VIETNAM NATIONAL UNIVERSITY – HO CHI MINH CITY
UNIVERSITY OF INFORMATION TECHNOLOGY

Chapter 1

INTRODUCTION TO SOCIAL MEDIA ANALYSIS
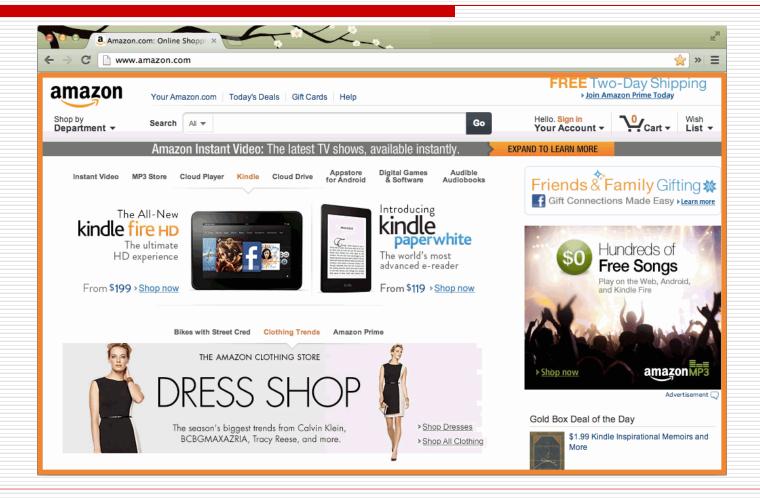
Lecturer: MSc. Kiet Van Nguyen

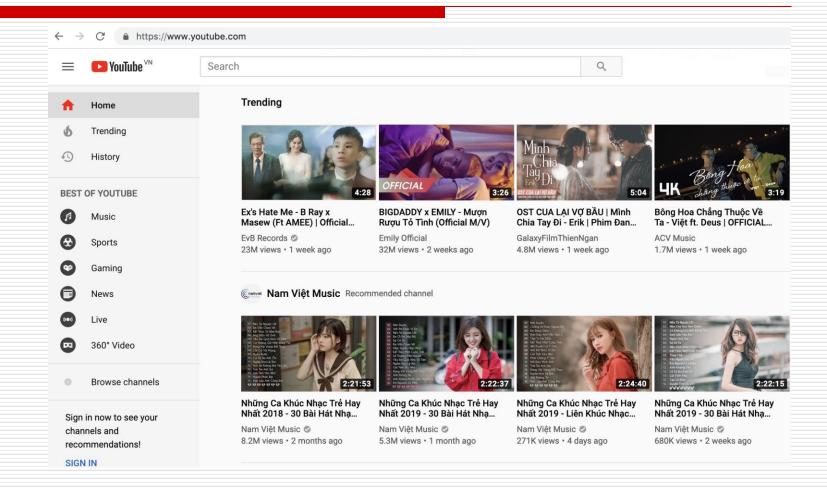**Faculty of Information Science and Engineering**

Facebook

- **How does Facebook use your data?**
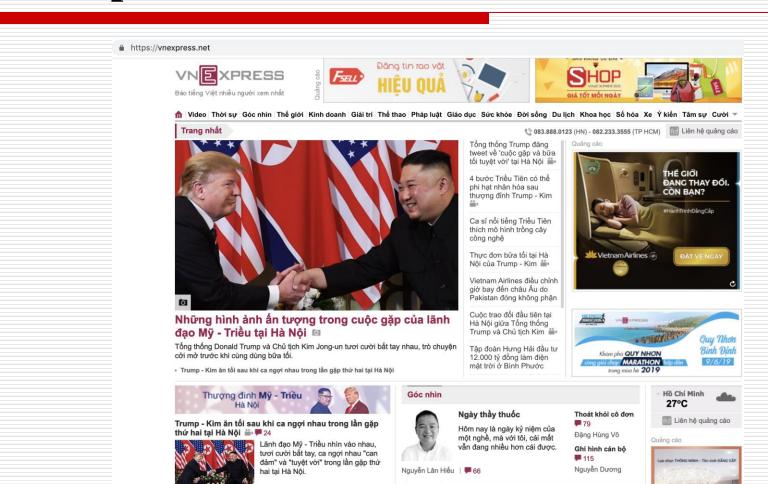
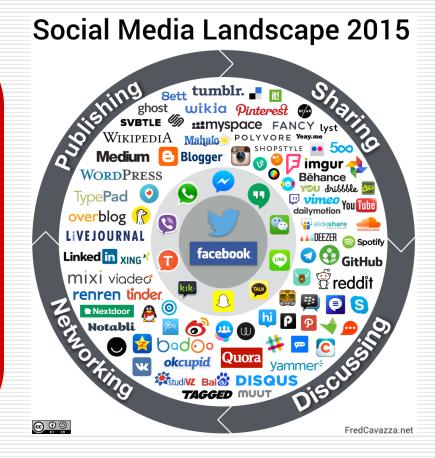- **Where do you think Facebook can use your data?**

What about Amazon?

Youtube

VnExpress

Social Media

Definition

Social Media is the use of electronic and Internet tools for the purpose of sharing and discussing information and experiences with other human beings in more efficient ways.

Social Media Landscape 2015

FredCavazza.net

Social Media: Examples

❖ A wiki article

❖ Web reviews and ratings of a popular pizza place in your city

▪ E.g., Yelp.com, Foody.vn

❖ An online social network of your professional contacts

▪ E.g., Facebook.com, LinkedIn.com

❖ An iPhone application that informs you where parking is likely available

▪ E.g., FasPark

Types of Social Media

- ❖ Online Social Networking
- ❖ Publishing
  - ▪ Blogging
  - ▪ Wiki
- ❖ Social News
- ❖ Media Sharing
  - ▪ Video Sharing
  - ▪ Photo Sharing
  - ▪ Podcast Sharing
- ❖ Opinion, Review, and Ratings Websites
- ❖ …

Online Social Networking

Online Social Networks are web-based services that allow individuals and communities to connect with real world friends and acquaintances online

❖ Interactions
   ▪ Friendship interaction
      • Friends, like, comments, …
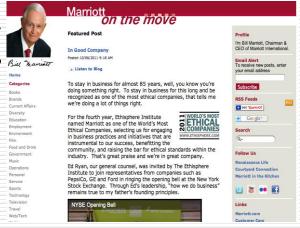   ▪ Media Sharing
   ▪ Sending and receiving messages

❖ Examples
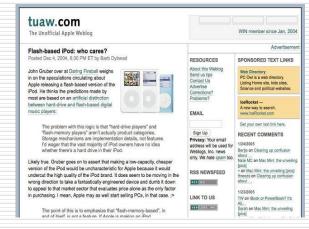   ▪ Facebook.com
   ▪ MySpace.com
   ▪ Bebo.com
   ▪ Orkut.com

Blogging

A blog is a journal-like website for users, a.k.a. bloggers, to contribute textual and multimedia content, arranged in reverse chronological order

❖ Maintained both individually or by a community

  ▪ See a tutorial at KDD
    http://videolectures.net/kdd08_liu_briat/

❖ Usages:

  ▪ Sharing information and opinions with friends and strangers

  ▪ Disseminating subject-specific content

  ▪ Who is the influential
    http://videolectures.net/wsdm08_agarwal_iib/

Wiki

A wiki is a collaborative editing environment that allows users to develop Web pages using a simplified markup language

❖ Wikipedia allows interested individuals to collaboratively develop articles on a variety of subjects.

❖ Using the wisdom of crowds effectively, it has become a comprehensive repository of information useful to a variety of individuals

Media Sharing

Media sharing is an umbrella term that refers to the sharing of a variety of media on the web.

Users share such multimedia content of possible interest to others

❖ Examples:

- ▪ Video Sharing: YouTube.com

- ▪ Photo Sharing: Flickr.com, picasa.com

- ▪ Document Sharing: Scribd.com, Slideshare.com
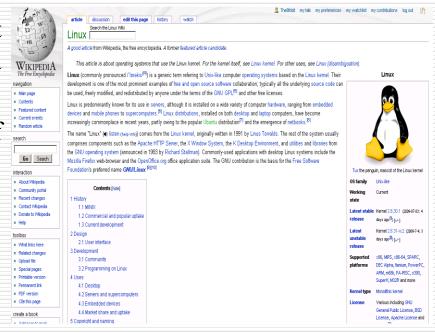
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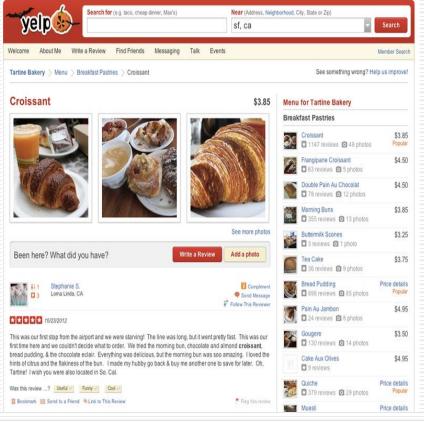
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Opinion, Review, and Ratings Websites

Opinion, review, and ratings websites are websites whose primary function is to collect and publish user-submitted content in the form of subjective commentary on existing products, services, entertainment, businesses, places, etc. Some commercial sites may serve a secondary purpose as review sites by publishing product reviews submitted by customers.

❖ Examples
- Cnet.com
- Epinions.com
- yelp.com
- tripadvisor.com

Main Characteristics

❖ **Participation**: social media encourages contributions and feedback from everyone who is interested. It blurs the line between media and audience.

❖ **Openness**: most social media services are open to feedback and participation. They encourage voting, comments and the sharing of information. There are rarely any barriers to accessing and making use of content – password-protected content is frowned on.

❖ **Conversation**: whereas traditional media is about "broadcast" (content transmitted or distributed to an audience) social media is better seen as a two-way conversation.

❖ **Community**: social media allows communities to form quickly and communicate effectively. Communities share common interests, such as a love of photography, a political issue or a favorite TV show.

❖ **Connectedness**: Most kinds of social media thrive on their connectedness, making use of links to other sites, resources and people.

What is social media exploring?

Social Media Mining

What is social media exploring?

Social Media Exploring is the process of representing, analyzing, and extracting meaningful patterns from social media data.

Social Media Exploring Challenges

❖ **Big Data Paradox**

  ▪ Social media data is big, yet not evenly distributed.

  ▪ Often little data is available for an individual.

❖ **Obtaining Sufficient Samples**

  ▪ Are our samples reliable representatives of the full data?

❖ **Noise Removal Fallacy**

  ▪ Too much removal makes data more sparse.

  ▪ Noise definition is relative and complicated and is task-dependent.

❖ **Evaluation Dilemma**

  ▪ When there is no ground truth, how can you evaluate?

Discussion

❖ **<u>Topic 1:</u>** What are the key characteristics of **social media** that differentiate it from **traditional media**? Please list at least two with a brief explanation.

❖ **<u>Topic 2:</u>** Identify the types of activities that individuals can perform on Amazon Flickr Facebook, Twitter, BlogCatalog, MySpace, Instagram, LinkedIn, Reddit, Yelp, YouTube, Microsoft Teams, …

❖ **<u>Topic 3:</u>** What marketing opportunities do you think exist in social media? Can you outline an example of such an opportunity in Twitter?

❖ **<u>Topic 4:</u>** Identify at least three major side effects of information sharing on social media. Why you choose the three keys?

❖ **<u>Topic 5:</u>** Rumors spread rapidly on social media. Can you think of several methods to block the spread of rumors on social media?

Q&A

Thank you!