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The Evolution of the Internet and Features and Categories of Websites

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# The evolution of the Internet

The Internet, as we know it today, is a global network of billions of computer and electronic devices. These days it plays a huge role in our day to day lives, since it allows us to access any information and communicate with anyone in the world, that it almost seems like it’s always been here. But we should ask ourselves, how was it created and why? How did it come to be a global phenomenon?

It all started with the invention of the Arpanet for the purpose of serving the US military force during the cold war about 40 years ago. The US military force funded a research arm called Advanced Research Projects Agency (ARPA), who worked on a communication project which then led to the invention of Arpanet. Though it was meant for armed forces to communicate over a connected and distributed network at the time, as the years went by Arpanet expanded its connection to universities and other cities over satellites and eventually was renamed to ‘Internet’.

The internet became a global phenomenon thanks to two main inventions which had significant impacts. These are the Internet’s Domain Name System and World Wide Web. The Internet Domain Name System was invented in 1984 to match complex IP addresses with easy to remember names ending in extensions such as .com, .org, .edu, .gov, .mil and country codes. The World Wide Web was invented by Tim Berners-Lee in 1990 as a method of publishing information in a hypertext format on the Internet. The Web began to take off in 1993, after computer science student Marc Andreessen created the first popular Web browser, known as Mosaic.

So, even if it seems a casual invention now it’s worth knowing about how it came to be so widespread since it might actually open doors for other great inventions.

1. 2. View the 5 – 10 popular websites of your choice from web archive URL and put your observation and assessment your choice from web archive URL and put your observation and assessment

# Observation and assessment of websites

I have chosen to review 6 websites from web archive. They are Amazon, BBC, Yelp, Reddit, goodreads and foodnetwork.

1. Amazon

Amazon is the best online shopping website there is these days. But the design and layout wasn’t always the same as it is now. In earlier years like 2005, to get to the home page the link with the name “welcome” had to be pressed and the logo was placed separately on the left but starting from 2006 the link leading to the home page had the sign of the logo and was placed with other links that lead to the store and product categories, but as the years went by it is placed on its own with a larger size. Another change that can be mentioned is that the search text field occupies a much larger space from the year starting 2008.

After 2016 the website increased its attractiveness by leaving the majority of the page for the expansion of the logos of the products by their categories and also adding motion pictures. It’s not hard to notice that the website has different products highlighted every month for the users to choose from. The current 2020 website has an easy going flow that the user can relate to. Generally, it’s not surprising to hear that amazon is the best online shopping website there is.

1. BBC

BBC is one the most popular news websites in the world and unsurprisingly the home page is filled with the latest news categorized with their type of news such as top stories, sports, entertainment etc. There’s a “Welcome to BBC” writing just below the logo and the sign in for an account link. Beside them there are the other links which lead to the web pages news, sport, weather, etc. And in the end of those there’s a search text field. It’s not hard to tell that it uses basic html and css for design.

1. Yelp

Yelp is one of the more popular social networking sites that focuses on reviewing businesses and sharing information. By the first glance you can immediately tell that the theme color of the website is red. The top header’s background, the buttons, the star icons representing the rates, the captions describing what the following section will entail, they are all colored red. This highlights how they used the css.

In the year 2015 at the top of the page next to the logo there are two search text fields where the user can search what they want to rate and where it’s actually found, next to it there’s a button where they can sign up for a new account or log in into an existing account. Below that there are the links that lead to other webpages that enable you to learn about the website and write your own reviews. Below that there are the recommended yelp places where they are ranked based on the highest rates.

The website has changed a few things over the years. For example on the latest one, the logo of yelp is above the two search boxes which are kind of merged together and their background is black not red. On the main page the items are more categorized by group, there’s a browse by business caption where below it they are grouped as restaurants, shopping, and active life with their respective descriptive logos.

1. Reddit

Reddit is one of the famous platforms for internet communities as it says so on the website right below the logo and the link for the webpages next to it which make the user choose from the hot, new and rising topics there are at that time. There’s a search and a sign in text field where the user can log into their account or create a new one on the top right side of the home page. The rest of the main page is a list of random topics which are called subreddits where people can go and give their comment or add to the section. It hasn’t changed much over the years except for the varying topics and the writing below the logo has changed to “Welcome to Reddit”. It can be observed that it uses basic html structure.

1. Goodreads

In earlier years, the homepage starts with its name “goodreads” and a little further next to it to the right there are text fields to sign into an existing account. Then right below it there are text fields to create new accounts with the words “Meet your next favorite book.” Next to it in a slightly larger font and with pictures of books below them which can let someone guess easily about what the website is. The top portion has a very light brown background and the main page right below is just plain white. It starts with a list of books with the caption “What will *you* discover?” A little far down the page there is a search option where you can browse through books that might be there.

As the years went by not a lot of things changed from the website but there is the addition of the love list section on the top right portion of the main page which suggests categories of the best books the user might like.

1. Foodnetwork

In the earlier years like 2013, the homepage of the website starts out with the recipes and cooking with the logo next to it on the left. There are the links next to it leading to the other webpages like the shows, chefs and restaurants. Below that there are a number of options which lets the user choose what kind of food they are interested in at the time. For example if it is Halloween, family-friendly food, healthy eating, etc. The content part of the page starts out with a search option then moves on to the different categories of food recipes it can offer whether it’s top leading recipes or which chef is actually cooking something.

When we come to the recent design of the website, it has changed a lot of the things that it has to be one of the websites that almost completely transformed its layout. It’s safe to say it changed for the best. The main page, unlike the one’s in earlier years, occupies most of the page in width and is very clear with different captions such as where to eat? , quick and easy recipes to make this week, etc. And they’re accompanied by pictures which increase the attractiveness of the page in general. One of the most significant things about it is that the different sections all have different background colors.

# Examples of websites for each category

1. Examples of news websites

* Yahoo! News

As the name suggests Yahoo! News is a news website which originated as an internet-based news aggregator by Yahoo. It focuses on displaying the latest news and headlines.

Link: <https://news.yahoo.com/>

* CNN

CNN is an American news-based pay television channel owned by AT&T's Warner Media. It was founded in 1980 by American media proprietor Ted Turner as a 24-hour cable news channel. The website focuses on displaying the latest news and breaking news today for U.S., world, weather, entertainment, politics and health.

Link: <https://edition.cnn.com/>

* BBC

The British Broadcasting Corporation (BBC) is a British public service broadcaster. It focuses on displaying the latest news and sport headlines, weather, TV & radio highlights and much more.

Link[: https://www.bbc.co.uk/news](https://www.bbc.co.uk/news)

* Fox news

Fox News is an American conservative cable television news channel.

Link:<https://www.foxnews.com/>

* NBC news

NBC News is the news division of the American broadcast television network NBC.

Link:<https://www.nbcnews.com/>

1. Examples of entertainment websites

* YouTube

YouTube is an American video-sharing platform headquartered in San Bruno, California. For most people, it’s is used to watch music videos, comedy shows, how to guides, recipes, hacks and more. It can serve for many purposes and since it’s used for entertainment, it can be mentioned as an example.

Link: <https://www.youtube.com/>

* Netflix

Netflix is a streaming service that allows users to watch a wide variety of award-winning TV shows, movies, documentaries, and more on thousands of internet-connected devices. It’s quite famous and people who have an account can enjoy unlimited ad-free viewing of the content.

Link: <https://www.netflix.com/>

* Wattpad

Wattpad is an Internet community for readers and writers to publish new user-generated stories in different genres, including classics, general fiction, historical fiction, non-fiction, poetry, fan-fiction, spiritual, humor, and teen fiction.

Link:<https://www.wattpad.com/>

* Reddit

Reddit is an American social news aggregation, web content rating, and discussion website. Members who have registered submit content to the site such as links, text posts, and images, which are then voted up or down by other members.

Link: <https://www.reddit.com/>

* IMDb

IMDb is the world's most popular and authoritative source for movie, TV and celebrity content. It allows people to find ratings and reviews for the newest movie and TV shows.

Link: <https://www.imdb.com/>

1. Examples of informational websites

* Wikipedia

Wikipedia is a multilingual online encyclopedia created and maintained as an open collaboration project by a community of volunteer editors using a wiki-based editing system.

Link: <https://www.wikipedia.org/>

* YouTube

As YouTube can be used for many services it can be listed in more than one category. It’s likely it will have useful information that a user is specifically looking for since a lot of people add different information to a specific topic every year if not every month.

Link: <www.youtube.com.>

* WHO

The World Health Organization is a specialized agency of the United Nations that is concerned with world public health.

Link: <https://www.who.int/about>

* TED

TED is a nonpartisan nonprofit devoted to spreading ideas, usually in the form of short, powerful talks.

Link: <https://www.ted.com/>

* CNET

CNET, formerly Computer Network, is an American media website that publishes reviews, news, articles, blogs, podcasts, and videos on technology and consumer electronics globally.

Link: [www.cnet.com.](http://www.cnet.com/)

1. Examples of educational websites

* EdX

EdX is a massive open online course provider. It hosts online university-level courses in a wide range of disciplines to a worldwide student body, including some courses at no charge.

Link: <https://www.edx.org/>

* Stack Overflow

Stack Overflow is a question and answer site for professional and enthusiast programmers. It features questions and answers on a wide range of topics in computer programming.

Link: [https://stackoverflow.com/](%20https:/stackoverflow.com/)

* W3schools

W3Schools is an educational website for learning web technologies online. Content includes tutorials and references relating to HTML, CSS, JavaScript, JSON, PHP, Python, Angular JS, React.js, SQL, Bootstrap, Sass, Node.js, jQuery, XQuery, AJAX, XML, Raspberry Pi, C++, C# and Java.

Link: <https://www.w3schools.com/>

* YouTube

YouTube can also be categorized as an educational website since students all over the world are accessing videos about their respective interests.

Link: [www.youtube.com.](http://www.youtube.com/)

* Internet archive

Internet archive is an authentic website storing the originals from various big websites. For example, American libraries include the collection of free book directly attached with the college libraries' websites. Even though it doesn’t give admission or certificates for learning, it’s one of the best websites imparting free and accessible knowledge.

Link: <https://archive.org/>

1. Examples of blog websites

* TechCrunch

TechCrunch is a leading technology media property, dedicated to obsessively profiling startups, reviewing new Internet products, and breaking tech news. It’s popular as it has more than 2 million friends and followers on Twitter, Facebook, LinkedIn, Google and other social media.

Link: <https://techcrunch.com/>

* Lifehacker

Lifehacker is an online blog that teaches visitors little tricks for everyday situations that make their lives easier.  It contains articles and guides on how to do almost anything.

Link: <https://lifehacker.com/>

* Mashable

Mashable started as a blog which the founder wrote himself while recovering from an operation in his teens. He would write about things he saw around him and about the things he had read on the internet and in books. The blog gained readers and subscribers week on week, with people sharing his thirst in technological change and what it meant for the everyday man. After almost 2 years two million people a month read Mashable.

Link: <https://mashable.com/>

* Business insider

Business Insider is a fast-growing business site with deep financial, media, tech, and other industry verticals.

Link: https://www.businessinsider.com/

* Huffington post

HuffPost is an American news and opinion website and blog, with localized and international editions.

Link: <https://www.huffpost.com/>

1. Examples of business/ marketing websites

* Bloomberg

Bloomberg focuses on delivering business and markets news, data and analysis.

Link: https://www.bloomberg.com/

* Google finance

Google Finance is a website focusing on business news and financial information hosted by Google.

Link: google.com/finance

* CNN Business

CNN Business is a financial news and information website, operated by CNN.

Link: <https://edition.cnn.com/business>

* Yahoo finance

Yahoo! Finance is a media property that is part of Yahoo!'s network. It provides financial news, data and commentary including stock quotes, press releases, financial reports, and original content. It also offers some online tools for personal finance management.

Link: <https://finance.yahoo.com/>

* Forbes

Forbes is an American business magazine. Published bi-weekly, it features original articles on finance, industry, investing, and marketing topics. It also reports on related subjects such as technology, communications, science, politics, and law.

Link: <https://www.forbes.com/>

1. Examples of content aggregator websites

* Alltop

[Alltop](https://alltop.com/) is one of the biggest names in content aggregation and deservedly sits in first place on this list. One of the great things about it is that you can search for specific topics and then view aggregated content from some of the top blogs for that specific topic.

Link: <https://alltop.com/>

* Popurls

Popurls pulls in content from a variety of social networks, blogs, and news organizations.

Link: <http://popurls.com/>

* WP News Desk

[WP News Desk](http://wpnewsdesk.com/) is a content aggregator website that focuses specifically on WordPress. It automatically pulls in content from a variety of WordPress blogs and companies and displays posts on the front page.

Link: <http://wpnewsdesk.com/>

* The Web List

[The Web List](http://theweblist.net/) functions similarly to Popurls in that it’s a one-page content aggregator website that collects content from a huge variety of sources.

Link: <https://theweblist.net/>

* Travel Blogger Community

[Travel Blogger Community](http://travelbloggercommunity.com/) is for travel bloggers what WP News Desk is for WordPress. It aggregates content from travel bloggers all around the world in one accessible place.

Link: <http://travelbloggercommunity.com/>

1. Examples of wiki websites

* Wikipedia

Wikipedia is basically a free encyclopedia with millions of articles contributed collaboratively using wiki software, in dozens of languages.

Link: <https://www.wikipedia.org/>

* Wikihow

Wikihow allows people to learn how to do anything by giving easy, step-by-step, illustrated instructions for everything.

Link: <https://www.wikihow.com/Main-Page>

* Wikitravel

Wikitravel is a project to create a free, complete, up-to-date and reliable world-wide travel guide.

Link: <https://wikitravel.org/en/Main_Page>

* Wikibooks

Wikibooks is a wikimedia community creating a free library of educational textbooks that anyone can edit.

Link: <https://www.wikibooks.org/>

* Wiktionary

Collaborative project for creating a free lexical database in every language, complete with meanings, etymologies, and pronunciations.

Link: <https://www.wiktionary.org/>

1. Examples of social network websites

* Facebook

Facebook is a social networking site that makes it easy for you to connect and share with family and friends online.

Link: <https://www.facebook.com/>

* Instagram

Instagram is an American photo and video-sharing social networking service owned by Facebook, Inc.

Link: https://www.instagram.com/

* Twitter

Twitter is an American microblogging and social networking service on which users post and interact with messages known as "tweets". Registered users can post, like, and retweet tweets, but unregistered users can only read them.

Link: <https://twitter.com/>

* Telegram

Telegram is a cloud-based instant messaging and voice over IP service. Telegram client apps are available for Android, iOS, Windows Phone, Windows NT, macOS and Linux. It enables users can send messages and exchange photos, videos, stickers, audio and files of any type.

Link: <https://telegram.org/>

* Snapchat

Snapchat is a multimedia messaging app used globally.

Link: <https://www.snapchat.com/>

1. Examples of portal websites

* UAB Medicine, Patient Portal

UAB's top-ranked medical professionals found a platform through which they can reach many visitors and actual patients with health concerns. Their site hosts a free patient portal with a directory of various healthcare providers categorized by specialty, gender and location.

Link: <https://www.uabmedicine.org/>

* Grants.gov, Federal Government Portal

The mission of Grants.gov is to allow applicants for federal grants to apply for and manage grant funds online through a common website. With a fully-functional government portal, the government could simplify grant management and eliminate redundancies.

Link: <https://www.grants.gov/>

* Stanford University AXESS, Student & Faculty Portal

Stanford University developed a consolidated online platform called AXESS for the academic community to access information and record various transactions. The portal enables functions as related to student enrollment & financials, academic advising, teaching & grading, employment & training, and workflow-enabled administrative processes.

Link: <https://axess.sahr.stanford.edu/>

* Saint-Gobain, Intranet

Saint-Gobain needed a solution to help sustain innovation with speed and precision. They wanted an information systems portal that would allow users to create and manage their own pages/content. With their new site, users could contribute autonomously while having access to documents with internal doc management tools and collaborative platform communities through portlets.

Link: <https://www.saint-gobain.com/en>

* Santander Bank, Retail Banking Portal

As one of the largest banks in the Eurozone, Santander looked to build a new enterprise web platform that would integrate with existing software (CMS, Search Engine, Product Catalog) while allowing room for new content and features. Their site includes several retail banking features and ability to open new accounts and manage day-to-day banking operations.

Link: <https://www.santanderbank.com/us/personal>

1. Examples of personal websites

* Joe Mcnally

Link: <https://portfolio.joemcnally.com/index/all>

* Ellen Skye Riley

Link: <http://ellensriley.com/>

* Melanie Daveid

Link: <http://melaniedaveid.com/>

* Verena Michelitsch

Link: <https://verenamichelitsch.com/>

* Gari Cruze

Link: <http://www.garicruze.com/>

1. Examples of advocacy websites

* Women in toys (WIT)

The mission is to support, inspire and promote women working in the play industry, and to help them achieve greater professional and personal success.

Link: <https://www.womenintoys.com>

* Stand For Children

Stand is focused on ensuring all students receive a high quality, relevant education, especially those whose boundless potential is overlooked and under-tapped because of their skin color, zip code, first language, or disability.

Link: <http://stand.org/>

* Action on Smoking and Health

To advocate for innovative legal and policy measures to end the global tobacco epidemic.

Link: <https://ash.org/>

* The National Network for Immigrant and Refugee Rights

The National Network for Immigrant and Refugee Rights (NNIRR) works to defend and expand the rights of all immigrants and refugees, regardless of immigration status.

Link: <http://www.nnirr.org/drupal/>

* Endangered Species Coalition

The Endangered Species Coalition’s mission is to stop the human-caused extinction of our nation’s at-risk species, to protect and restore their habitats, and to guide these fragile populations along the road to recovery.

Link: <https://www.endangered.org/>

# Guidelines for evaluating the value of a website

There are certain guidelines for evaluating a website. A few of these include:

* Strategy: Any good website is backed by a good thought-out strategy. In order to say a given website has a good strategy, it to answer the following questions:
* What category is my business, and is that obvious on my website?
* What is the purpose of this website, and is the design accomplishing it?
* Who is my target audience, and how does the design take them into consideration?
* What do I want my audience to do, and is the design encouraging that action?
* Usability: this includes the practical considerations of what goes into good website design, such as speed, user-friendliness, security, technical details like sitemaps, etc. In order to test the usability of a given website, it to answer the following questions:
* How long does it take my pages to load, and will visitors get bored waiting?
* How easy is it to find information?
* Is there a search button for visitors?
* Do all the links work?
* Does the site work in different browsers?
* Does my site work on mobile devices?
* Style: the way a certain website looks is important. In order to test the effectiveness of a website’s aesthetic, consider the following:
* Does my website’s style align with my brand in terms of colors, feel, graphics, etc.?
* Is the style consistent throughout the website?
* Will the style suit my target audience? (i.e., cartoons on a toy company website, elegant layout on a legal website)
* What feel does the website give—Orderly or messy? Sparse or crowded? Playful or formal?—and how does that align with my goals?
* Where are photos or decorative touches getting in the way of my message?
* Content: the two main considerations regarding content are readability and usefulness. Readability is important because if your visitors can’t make out your content, whether that’s because it’s too small or in a pale color or in an unreadable font, there’s no way for your message to get across. Usefulness is just as important, because if the content doesn’t matter to the user then there won’t be any point for them to view it. In order to test the quality of the content, the following questions must be answered:
* Are the fonts I’ve chosen readable?
* Is there enough contrast between background colors and font colors?
* Is all the text big enough?
* Will this content be relevant to the reader?
* Is the content concise but still useful?
* Does the design make content easy to find?

Based on the guidelines above, I have evaluated 3 websites namely, Amazon, Goodreads and Reddit, below.

* Considering the strategy of Amazon, I think it’s a well thought-out website since anyone can easily understand the purpose. Just by looking at the cart icon and the list of products on the page it’s not hard to guess that it’s an online shopping market system. Usability wise it’s safe to say that a user won’t run into problems while trying to access the website since it can work on different browsers and all the links work. There’s also a search option for users using it for the first time so there won’t be any confusion. Regarding the style, it’s attractive and has a consistent one throughout the page but it’s a little crowded which is understandable since it’s trying to advertise as much products as it can. The content is precise and incredibly useful as it lists out the items that are available for sale.
* The strategy of reddit website may not be the best there is but it’s enough to inform the user what the website is about. Its usability is pretty good since all the links leading to the subreddits work and it can work on different browsers. And it’s not difficult to find the one the user specifically wants since there’s also a search option in case it’s lost on them. Concerning the style of the website, I think it could be improved in some ways. Considering all that is needed is the list of topics a user can join in on, it’s okay. But considering how it looks and how it meets the eye it can be improved by maybe adding some background colors for instance. The content is on the safe side since it’s readable and useful for all the purposes of the website.
* Goodreads also has a well thought-out strategy. The user can tell that what the website is about by observing the pictures of books from the background. Regarding the usability, all the links leading to other webpages work and there is a search option if the user has difficulty finding what they want. The style is consistent throughout the page and blends together with the pictures of the books or authors. It’s easily readable since there are captions indicating the categories of the books and it’s is extremely useful because in addition to listing out the recent books which are available, it also recommends books the user might like so I think it’s doing well concerning the content.

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