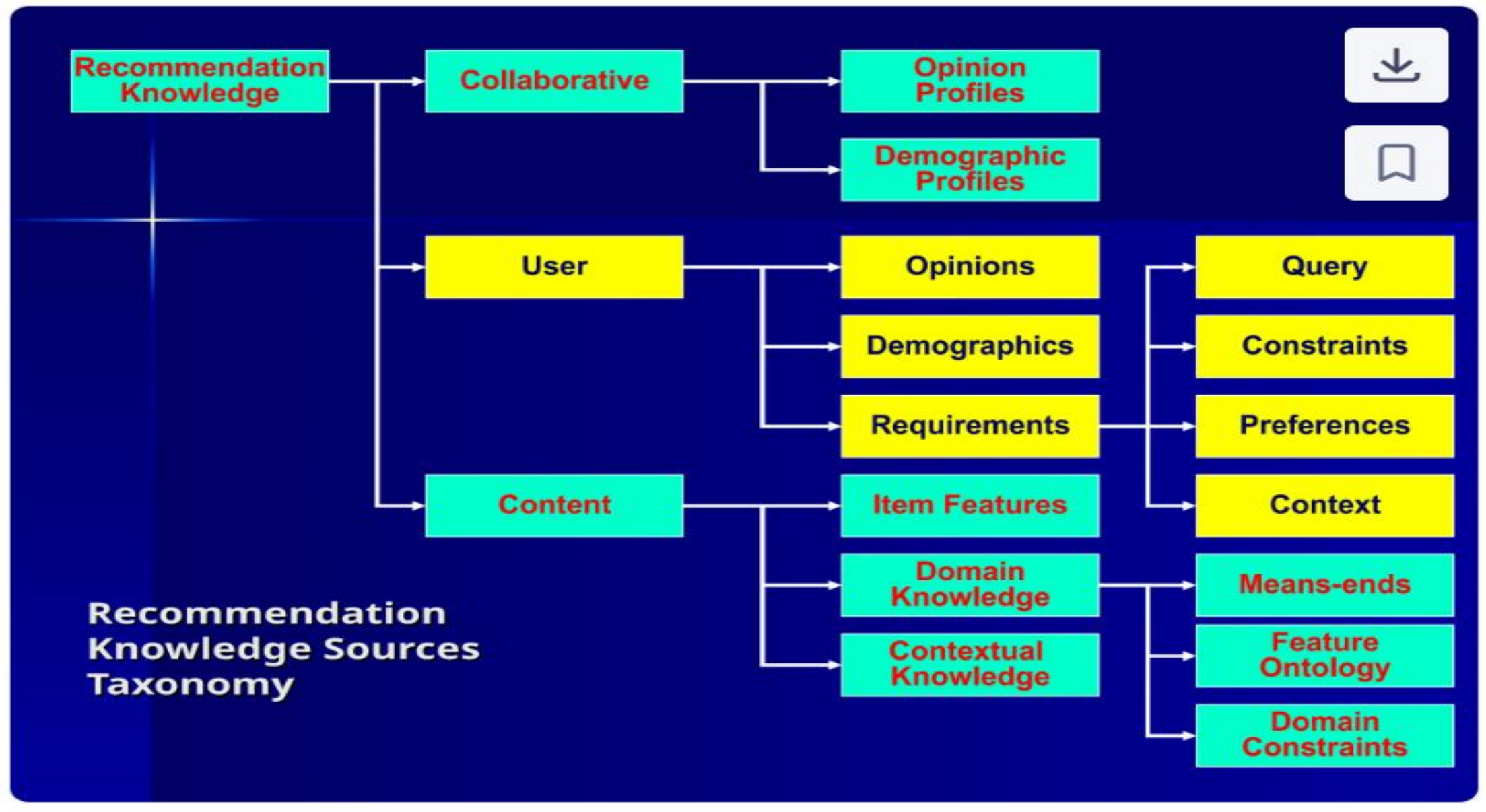
REKOMENDASI SISTEM

PENGANTAR SISTEM REKOMENDASI

PERTEMUAN 1-2


Recommendation Knowledge
Collaborative
Opinion Profiles
Demographic Profiles
User
Opinions
Demographics
Requirements
Content
Item Features
Domain Knowledge
Contextual Knowledge
Query
Constraints
Preferences
Context
Means-ends
Feature Ontology
Domain Constraints
Recommendation Knowledge Sources Taxonomy

Definition of Recommender Systems

- Sistem untuk merekomendasikan item (misalnya buku, film, CD, halaman web, pesan newsgroup) kepada pengguna berdasarkan contoh preferensi mereka.

PENGANTAR SISTEM REKOMENDASI

- Metode-Metode Rekomendasi Umum
  - Berdasarkan sejumlah kecil pendapat
    - Dari mulut ke mulut
    - Surat rekomendasi
    - Ulasan Koran (buku, film, dll)
  - Berdasarkan sejumlah besar pendapat
    - Zagat Restaurant Guides
    - Koran Daerah Pembaca voting "Tempat Terbaik Untuk ..."

Recommender Systems

- Bila jumlah rekomendasi meningkat, informasi yang diberikan oleh rekomendasi harusnya menjadi lebih baik (lebih dapat diandalkan, kurang bias)
  - Surat Rekomendasi
    - Jika hanya satu yang diperlukan, pemohon dapat dengan mudah memilih orang yang dijamin memberikan rekomendasi yang baik
    - Jika 3 diperlukan, meningkatkan kesempatan mengamati informasi negatif tentang pelamar. Sebaliknya, tidak adanya surat negatif memberikan keyakinan kuat dalam informasi positif

Recommender Systems

- Contoh Sistem Rekomendasi
  - Music
    - Amazon.com
    - MediaUnbound.com
    - MoodLogic.com
    - CDNow.com
    - SongExplorer.com

Recommender Systems

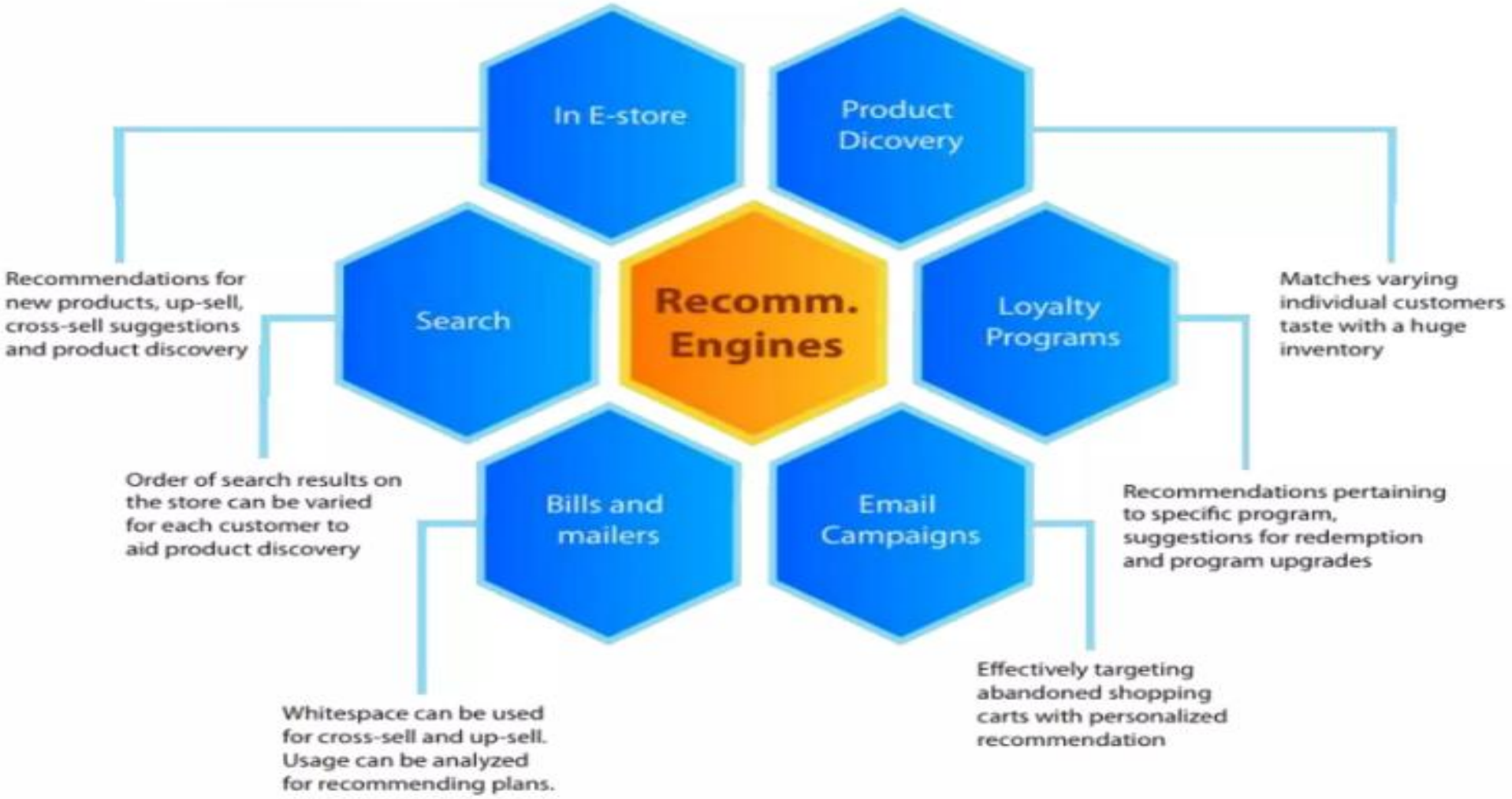
- Examples of Recommender Systems
  - Movies
    - Amazon.com
    - Moviecritic.com
    - Reel.com
    - Sepia Video Guide
    - MovieFinder.com
    - Morse

Recommender Systems

- Examples of Recommender Systems
  - Books
    - Amazon.com
    - RatingZone.com QuickPicks
    - Sleeper (pmetrics.com)

WHAT IS A RECOMMMENDATION SYSTEM? RECOMMENDATION SYSTEM IS AN INFORMATION FILTERING TECHNIQUE, WHICH PROVIDES USERS WITH INFORMATION, WHICH HE/SHE MAY BE INTERESTED IN. EXAMPLES:

Areas of Use


In E-store
Product Dicovery
Search
Recomm. Engines
Loyalty Programs
Bills and mailers
Email Campaigns
Recommendations for new products, up-sell, cross-sell suggestions and product discovery
Matches varying individual customers taste with a huge inventory
Order of search results on the store can be varied for each customer to aid product discovery
Recommendations pertaining to specific program, suggestions for redemption and program upgrades
Whitespace can be used for cross-sell and up-sell. Usage can be analyzed for recommending plans.
Effectively targeting abandoned shopping carts with personalized recommendation

Why there is a need?

"Getting Information off the internet is like taking a drink from a fire hydrant" - Mitchell Kapor

- Information Overload
- User Experience
- Revenues

Recommender systems help in addressing the information overload problem by retrieving the information desired by the user based on his or similar users' preferences and interests.

Types of Recommendation System

In General, two types of recommender system.

1. Personalized

Registered customers

John visits an online store to buy an accessory for his Blackberry and conducts an online product search. Since John is a registered customer, the recommendations engine draws up information of his previous purchases – a Blackberry phone bought a few months ago – as soon as he logs in and queries for accessories. The engine also draws up in-store trends and recognizes that a majority of customers that buy the same/ similar Blackberry also purchase a particular kind of accessory. The engine collates information about John and the collective and recommends the same accessory to John. An online store with advanced social commerce features can also display comments based on the buying behavior of John's social circle such as 'Your friend George bought this' or 'Your friend Jane reviewed this product' to influence his decision. If John adds the accessory to his online shopping cart, the engine will continue to offer real-time recommendations of products that complement his Blackberry and/or the new accessory. Thus the engine is constantly aware of John's digital actions and refines its recommendations to suit him.

Types... Cont'd

2. Non-Personalized

New customers

Taking the context of the above example let us say John is a new visitor to the online store, seeking to make the same type of purchase. Despite having no information about John the engine can offer recommendations about collective preferences in the form of 'Best Sellers'. As John begins to browse a few pages, the engine determines John's preferences and leverages this information to offer recommendations that may interest him.

FINISH
SEE U..