UNIT 1
INTRODUCTION TO CONTENT MANAGEMENT SYSTEMS

By: Asst. Prof Myrtle Fernandes

Fr. Agnel College of Arts & Commerce

Pilar-Goa

TOPICS

- Traditional Content Delivery Systems
- Need for Content Organization
- Merits /Demerits of CMS

CONTENT DISTRIBUTION NETWORK (CDN) OR CONTENT DELIVERY NETWORK (CDN)

Image Source

https://www.google.com/url?sa=i&url=https%3A%2F%2Fcyberhoot.com%2Fcybrary%2Fcontent-delivery-network-cdn%2F&psig=AOvVaw3rjM7o3xL8ycgNb4bzoTNj&ust=1642312780296000&source=images&cd=vfe&ved=2ahUKEwj7oKeAirP1AhWYUWwGHbMlDqsQjRx6BAgAEAk
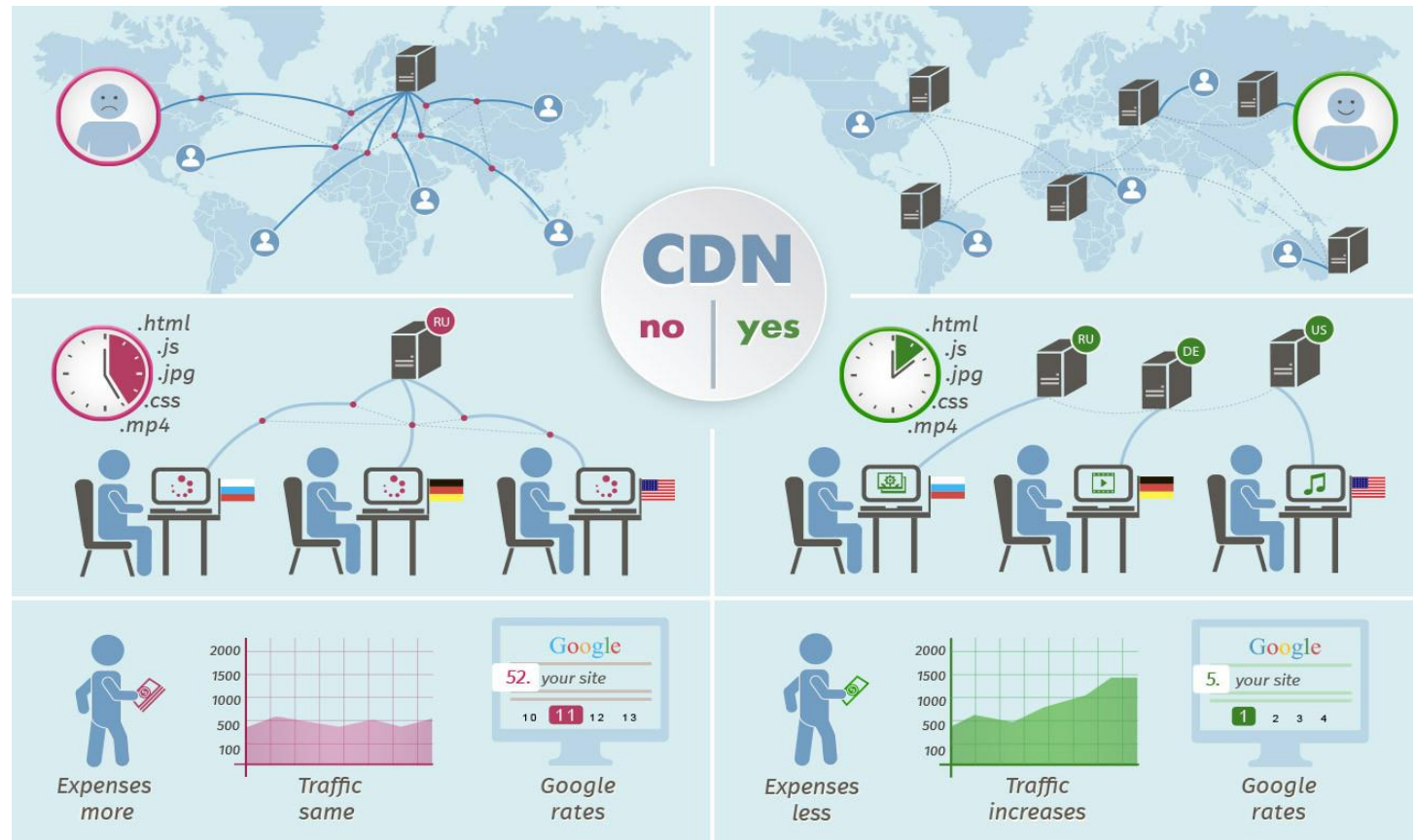
CONTENT DISTRIBUTION NETWORK (CDN) OR CONTENT DELIVERY NETWORK (CDN)

A content delivery network (CDN) refers to a geographically distributed group of servers which work together to provide fast delivery of Internet content. A CDN allows for the quick transfer of assets needed for loading Internet content including HTML pages, javascript files, stylesheets, images, and videos.

CONTENT DISTRIBUTION NETWORK (CDN) OR CONTENT DELIVERY NETWORK (CDN)

A content delivery network, or content distribution network (CDN), is a geographically distributed network of proxy servers and their data centres. The goal is to provide high availability and performance by distributing the service spatially relative to end users.

CONTENT DISTRIBUTION NETWORK (CDN) OR CONTENT DELIVERY NETWORK (CDN)

CDNs means for alleviating the performance bottlenecks of the Internet

CDNs have grown to serve a large portion of the Internet content

CDNs are a layer in the internet ecosystem.

CDN is an umbrella term spanning different types of content delivery services

CONTENT DISTRIBUTION NETWORK (CDN) OR CONTENT DELIVERY NETWORK (CDN)

CDN vendors may cross over into other industries like security, with DDoS protection and web application firewalls (WAF), and WAN optimization.

A content distribution network (CDN) is a network of servers that cache content from the main server

CDN's can be used for a variety of reasons, but primarily for faster delivery, better reliability and higher levels of security.

CONTENT DISTRIBUTION NETWORK (CDN) OR CONTENT DELIVERY NETWORK (CDN)

By having a CDN, users lower the impact of malicious attacks such as DDoS attack.

CONTENT MANAGEMENT SYSTEM (CMS)

Image Source

http://www.relywiz.com/what-is-cms/

CONTENT MANAGEMENT SYSTEM (CMS)

- What is Content Management System (CMS)?

- The Content Management System (CMS) is a software which stores all the data such as text, photos, music, documents, etc. and is made available on your website. It helps in editing, publishing and modifying the content of the website. i.e. A content management system (CMS) is a piece of software that allows users to upload and manage content online.

- Sites such as WordPress, Jhoomla, Drupal and Wix are some examples of CMS's.

- WordPress was initially released on 27th May, 2003 by Matt Mullenweg and Mike Little. WordPress was announced as open source in October 2009.

WHY CMS SOLUTIONS?

1. No coding knowledge required.
2. CMS solutions allow for easy collaboration
3. Users don't need to worry about updates
4. Scalability

CDN versus CMS

CMS solutions rely on CDNs.

To simplify it; a CDN is a network of servers that cache data/content, improving load speeds and security. On the other hand, CMS's are pieces of software that allow users to manage and use their content as needed.

A CMS may rely on a CDN to allow its users to access content and data quickly but not vice versa.

Few Examples of CDN Providers:-

RACKSPACE, AMAZON CLOUDFRONT, MICROSOFT AZURE CDN GOOGLE CLOUD CDN, MAX CDN, CLOUDFLARE

TRADITIONAL CONTENT DELIVERY SYSTEMS

Problem of pushing massive amounts of data from the Internet to the end user as fast as possible had to be solved.

- The first Content Delivery Networks were built by Akamai Technologies, Inc. based in Cambridge, Massachusetts. Their CDNs are responsible for 15-30% of global Internet traffic. They have over 2200 Points of Presence in 120 countries and are affiliated with 1500 networks.

- Companies that followed suit and also built their CDNs include AT&T, Telstra and Deutsche Telekom.

TRADITIONAL CONTENT DELIVERY SYSTEMS ORGANISED INTO 4 PERIODS

Pre-Formation Period

- Gave rise to server farms, hierarchical caching, and improvements in Web servers and caching proxy deployment
- Infrastructure development, mirroring, caching and multihoming

First Generation

- CDNs focused primarily on dynamic and static content delivery
- creation and the implementation of replicas, intelligent routing and edge computing methods
- Apps and info were split across the servers.

Second Generation

- focused on Video-on-Demand
- cleared a path for delivering content to mobile users
- credited with the usage of P2P, cloud computing techniques to delivery and maintain content

TRADITIONAL CONTENT DELIVERY SYSTEMS ORGANISED INTO 4 PERIODS

Third Generation

- driven by average users and regular individuals
- Self-configuring, self-managing
- Focus on quality of experience

NEED FOR CONTENT ORGANIZATION

As more marketers publish more content, organization plays a greater role. Let's say you curate 10 pieces of content a day. In a year, you may easily publish more than 3,600 pieces of content.

Now that you have such a large volume, you can provide that content to your readers in interesting ways, through intelligent organization.

Let's take a look at a few outstanding ways that marketers are organizing their content online, with real world examples of what it looks like.

NEED FOR CONTENT ORGANIZATION

1. Tagging

Tags are a common way to create a simple, non-hierarchical taxonomy of your content. Tags are simply keywords and phrases that are associated with each piece of content. For a single piece of content, they let the audience quickly understand the important concepts captured in the content. In aggregate, they provide a powerful way to spot recent trends by viewing the most popular tags.

1. EXAMPLE OF TAGGING

Image Source

http://www.contentmarketin ginstitute.com/wp-content/uploads/2012/09/de shpande-tag_cloud-f.jpg

TAG CLOUD

AJLI Association of Junior Leagues
International audiences
communications digital
marketing Google Greg Miller
homeowner journalists social media
Junior League linkedin Loan Value
Group Marketcom

NEED FOR CONTENT ORGANIZATION

2. Grouping

Grouping your related content serves two purposes: First, it helps reduce screen clutter by bringing together similar content. Secondly, grouping allows readers to quickly find different perspectives about the same issue.

2. EXAMPLE OF GROUPING

Image Source

http://www.contentmarketin ginstitute.com/wp-content/uploads/2012/09/de shpande_romney-f.jpg

Bain Capital could become Romney's Swift Boat moment

Fox News - 5 days ago

The questions surrounding Mitt Romney's tenure at **Bain Capital** are doing considerable damage to his presidential prospects. And the Romney ...

by Juan Williams - More by Juan Williams

Opinion: Letter: Romney's curious **Bain** connection Albany Times Union

In-Depth: Mitt Romney **Bain Capital** Claims Don't Hold Up To Evidence Huffington Post

Blog: **Bain** doesn't have an image problem. Romney does. Washington Post (blog)

The Hill (blog) - New York Daily News

all 8345 news articles »

Business Recorder

NEED FOR CONTENT ORGANIZATION

3. RECOMMENDATIONS
A great way to get people to consume additional content is to offer recommendations based on their previous content consumption patterns.

Companies such as Netflix and Amazon employ sophisticated collaborative filtering algorithms that deliver personalized recommendations to every user.

3. EXAMPLE OF RECOMMENDATIONS

Image Source

http://www.contentmarketin ginstitute.com/wp-content/uploads/2012/09/de shpande_futurama-f.jpg

King of the Hill

1997-2008   TV-PG   13 Seasons

Texan Hank Hill, the patriarch of the Hill clan, spends his free time downing beers with his buddies -- until a family crisis inevitably crops up. More Info

Starring: Mike Judge, Kathy Najimy
Creators: Mike Judge, Greg Daniels

Based on your interest in: *Futurama the Movie: Bender's Big Score, Futurama: The Beast with a Billion Backs* and *Futurama: Into the Wild Green Yonder*

NEED FOR CONTENT ORGANIZATION

4. FACETS

Another technique to better organize content that is commonly employed on e-commerce sites is to provide a faceted navigation that lets readers quickly drill down to just the content in which they are interested.

4. EXAMPLE OF FACETS

Image Source

http://www.contentmarketin
ginstitute.com/wp-
content/uploads/2012/09/de
shpande-lctv-f.jpg

NEED FOR CONTENT ORGANIZATION

5. TRENDS HISTOGRAM
Google Trends displays trend histograms which illustrate the search volume and news reference volume of existing content over time. In addition, it has special algorithms that highlight salient stories that pertain to specific topics.

5. EXAMPLE OF TRENDS HISTOGRAM

Image Source

http://www.contentmarketin ginstitute.com/wp-content/uploads/2012/09/de shpande-obama-f.jpg
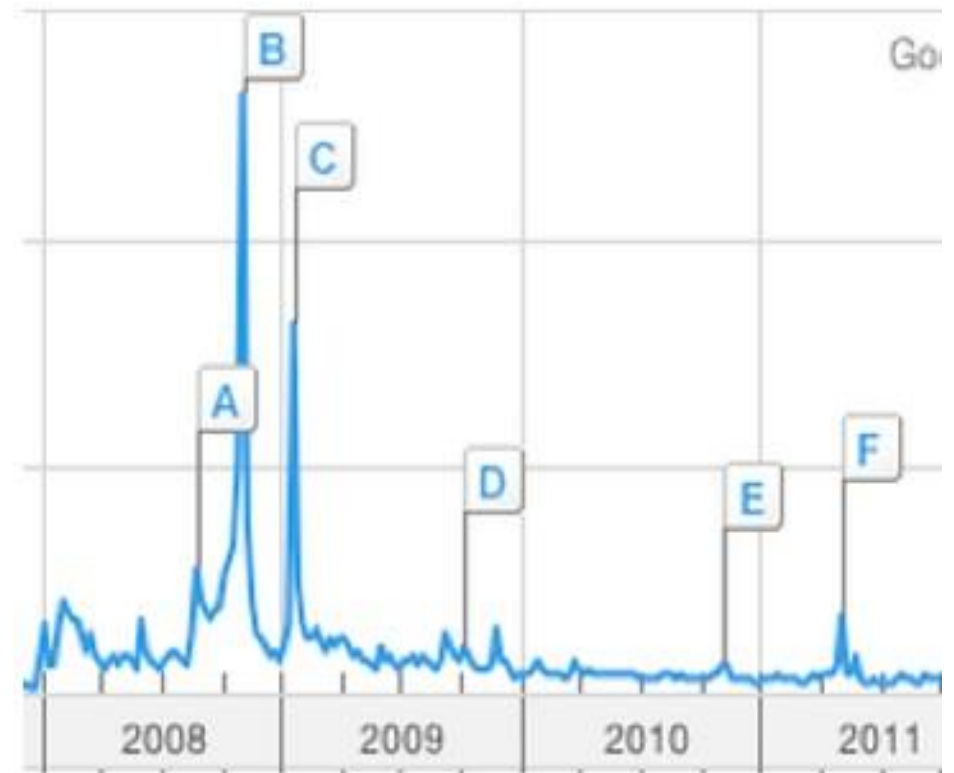
NEED FOR CONTENT ORGANIZATION

6. TOPIC PAGES

Topic pages are emerging as an easy way to organize your content by the topics that you have written about. Earlier last month, ReadWriteWeb called Topic Pages the "next big thing."

Sites such as Quora, Pinterest, and the New York Times are built on topic pages, to name just a few examples. With topic pages, readers can quickly view all the content pertaining to a specific topic on a single page. In addition, topic pages are great for long-tail search engine optimization.

NEED FOR CONTENT ORGANIZATION
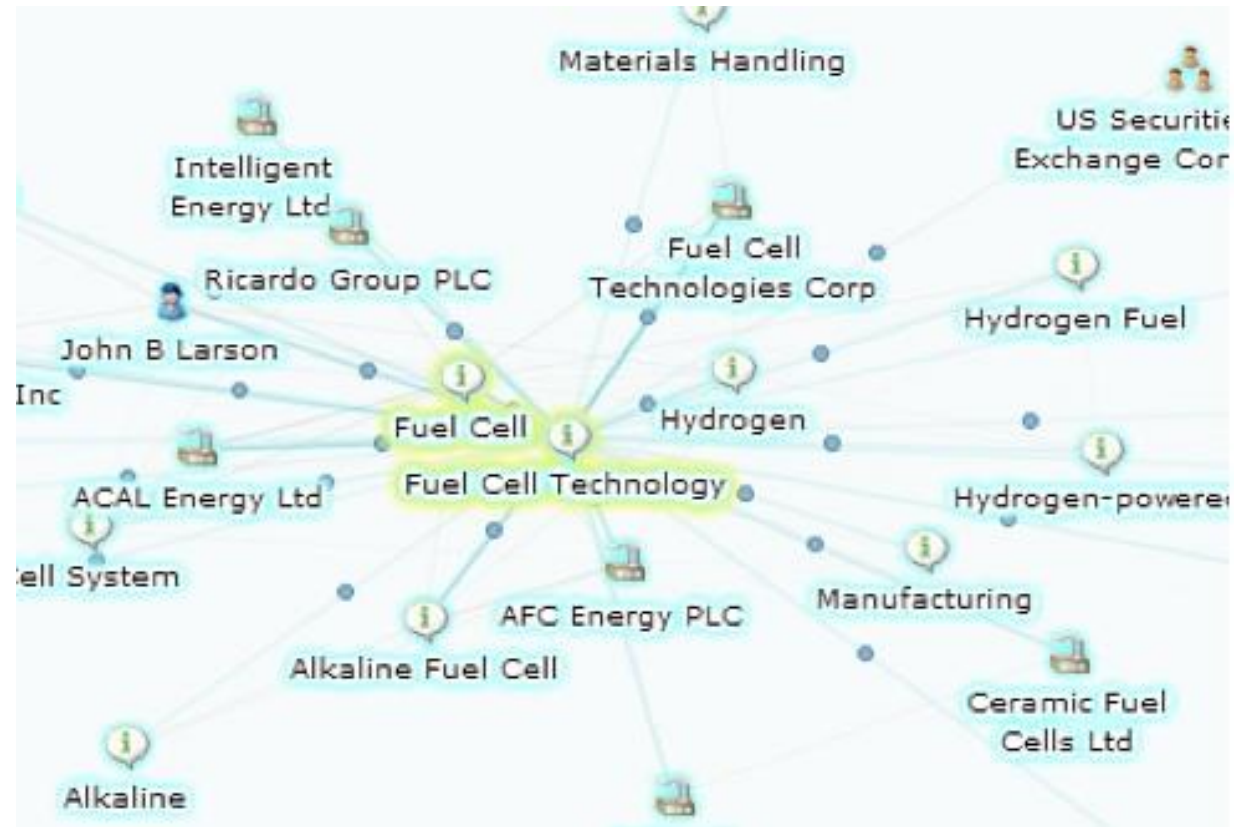
7. TOPIC MAPS

A fun way to visually organize your content is through topic maps.

7. EXAMPLE OF TOPIC MAPS

Image Source

http://www.contentmarketin ginstitute.com/wp-content/uploads/2012/09/de shpande-silobreaker-f.jpg

MERITS OF CMS

Quick Development

Less Backend Coding

Provide built-in Page Builder

Easy for non-technical Person

Security

MERITS OF CMS

SEO Friendly

Improve Customer Services

Reduces cost if you use some free open-sources

Facilitates the implementation of important functionalities

Complete control over the content

DEMERITS OF CMS

Dependence on plugins and widgets

Hidden cost of plugins and widgets

Site load speed

Maintenance

Can sustain limited number of users

DEMERITS OF CMS

Limitation in functional requirements

Back end functionalities are limited

Updating WordPress version leads to loss of data, so a backup copy of the website is required.

Modifying and formatting the graphic images and tables is difficult

WHICH IS THE BEST CDN?

Your organization's needs

User geography

Speed and reliability

Cost and pricing models

Speed and reliability

Security

Support

QUESTION BANK

1. Define CDN. 1-2 marks
2. What is the goal of CDN? 1 mark
3. What are the characteristics of CDN. 5 marks
4. State any three advantages of CDN. 3 marks
5. Where was the first CDN built? 1 mark
6. List any two/four CDN Providers. 2 marks
7. Write a note on CMS 3 marks
8. Give two/four examples of CMS. 2 marks
9. Differentiate between CDN and CMS. 3 marks
10. Write a note on Traditional Content Delivery Systems. 3 marks
11. Differentiate between four periods of Traditional Content Delivery Systems. 2 marks
12. Why do we need to organize content on a website?1-2 marks
13. Explain in brief by giving any five examples in which marketers/content organizers organise their website content? 3-5 marks
14. What are the pros of a CMS? 3-5 marks
15. What are the cons of a CMS? 3-5 marks
16. As a marketer, on what basis would you decide a CDN? or What are the characteristics one should look for while deciding on a CDN? 3-5 marks

REFERENCES

https://rentechdigital.com/advantages-and-disadvantages-of-cms

https://www.gsmresults.com/content-management-system-advantages-disadvantages/

https://www.globaldots.com/resources/blog/content-delivery-network-explained/

https://en.wikipedia.org/wiki/Content_delivery_network

https://www.dooh.ly/post/whats-the-difference-between-cdn-and-cms