByMarcus.com/

**Workshops By Marcus™**
http://www.WorkshopsByMarcus.com/

**SourceSeries Internet Research Workshops**
http://www.SourceSeries.com/

**Watch Marcus™**
http://www.WatchMarcus.com/

**listen to marcus™**
http://www.ListenToMarcus.com
Research White Papers, Articles, Lectures and Speeches by Marcus P. Zillman, M.S., A.M.H.A.:

2021 Directory of Directories

2021 Guide to Finding Experts by Using the Internet
http://www.FindingExperts.info/

2021 Guide to Finding People Resources and Sites
http://www.FindingPeople.info/

2021 Guide to Internet Privacy Resources and Tools
http://www.2021InternetPrivacy.com/

2021 Guide to Searching the Internet
http://www.SearchingTheInternet.info/

2021 New Economy Resources
http://www.2021NewEconomy.com/

Academic and Scholar Search Engines and Sources 2021
http://www.ScholarSearchEngines.com/

Bots, Blogs and News Aggregators 2021
http://www.BotsBlogs.com/

Business Intelligence Online Resources 2020
http://www.BIOnlineResources.info/

Cloud Computing Resources Primer 2020
http://www.zillman.us/white-papers/grid-distributed-and-cloud-computing-resources-primer/

Current Awareness Discovery Tools on the Internet 2021

Deep Web Research and Discovery Resources 2020 Online White Paper
http://DeepWeb.us/

eMarketing MiniGuide 2021
http://www.eMarketingMiniGuide.com/
eReference Library Link Toolkit 2020
http://www.eReferenceLibrary.com/

Finding Experts By Using the Internet 2021
http://www.FindingExperts.info/

Finding People Resources and Sites 2021
http://www.FindingPeople.info/

Healthcare Bots and Subject Directories 2021
http://www.HealthcareBots.info/

Knowledge Discovery Resources 2021
http://www.KDResources.info/

New Economy Resources 2021
http://www.NewEconomyResources.com/

Online Research Browsers and Data Visualization Tools 2021
http://www.zillman.us/white-papers/online-research-browsers/

Online Research Tools
http://www.OnlineResearchTools.info/

Online Social Networking 2021
http://www.OnlineSocialNetworking.info/

Searching the Internet 2021
http://www.SearchingTheInternet.info/

Using the Internet As a Dynamic Resource Tool for Knowledge Discovery 2021

Web Data Extractors 2021
http://www.WebDataExtractors.com/

Web Guide for the New Economy 2020

White Papers By Marcus P. Zillman, M.S., A.M.H.A.
http://www.WhitePapers.us/
Internet Tutor by Marcus P. Zillman, M.S., A.M.H.A.
http://www.InternetTutor.info/
Visit this site to learn about the availability of Marcus P. Zillman to tutor you or your associate one on one in the privacy of your residence or office on the latest happenings of the Internet including Internet basics to advanced Internet searching using bots and creating your own personal blog.

Internet Speaking by Marcus P. Zillman, M.S., A.M.H.A.
http://www.InternetSpeaker.net
Visit this site to learn about Marcus P. Zillman’s speaking engagements for your organization meetings and events. View and listen to his previous presentations as well as his weekly television shows.

Internet Consulting by Marcus P. Zillman, M.S., A.M.H.A.
http://InternetConsultant.BlogSpot.com/
Visit this site to obtain information about obtaining the consultation services of Marcus P. Zillman for your company including eCommerce audits, utilization of bots, blogs and news aggregators or the creation of your own personal virtual private library powered by Subject Tracer™ Information bots!

Current Awareness Monitors, Alerts and Information Traps
http://www.ecurrentAwareness.com/
Marcus P. Zillman’s latest reports Current Awareness Monitors, Alerts and Information Traps and Current Awareness Tools 2020 are now available. One for purchase and one freely available online and immediate download. These reports are comprehensive listings of the latest resources, sources and sites for current awareness on the Internet. This is a must read for anyone who must stay current in their profession and/or business activity as the list of URLs will keep you at the leading edge of your career.

Market Intelligence Resources
http://www.MarketIntelligenceResources.com/
Marcus P. Zillman’s just released professional Internet MiniGuide is titled Market Intelligence Resources and is available for purchase online and immediate download. This 193 page digital miniguide represents a comprehensive listing of the latest resources, sources and sites to discover the latest Market Intelligence sources available on the Internet with many of them freely available! Designed specifically for today’s entrepreneur, professional and/or investor.

Entrepreneurial Links 101
http://www.EntrepreneurialLinks.com/
Marcus P. Zillman’s newly released 231 page eReference digital book for the up and coming entrepreneur. Entrepreneurial Links 101 gives an alphabetical listing of the very best Internet and World Wide Web sites covering Entrepreneur Resources, Business
Intelligence Resources and an extremely comprehensive list of Online Research Tools. This is considered by many to be the entrepreneur’s bible for finding relevant and competent online resources!

**Internet Privacy and Security Resources**

http://www.InternetPrivacySecurity.net/

Marcus P. Zillman’s latest eReference digital publication is a selected comprehensive alphabetical listing of the latest resources and sites covering all aspects of privacy and security currently available over the Internet. From the board room to the family room, these resources and sites give you the information you need to maintain your privacy and security as you use the Internet in your business and personal life.

**Research Resources Online Guide**

http://www.ResearchResourcesOnline.net/

Marcus P. Zillman’s latest LinkSeries Publication is a 340 page digital guide of a selected comprehensive alphabetical listing of the latest and greatest resources and sites covering all areas of research that is currently available over the Internet. The guide covers online research resources and tools for the Newbie to research as well as the Seasoned researcher. Contents include: a) Research Resources, b) Research Tools, c) Student Research Resources Toolkit, d) Knowledge Discovery/Management and Data Mining Resources, e) Knowledge Discovery/Retrieval and the World Wide Web Resources, and f) Subject Tracer™ Information Blogs.

**The Survivor’s Manual for The New Economy.**


Marcus P. Zillman’s latest LinkSeries Publication is a 239 page digital read that gives excellent resources and annotated sources for the new economy analytics, alerts, ecommerce, financial sources, invisible and deep web resources, social and business networking sources along with new economy competitive and business intelligence resources and an extremely comprehensive listing of new economy online tools.