

Sistemi Collaborativi e di Protezione (SCP)

Corso di Laurea in Ingegneria

Part 2 – Advertising

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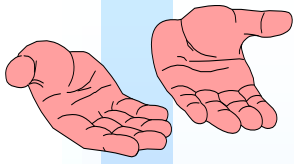
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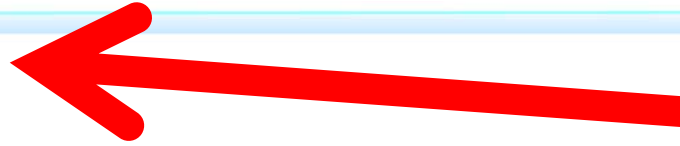
Lab: DISIT, Sistemi Distribuiti e Tecnologie Internet

<http://www.disit.dinfo.unifi.it/>

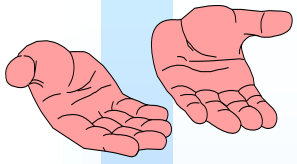
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Part 2: Advertising

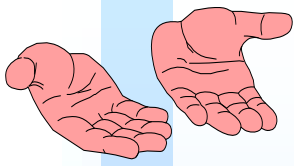


- Internet Advertising
 - Why Advertising
- Business models and Advertising
- Consumer analysis
- TV Advertising
- Magazine Advertising
- Internet Advertising Measures
- Other Business Models with Advertising
- Advertising Services: Google ADWords
 - Lessons Learned
- Google AdSense
- Recommendation and Advertising
- Semantic processing and Issues of Advertising



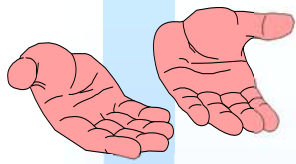
Internet Advertising

- ⓘ These slides are focused on presenting and understanding the technical mechanisms behind Internet Advertising, called in short Ad/Ads
- ⓘ **Banners:** simple images and/or text containing Ad
 - ♣ Initially static
 - ♣ Then dynamic, changed in some how (iframe, etc...)
- ⓘ Internet advertising is rapidly growing with respect to other advertising
 - ♣ 1 Billion of users,
 - ♣ Ad revenues of \$36 billion by 2011
- ⓘ Intelligence and semantic processing have changed the Ad processing tools and mechanisms



Why advertising

- i The traditional forms of Commerce are not always replicable on the Digital Domain
- i Users perceive the digital content e-commerce as something to be taken for free
- i Still too high costs for the connection to Internet
 - ♣ They are mandatory costs that are seen from the consumer as the price to be paid to access at the content and information



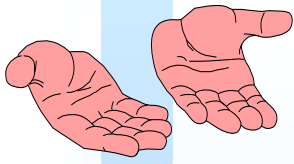
User perception and business models

❗ **Users perceive the digital content e-commerce as something to be taken for free.**

- ♣ This probably come from the historical reasons
- ♣ From the IST costs to access at xDSL services
- ♣ From the Broadcasting Analog TV monthly rate
- ♣ From the Radio Broadcasting
- ♣ Etc.

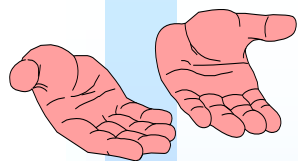
❗ **They have used for years:**

- ♣ Subscription, monthly rate
- ♣ Governmental taxes (see RAI on Italy)
- ♣ Advertising compensation:
 - ➔ Broadcasting, and journals
- ♣ Governmental support
 - ➔ Money to newspapers, TVs, etc.
- ♣ Industry sponsored programs (soap opera)
- ♣ ...

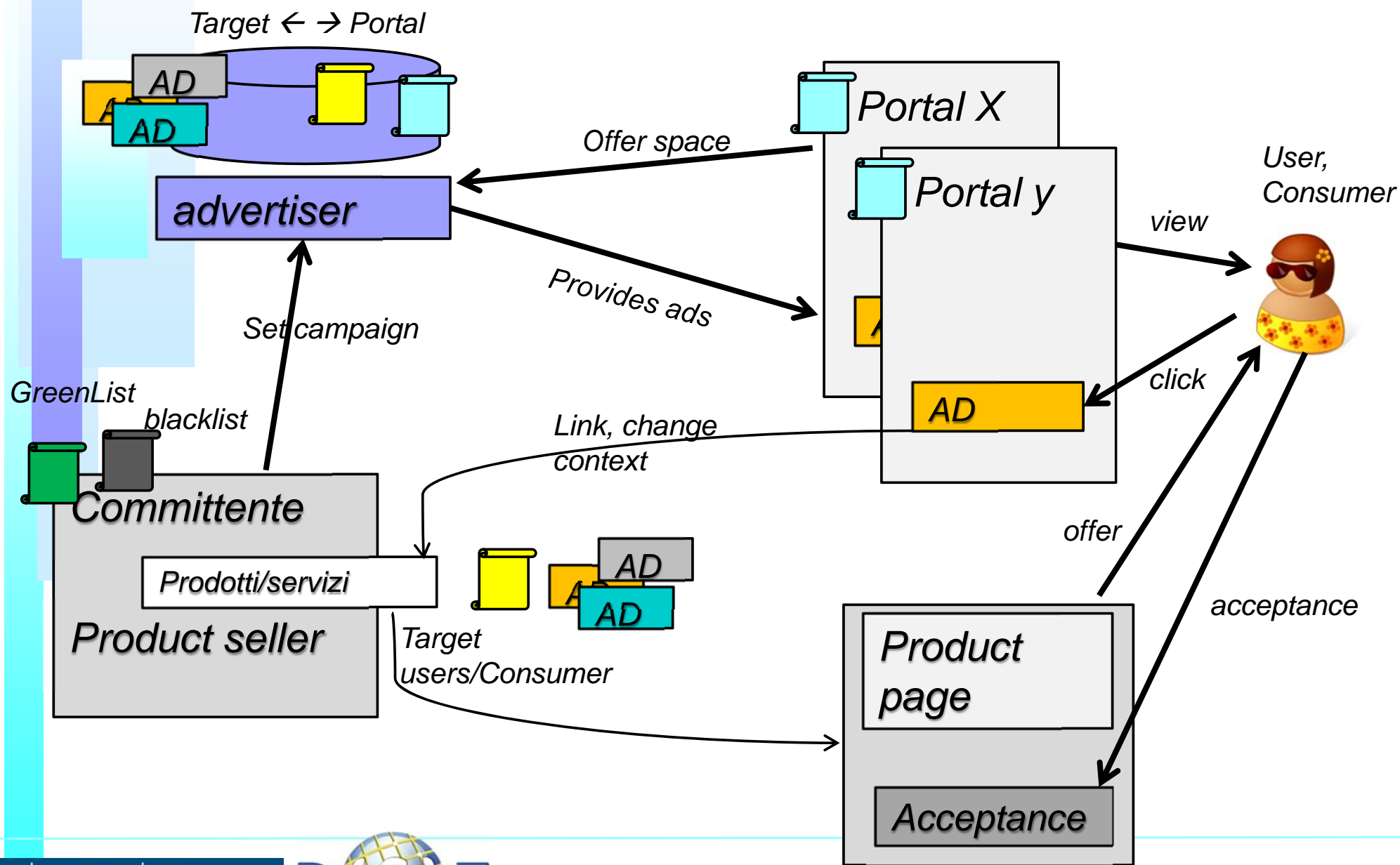


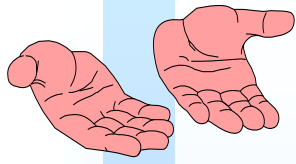
New models

- ⌚ As we have seen in first part of this course
 - ♣ **Business models are becoming** more articulated and mixed.
- ⌚ **For Example:**
 - ♣ DVB-T channels: recover revenues from:
 - ➔ Governmental taxes
 - ➔ Monthly subscriptions
 - ➔ Pay per play, PPV,
 - ➔ Advertising
 - ➔ Mixed models.....
 - ♣ WEB portals on Internet, WebTV, IPTV:
 - ➔ Monthly subscriptions
 - ➔ Pay per play, PPV; and Video on Demand, VOD
 - ➔ Pay per burn
 - ➔ Advertising
 - ➔ Mixed models.....



Architettura di Riferimento





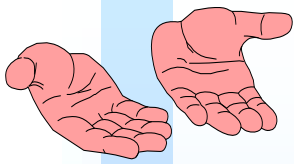
Advertising via media

Advertising to

- ♣ Increase selling and revenues
- ♣ inform consumers about some news with aim of selling them the products and/or services
- ♣ a sort of implicit contract Seller \leftrightarrow Consumer

Actors and terms:

- ♣ Product Seller: who would like to sale the product
- ♣ Advertising: Ads, Ad
- ♣ Advertisers: who is distributing the Ad
- ♣ Consumer/User: the person or group that is going to receive the Ad
- ♣ Target User/Consumer: the User with a given profile, specifically tuned for the Ad, those that should buy the product
- ♣



Consumer Analysis

For each Ad,

- ♣ it is mandatory to describe/identify the profile of
 - ➔ General Consumers
 - ➔ Target Consumers
 - ➔ Any other side consumer category

To assess the appreciation of

- ♣ Target Consumers:

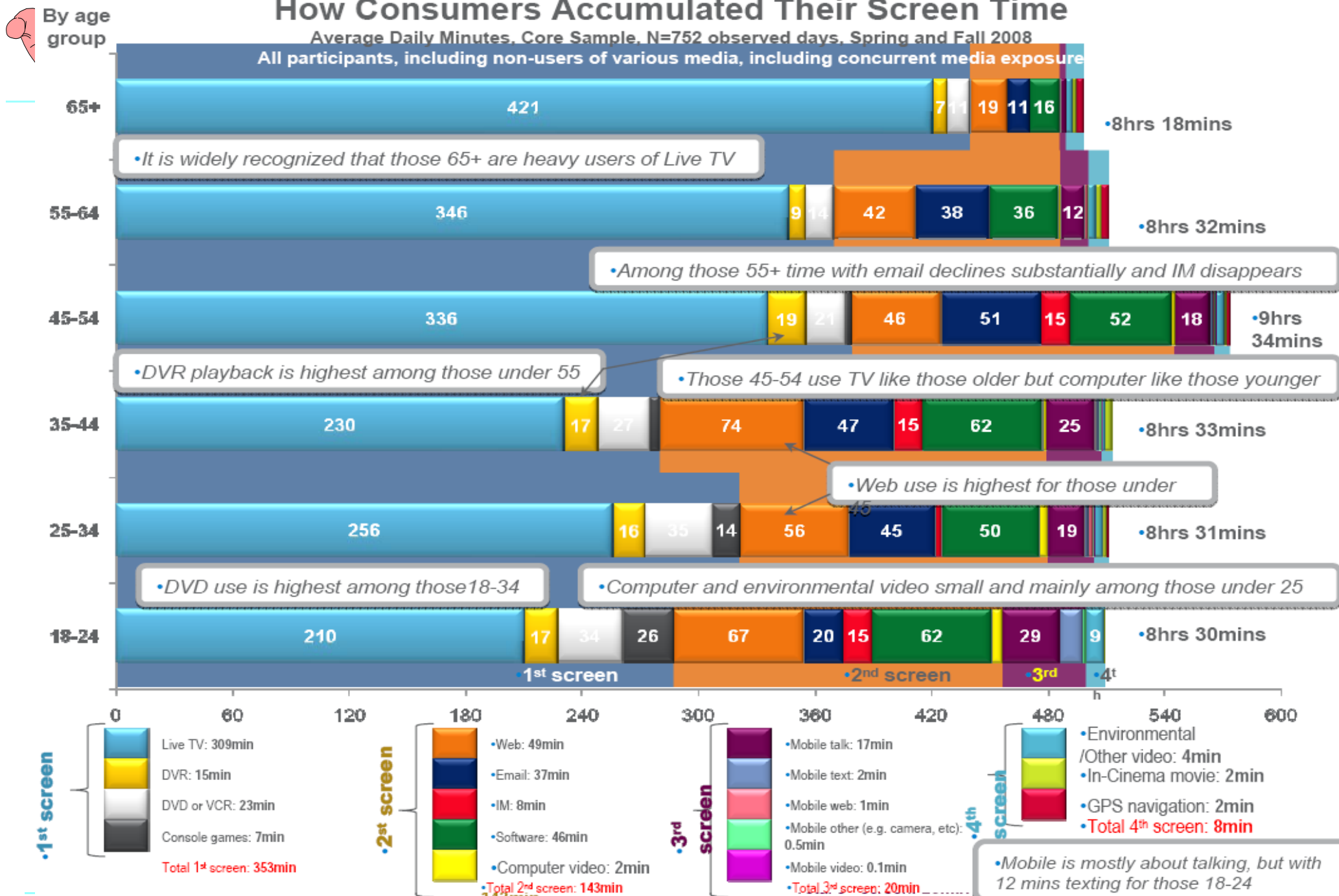
To understand:

- ♣ what they do, where they are,
- ♣ when and how they buy,
- ♣ why they buy,
- ♣ etc.

How Consumers Accumulated Their Screen Time

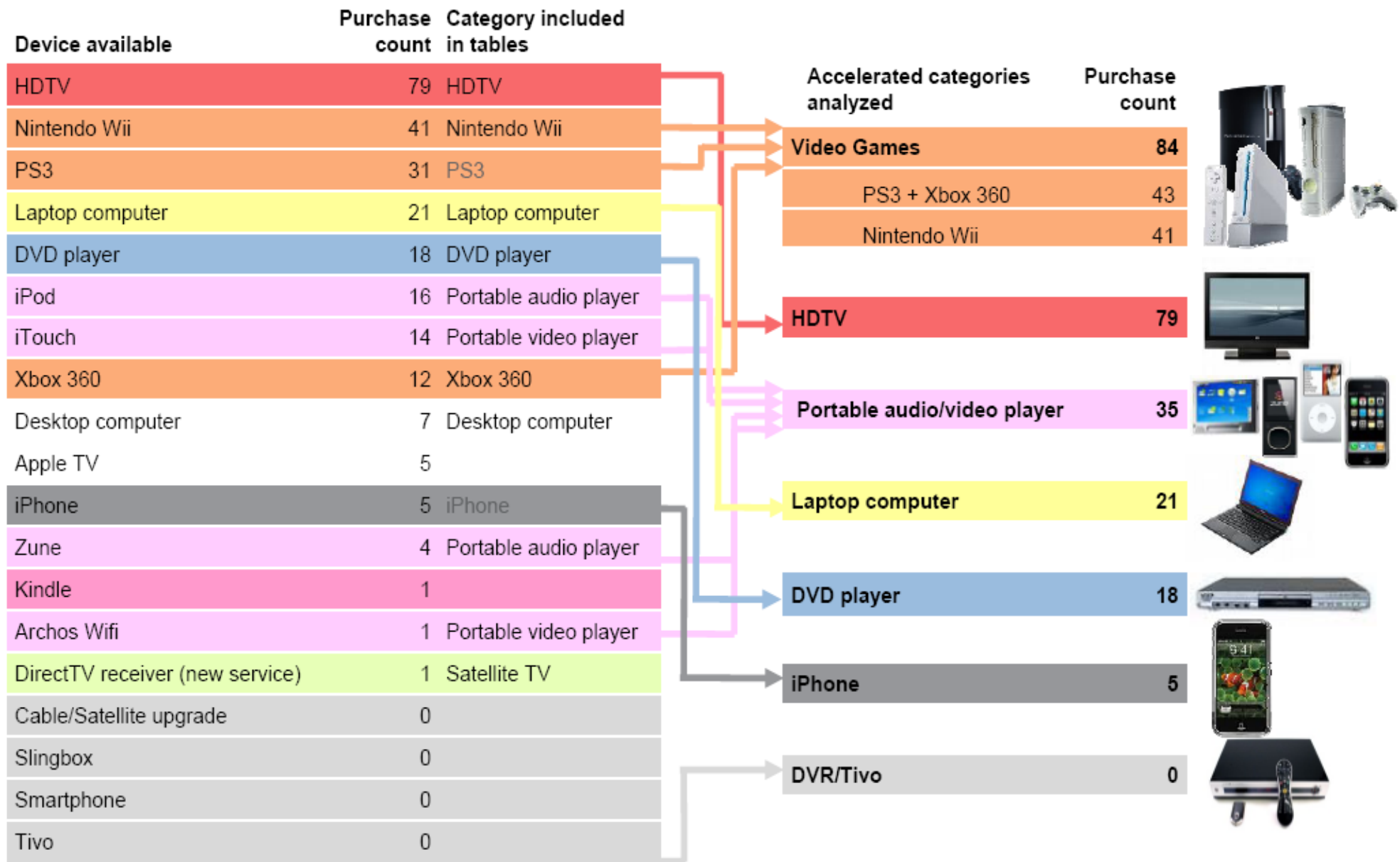
Average Daily Minutes, Core Sample, N=752 observed days, Spring and Fall 2008

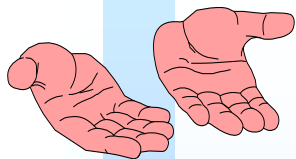
All participants, including non-users of various media, including concurrent media exposure



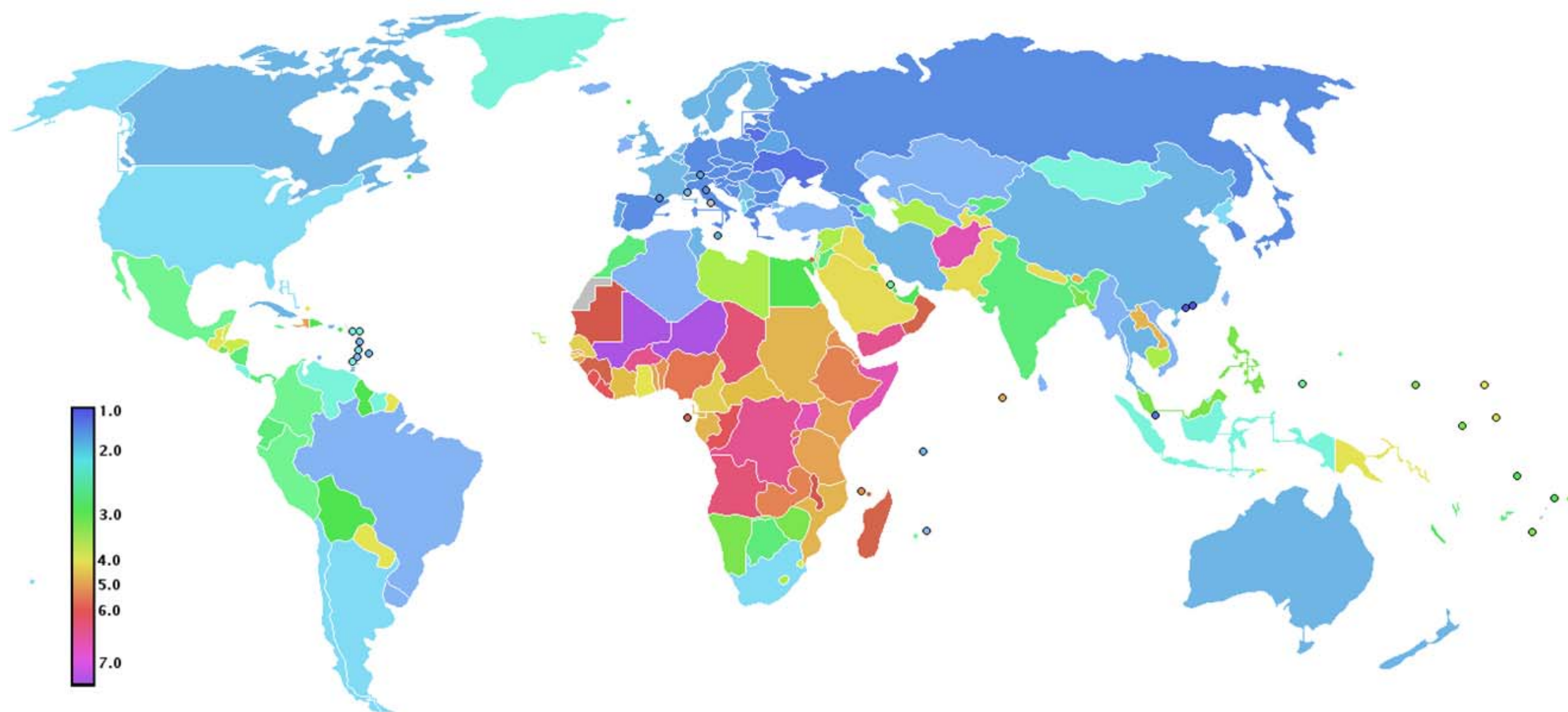


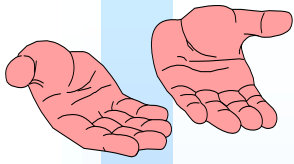
Acceleration Learning



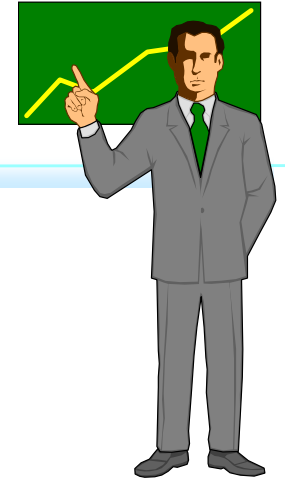


Fertility rate of Population





Consumer Analysis



To provide the Ad to Target Consumers with **maximizing** the efficiency:

♣ **EfficiencyTouching** = $NRTU/NRC$

→ NRTU: Number of Reached Target Users

- Non e' detto che abbiano comprato

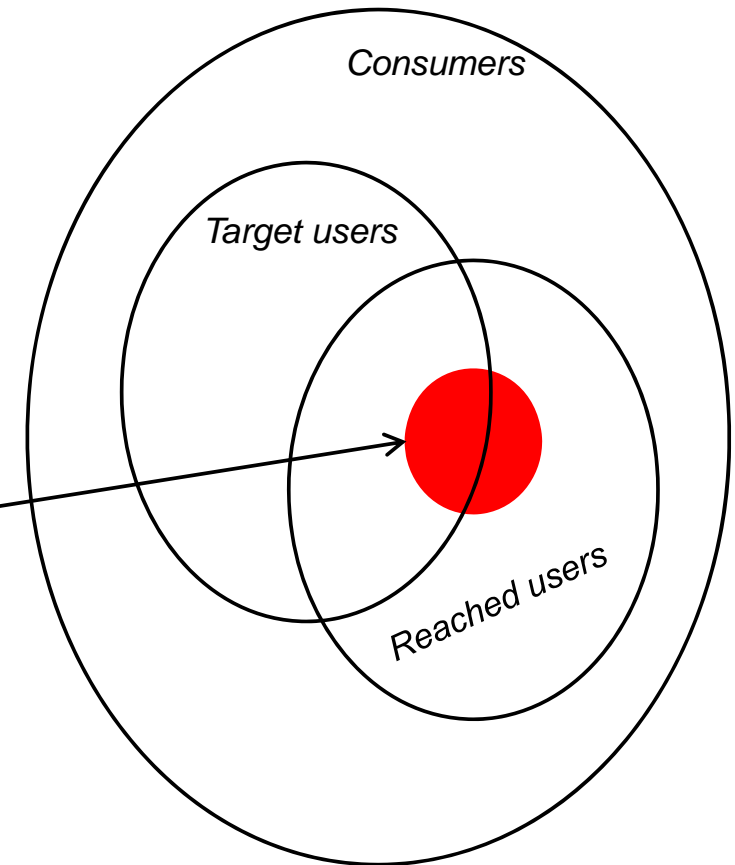
→ NRC: Number of Reached Consumers

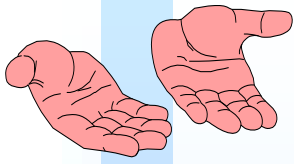
♣ **EfficiencySale** = NSP/NRC

→ NSP: Number of Sold Products

- Gli utenti possono prendere 1 o piu' prodotti

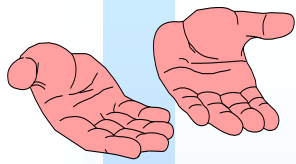
→ NRC: Number of Reached Consumers





Ad Efficiency

- ⌚ Poor Ad efficiency is not interesting, it is too expensive
- ⌚ **examples of massive Ad** (marginally targeted)
 - ♣ Mailing spam is not efficient
 - ♣ Broadcasting: TV, Radio, etc. (generally thematic)
 - ➔ Product placement on context and content
 - ♣ Phone calls
 - ♣ Distributing flyers foils on the street or mail boxes
 - ♣ News papers and journals (general or thematic..)
- ⌚ **Consumers Segmentation (segmenting user profiling):**
 - ♣ addresses, locations, areas, age, sex,
 - ♣ time of watch, time of reading
 - ♣ topic of interest, preferences,
 - ♣ cross marketing for profiling
 - ♣ etc.



Problems of Internet Ad

❗ **Very few web sites have enough visitors** to be of some interest for advertisers companies such as Google, etc..

❗ **majority of consumers are not on Internet**

- ♣ Internet is accessed by only a specific kind of Consumer

- ➔ the majority of Target Consumers is not reached

- ➔ Demographic problems

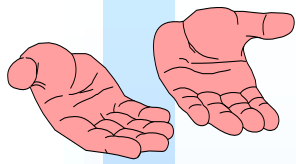
- ➔ Economic problems

- ➔ Internet user Profile: age, education, hobbies, income, gender, locations, religion, etc...

❗ **Entry points:**

- ♣ General service and community Portal: social networks, ISP providers, etc...

- ♣ Query Search Service Portal: Google,



Concepts of Dynamic Advertising

When a given Consumers accesses to the Web page
the advertiser proposes/recommend Ads according to a reasoning on semantic descriptors of:

• **User/Consumer Profile/Descriptor**

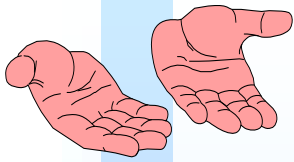
- ♣ Static aspects: Age, language, location, etc.
- ♣ Dynamic aspects
 - ➔ Context of the current web page
 - ➔ Context of the query performed
 - ➔ History of the actions performed by the user (also email, past opened web pages, video played on youtube, profiles inherited from other Social Networks, etc.)

• **Target user profile/descriptor for a given Ad:**

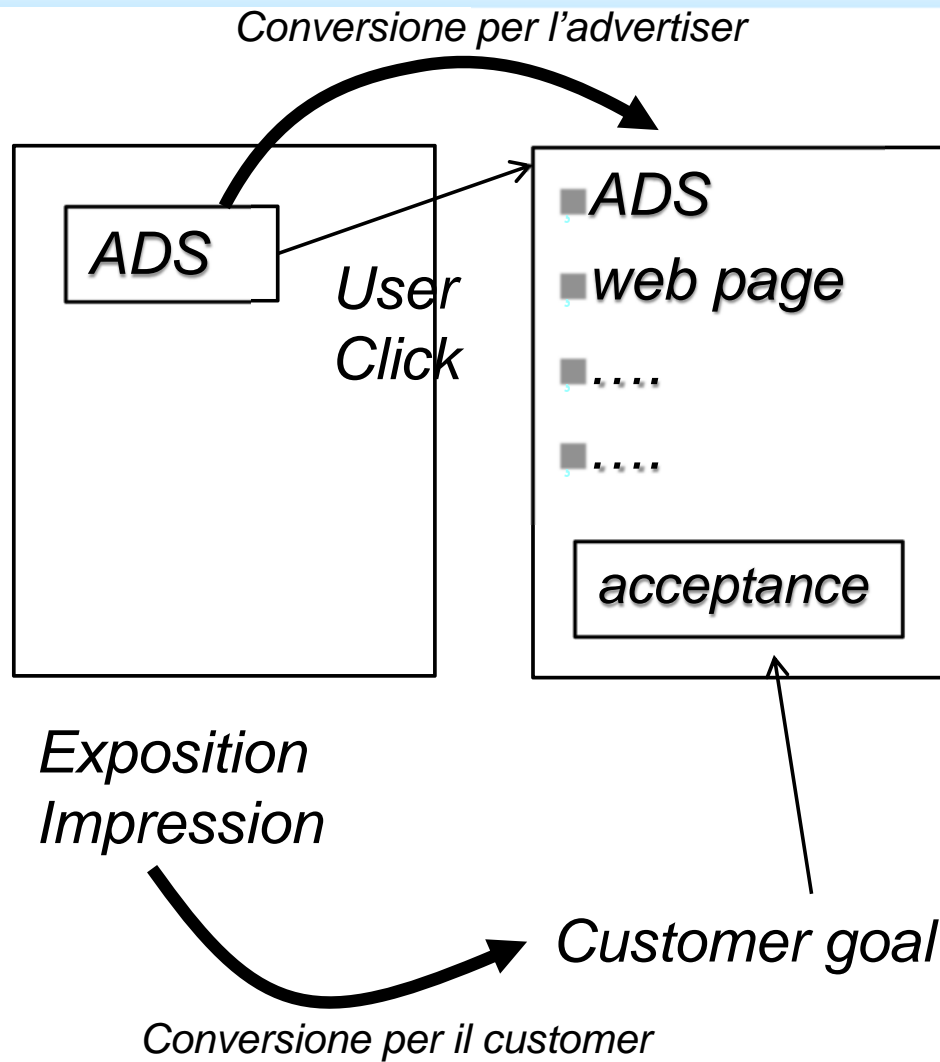
- ♣ Age, income, etc.

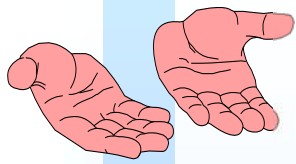
• **Classified Ad, Ad Descriptor:**

- ♣ kind, theme, topic, etc.



Concepts





Internet Advertising Business Models

Advertiser \leftrightarrow Seller

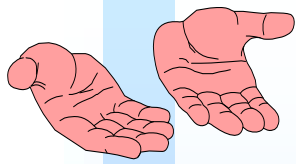
Static:

- ♣ A Fee/Cost for the exposition of the Ad on the web page independently on the number of visits

Dynamic:

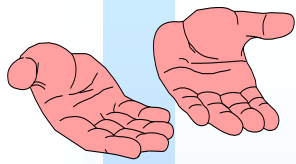
- ♣ **Pay per Exposition/Visits/Impression:** A Fee for each exposition of the Ad, counting of the expositions
- ♣ **Pay per Click:** A Fee for each click on the Ad, counting of the click
- ♣ Maximizing the click probability according to some reasoning on descriptors mentioned before

→ Semantic Computing of Descriptors, of the WEB 2.0



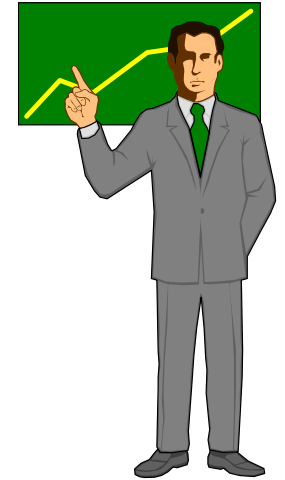
Internet Advertising Measures

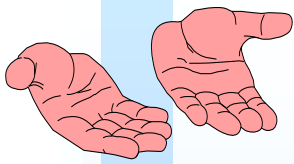
- **Hits:** number of references on that page/keyword.
Number of web pages on Google for a given query
- **Impressions or Views:** number of times a given page or banner has been presented to Customers
- **Visits:** number of times a certain user has been exposed to certain web page (in some cases for at least a certain time period)
- **Unique Visitors:** number of different visitors (typically distinct IPs) that have visited a given web page, per year or per month or from the whole life.
- **Interested/Attracted Visitors:** those that click on the Ads to go on the WEB page. Their profiles should match with the Target Consumers.



Internet Advertising Measures

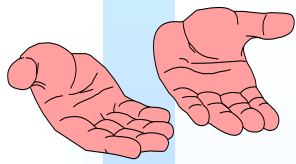
- ❖ **Number of Clicks (Click Through):** a click is the action to select an Ad that bring the Customer to open the Web page of the Ad. So that it should correspond to the number of Visits on the Seller Web page for a given product.
- ❖ **Click Fraud:** False generation of site click to generate payment for click without to have them provoked by real customers.
- ❖ **Web Analytic Software:** a software to track the accesses on a given portal
- ❖ **Trend Software:** a software to analyze the trend of visibility for queries or visits on web pages, counting them along time



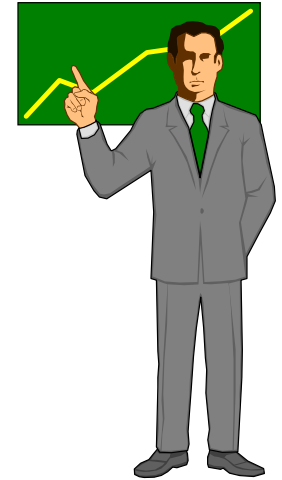


Internet Click Fraud

- Typically performed by Competitors to make your Ad Campaign very expensive and not useful
- Robots to perform click fraud with rotating user agent!!!
- Services may monitor who is clicking on your Ad
 - ♣ <http://www.whosclickingwho.com/>



Internet Advertising Measures



Conversion Rate, Conversion:

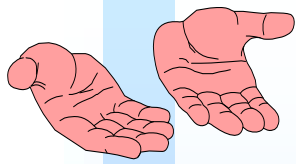
- ♣ number of Clicks with respect to the number of Impressions/expositions (in some cases scaled by 1000 or more).

Conversion in Contacts:

- ♣ number of Contacts with respect to the number of Impressions (in some cases scaled by 1000 or more).
 - ➔ Potrebbe essere il numero di visite nel sito web di vendita che non sono ancora conversioni per il customer.

Conversion in Sales:

- ♣ number of Sales with respect to the number of Impressions (in some cases scaled by 1000 or more).



Advertising Business Models

• **Costs per Impressions, CPI (Costs per Thousands of Impressions, CPM, M is derived from M as 1000 in Roman numbers):**

- ♣ a fee for each impression of the Ad

• **Cost per Click, CPC:**

- ♣ a fee for each click on the Ad

• **Cost per Sale, CPS:**

- ♣ a fee for each Sale of a given product/service

• **Flat Fee, FF**

- ♣ A fee for each Ad exposed for a given period without any assurance about the number of impressions or clicks

• **Pay per View: PPV**

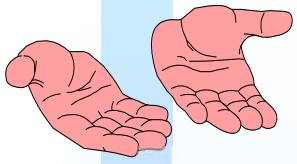
- ♣ A fee for each view of the connected Web page to an Ad

• **Pay per Purchase, PPP**

- ♣ A fee for each selling provoked by the Ad exposition on some web portal

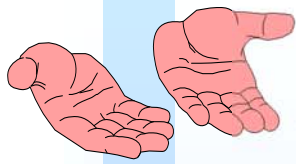
• **Hybrid**

- ♣ Different prices for the above models on the same web portal



For TV

- Syndicating (verifica a campione o puntuale)
 - ♣ Diary: Ask people to keep a diary of what they watch
 - ♣ Meter: records what channel a tv is tuned to
 - ➔ Auditel, Decoder specifici con canale di ritorno
 - ♣ People Meter: Records what channel is being watched as well as who is watching it
- Nielsen Ratings are the most common
- Nielsen Television Index (NTI) for national ratings
- Nielsen Station Index (NSI) for local ratings
- Nielsen handout shows a typical NTI Report



Audience Measures Used in Media Planning

• *Un altro modello*

- **Gross (Target) Impressions:** *Total number of exposures, regardless of audience size or makeup*

- *If 1000 people are exposed to an Ad 1 time, total impressions is 1000*

- *If 100 people are exposed to an Ad 10 times each, total impressions is 1000*

- **Gross (Target) Rating Points:** *$(\text{Impressions} / \text{Population}) \times 100$*

- *While it looks like a percentage, it CAN be more than 100.*

- **Reach:** *Percentage of population exposed at least once*

- *Total Unique Audience / Population*

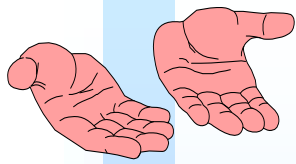
- **Frequency:** *Average number of times a person in the reached audience is exposed to the ad*

- *Total impressions / total unique audience*

- **CPM:** *Cost per thousand impressions*

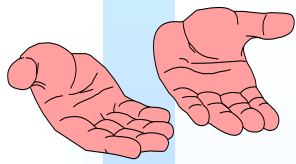
- *$(\text{Ad Cost} / \text{Impressions}) \times 1000$*

OR *Ad Cost / Impressions (000)*



Magazine Audience Measurement

- ❖ **Circulation:** measure of how many copies of an issue are sent to market including subscriptions and distributor sales
- ❖ **Readership:** estimate of the number of people actually reading an issue of a magazine; more than one person typically reads the same copy of a magazine
- ❖ These number are broken down by reader characteristics to more accurately define a target audience, ex. SRDS handout



Readership Measurement

❧ Magazine rates

- ♣ Based on circulation that a publisher promises to provide

❧ Magazine circulation

- ♣ The number of copies of an issue sold

❧ Simmons Market Research Bureau

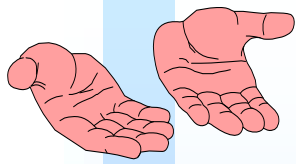
- ♣ Provides psychographic data on who reads which magazines and which products readers buy and consume

❧ MediaMark

- ♣ Measures readership for many popular magazines

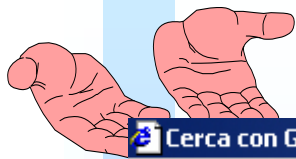
❧ Standard Rate and Data Service

- ♣ Provides circulation, ad rates, and varying details about the magazine and the readers of a magazine as provided by publishers



Internet: business models

- ❧ Ad as Banners/Texts on Web Pages,
 - ♣ insertion ADS into third party Web pages
 - ♣ Insertion ADS into Web pages of the Advertiser (e.g., insertion into the Google Search results pages)
- ❧ Ad as video on TV
- ❧ Ad as Audio on Radio
- ❧ Ad as Video on WEB TV video
 - ♣ insertion ADS into third party videos, before, over and/or inside
- ❧ Ad as product placement into the content. For example:
 - ♣ presence of a Given Car into a Film (e.g., 007 Film with BMW)
 - ♣ usage of certain furniture, dresses, in a video
- ❧



Inserzioni a pagamento del tipo Pay per Click

Cerca con Google: stampi materie plastiche - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Reload Search Print

Address http://www.google.it/search?hl=it&ie=UTF-8&oe=UTF-8&q=stampi+materie+plastiche&lr=lang_it Go Links

Google stampi materie plastiche Search Web Search Site PageRank i AutoFill e Oa

Google [Ricerca avanzata](#) [Preferenze](#) [Strumenti per le lingue](#) [Suggerimenti per la ricerca](#)

stampi materie plastiche Cerca con Google

☐ Cerca nel Web ☒ Cerca solo le pagine in Italiano

Web Immagini Gruppi Directory News **Novità!**

Google ha cercato **stampi materie plastiche** nelle pagine in Italiano. Risultati 1 - 10 di circa 9,120. Durata ricerca: 0.22 secondi.

[RDS Stampaggio materie plastiche per Stampaggio plastica](#)
RDS subfornitura si occupa di **stampi di materie plastiche** e di stampaggio plastica.
Stampaggio **Materie Plastiche** Stampaggio Plastica **Stampi materie plastiche**. ...
rds-stampi-pessofusione.owt.it/stampaggio-plastica.htm - 5k - [Copia cache](#) - [Pagine simili](#)

[Nuova Impronta srl - Produzione stampi materie plastiche](#)
Nuova Impronta srl - Produzione **stampi materie plastiche** <http://www.nuova-impronta.com>.
Produzione e progettazione **stampi materie plastiche**. ...
Descrizione: [Cordenons, PN] Progetta e costruisce **stampi** per la lavorazione di **materie plastiche**, ne descrive...
Categoria: World > Italiano > ... > Lavorazioni > Stampaggio
www.nuova-impronta.com/ - 3k - [Copia cache](#) - [Pagine simili](#)

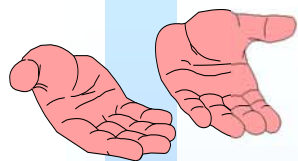
[Nuova Impronta srl - Produzione stampi materie plastiche](#)
Forti di una collaudata esperienza nella progettazione e costruzione di **stampi** per **materie plastiche**, la Nuova Impronta continua a perseguire un obiettivo: "La ...
www.nuova-impronta.com/italiano/home.htm - 10k - [Copia cache](#) - [Pagine simili](#)
[Altri risultati in www.nuova-impronta.com]

Collegamenti sponsorizzati

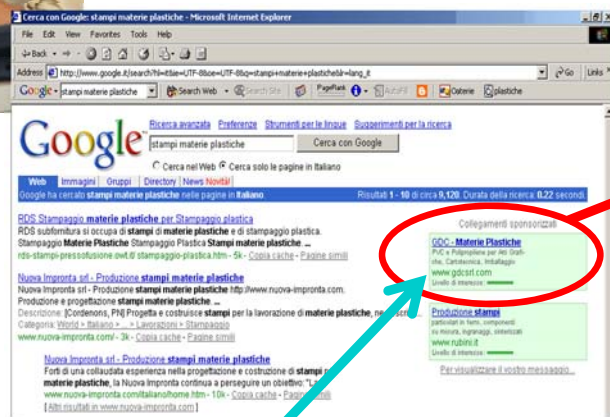
GDC - Materie Plastiche
PVC e Polipropilene per Arti Grafiche, Cartotecnica, Imballaggio
www.gdc srl.com
Livello di interesse:

Produzione stampi
particolari in ferro, componenti su misura, ingranaggi, sinterizzati
www.rubini.it
Livello di interesse:

[Per visualizzare il vostro messaggio...](#)



Pay per click, mediated via advertisers



Visit

WEB Page of the Seller

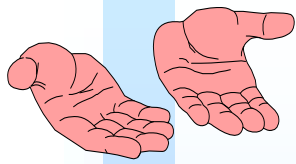
click

Advertising Management
& Semantic Computing



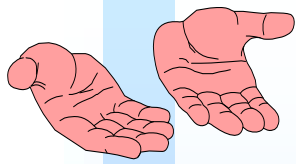
WEB portal capable to:

- present products
- monitor user actions, IPs, etc.
- ask for registration
- collect contact
- provide more and more.....



Google Advertising, AdWords

- **Mainly pay per click of your Ad on:**
- Google search pages
 - ♣ The user performs a query and the Ad is provided on the left or right side according to:
 - ➔ **Matching query \leftrightarrow Ad-Descriptor**
 - ➔ Business model, Rate, history
- Many many Web sites that have given to Google the possibility of dynamically inserting image banners or text
 - ♣ Providing their profile
 - ♣ Demonstrating of having a certain volume of traffic
 - ♣ Ad is exposed on those web portals on the basis of:
 - ➔ **Matching WebPortal-Descriptor \leftrightarrow Ad-Descriptor**
 - ➔ Business model, Rate, history



Google Advertising, AdWords

Google also provides support to:

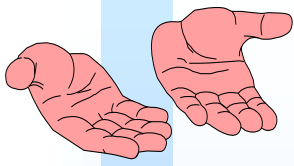
Keywords to be used

- ♣ Profile your web site (extraction of your keywords)
- ♣ Browsing and searching for possible keywords to see their costs, etc.
- ♣ Suggesting keywords related to your web site, pushing you to use quite expensive keywords
- ♣ Providing an estimation about the number of click you may have for each keyword on the basis of their historical data and status.

Web Portals in which you can have the AD

- ♣ Browsing and searching possible web portals
- ♣ Suggesting Web portals on which posting Ads

Monitoring and analyzing your campaigns



Google Advertising



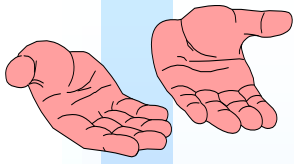
Advertising Campaign

- ♣ A set of Ads (see below)
- ♣ A set of business models: pay per click, etc.
- ♣ A period of validity
- ♣ A max cost per day/months, etc..
- ♣ A bank account
- ♣ ...



A set of ADS: one or more announces for each Ad

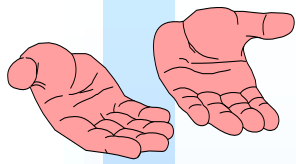
- ♣ Multilingual, for the corresponding countries
- ♣ Multi-statement/slogans:
 - ➔ rotate them in polling or smart selection
- ♣ Keep trace of their single effectiveness:
 - ➔ Conversion rate, Clicks, Impressions, etc.



Google Advertising

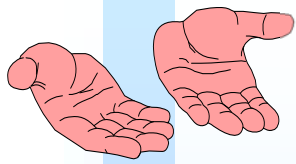
For each announce

- ♣ A URL, general or specific
- ♣ A maximum rate to pay per click, specialized per Ad
 - ➔ Max CPC (click), Max CPM (1000 impressions)
- ♣ A set of keywords/key-phrases for URL (service/product) description (a tool to perform an automated analysis is provided)
 - ➔ ***Keywords may have different CPC on the basis of their Quality and Click Through Rate***
- ♣ A set of black listed keywords
 - ➔ To avoid placing the Ad when keywords match with the Web page in which it should be placed.
- ♣ A set of preferred placements URLs
 - ➔ WEB sites in which it can be located/placed (specific communities, specific portals, social networks, etc.)
- ♣ A set of black listed placements URLs to be avoided



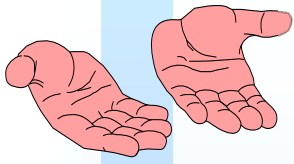
Quality and Click Through Rate

- The Cost per keyword depends on quality and on Click Through Rate, CTR
- This is determined on the basis of the history of query performed on Google Search



Lessons Learned in using AdWords

- **Identify specific keywords** for each of your Ads
- **Make it very specific**, regions, web sites, etc.
 - Start your campaign narrow,
 - Enlarge on the basis of your result analysis
 - Use multiple statements and Ads
 - Try to target your consumers and avoid accepting many clicks from curious consumers that are not converted in sales
- **Do not accept all suggestions** if you are not prepared to make a massive campaign



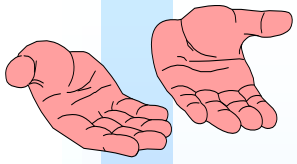
Lessons Learned in using AdWords

Monitor your web site:

- ♣ Before, during and after the campaign
- ♣ During, to measure:
 - ➔ conversions,
 - ➔ What potential Consumers do on the Web site: how much time they state linked, how many clicks, what they click, etc.

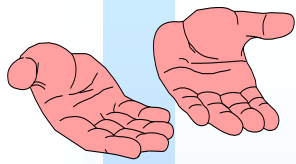
Assessing the number of Impressions and Clicks per Ads

- ♣ Provides hints on their effectiveness/conversion
- ♣ Provides hints on which portals *Interested Users* may be found
- ♣ Making analysis to compare Interested and Target Users
- ♣ Making analysis to identify Suitable WEB portal in which place the Ad according to the product and Conversion



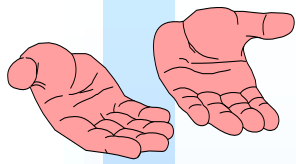
Google AdSense in your website

- ❗ Solution to allow **Google to place Ads on your Web Portal or site**
- ❗ As a counterpart, Google will provide you a certain fee for each Click performed by one of your visitor on the inserted Ad.
 - ♣ Each single provided fee per click may depend on
 - ➔ how much the Seller accepted to pay for a certain keyword and on
 - ➔ your web site keyword and costs.
- ❗ ***Specific contract has to be signed***
- ❗ It has sense only **over a certain amount of traffic**
- ❗ For a portal it is also possible to have a Google Search box into the page and get revenue sharing from it.

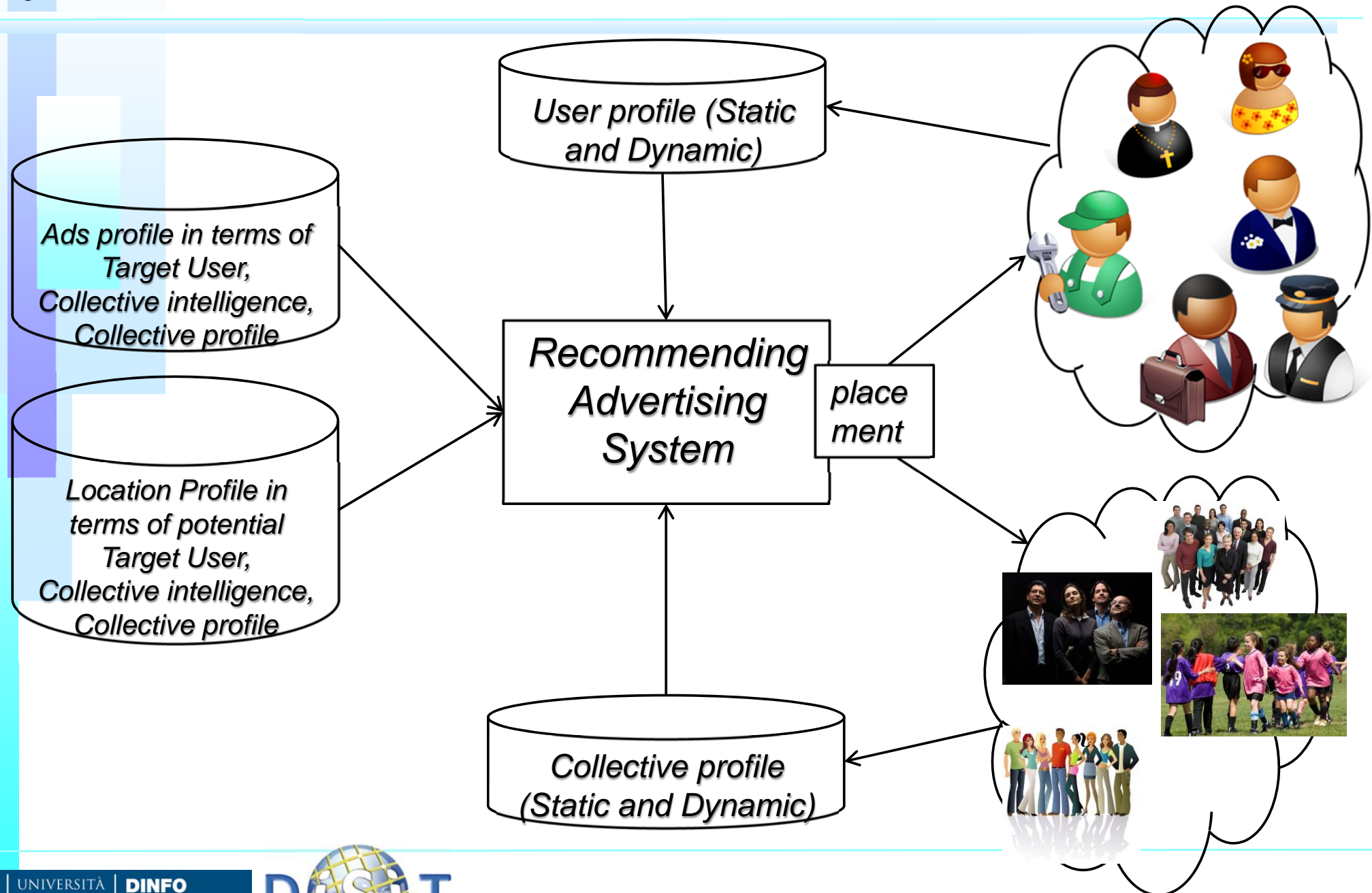


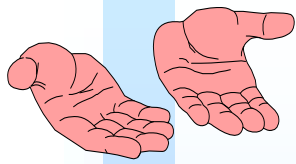
Issues of Ad Recommendations

- The associations of Ad is performed by using technologies of Semantic Computing, that will be better described in the part related to Social Networks
- **Taking into account static aspects and dynamic evolution of descriptors**
- **Taking into account the Content of the Web page and the Description of the Ad**
- **Semantic Matching, similarity distance among:**
 - Query-Description \leftrightarrow Ad-Description
 - Web-Portal-Description \leftrightarrow Ad-Description
 - Web-Page-Description \leftrightarrow Ad-Description
 - User-Description \leftrightarrow Ad-Description
 - Content-Media-Description \leftrightarrow Ad-Description
 - Etc...



Recommending Systems





Issues of Ad Recommendations

⌚ Avoiding wrong associations:

- ⌚ Bad keywords and Web Portal, blacklists (for instance, Sex, XXX, etc.)
- ⌚ Strange/unfair associations of Ad to content

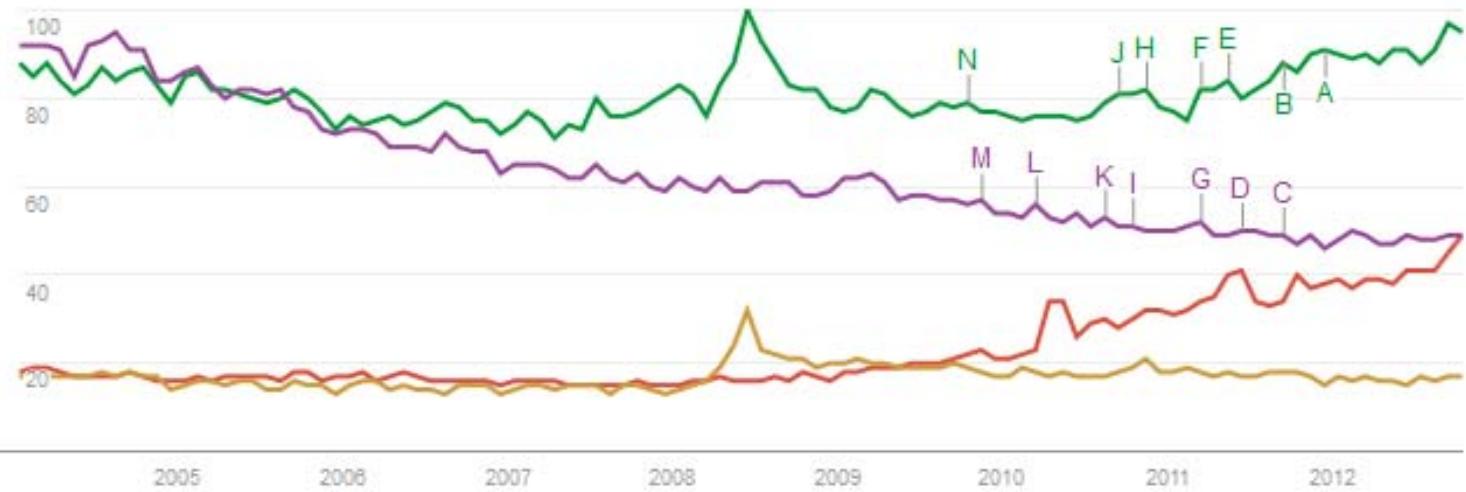
⌚ Examples of bad/unfair associations:

- ⌚ A web page of a news regarding an Aircraft crash with an Ad about a low cost Airline
- ⌚ A web page about a Dog that has aggressed/eat (given an bit) to a young Boy; with an Ad about Dog Food

⌚ Sentiment analysis is needed

- ⌚ Natural language processing is needed
- ⌚ ...

Google Trends



cloud

grid

smart

user

Interesse regionale ?



0 100

► Visualizza la variazione nel

Regione | Città

Termini correlati ?

Più cercati

In crescita

cloud computing

100

st cloud

95

the cloud

90

cloud 9

35

saint cloud

35

google cloud

35

i cloud

35

sound cloud

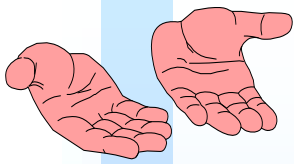
30

amazon cloud

30

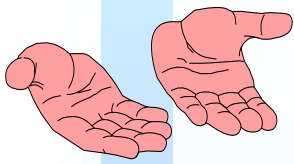
cloud nine

25



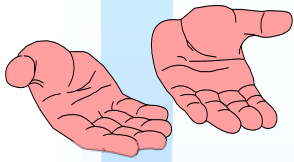
Advertising Estimation

- ⌚ **A → U: suggestion/recommendation of and Advertising to a User**
- ⌚ To be provided when user is connected to some service
- ⌚ Based on Similarity distance between
 - ♣ Ad descriptor versus User Profile
 - ♣ Taking into account aspects of User Profile which can be
 - ➔ Static: who is, age, language, etc...
 - ➔ dynamic: last preference, user behavior, etc.
 - ♣ Taking into account of user collectivity, collective intelligence
 - ➔ Expanding on the basis of the collective intelligence of the user kind



Advertising Estimation

- ❗ **A → O: suggestion/recommendation of and Advertising to a Object/Content**
- ❗ To be provided when user access to a Content
- ❗ Based on Similarity distance between
 - ♣ Ad descriptor and Content Description
 - ➡ Ad description may have:
 - Target audience
 - Evocating keywords, if you searched for “xxxxx” means that you are interested on “yyyy”
 - Example: Soap for Dogs to images of dogs, etc.
 - ♣ Taking into account aspects of Content-Ad which can be
 - ➡ Static: distance of descriptors
 - ➡ dynamic: clicks, effective responses.
 - ➡ Past record of acceptance for that Content, content kind

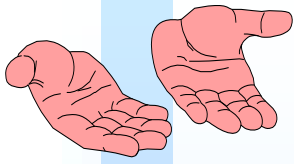


Similarity distances

Technologies such as:

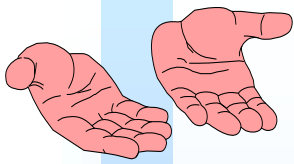
- ♣ **Semantic descriptors** and computing
 - Coding of semantic information
- ♣ **Clustering**
 - K-Means, K-Medoids, ...
- ♣ **Statistics analysis**, heuristic analysis
 - PCA, Principal Component Analysis
 - Multilinear regression
 - Holistic regression
- ♣ **Cosine Distance**
- ♣ **Text similarity**,
 - frequency of keywords
 - Natural language processing
- ♣ **Content based retrieval** similarities solutions
- ♣ Etc.

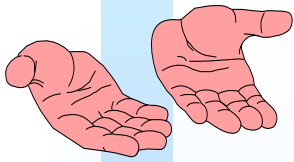
These issues are discussed in the next Part of the course in which the issues of Social Networks are addressed



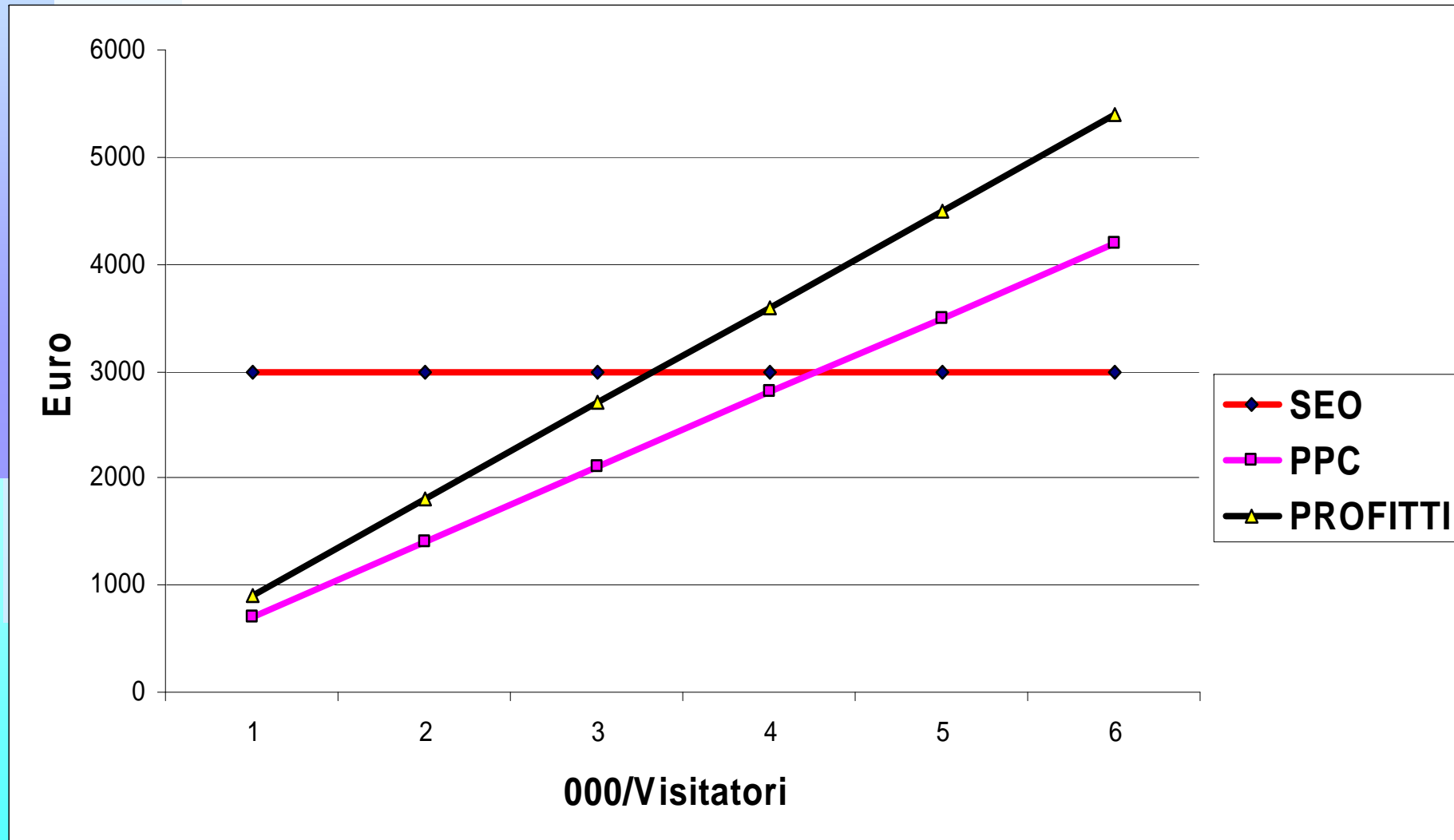
References

- ❧ B.C. Brown, The complete guide to Google Advertising, Atlantic Publishing
- ❧ Google AdWords
 - ♣ <http://www.google.it/intl/it/adwords/jumpstart/phone.html>
- ❧ Google Trends
 - ♣ <http://www.google.com/trends>
- ❧ Nielsen Media Research (NMR) is an American firm that measures media audiences
 - ♣ <http://www.nielsen.com/>

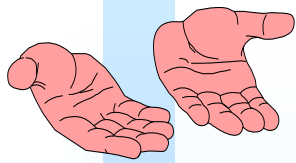




SEO vs. PPC



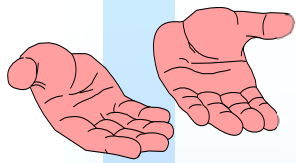
$Cpc = eu0.70$; $Profitti/000 = eu900$



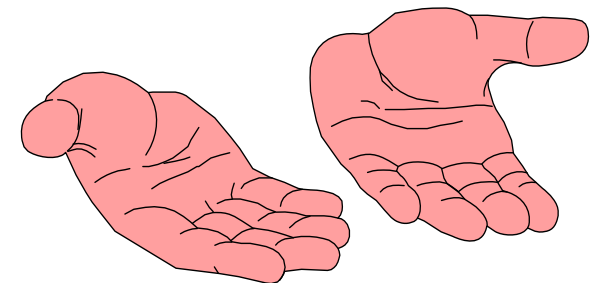
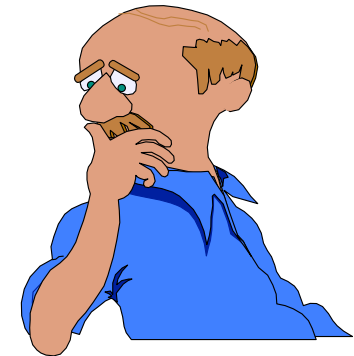
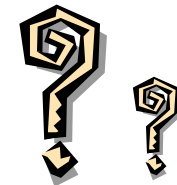
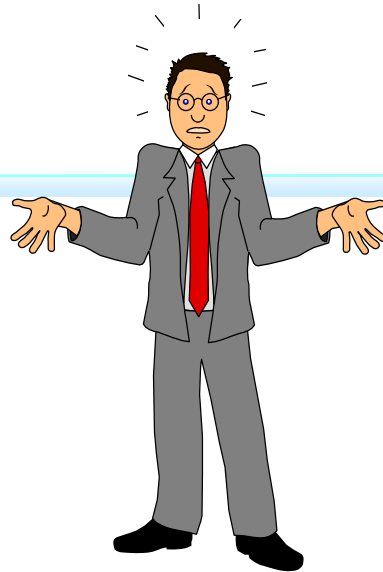
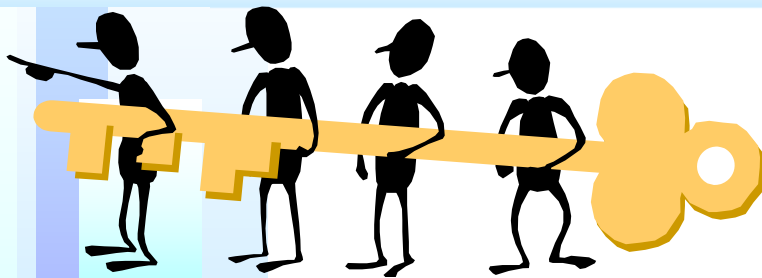
Esempio Calcolo Convenienza

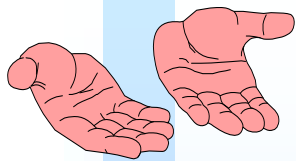
- Costo per click = eu0.80
- Tasso conversione = 4%
- Utile medio/ordine = eu10
- Costo Acquisizione Ordine
 $0.80 \times 100 / 4 = \text{eu}20$

- Costo per click = eu0.20
- Tasso conversione = 0.2%
- Utile medio/ordine = eu5000
- Costo Acquisizione Ordine
 $0.20 \times 100 / 0.2 = \text{eu}100$

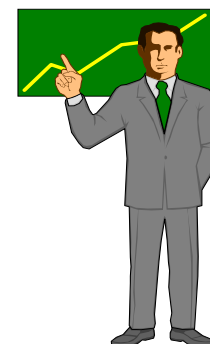
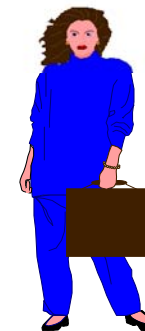


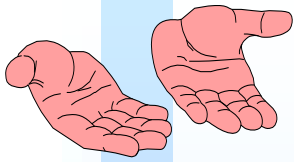
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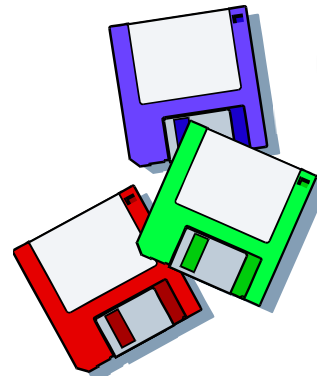
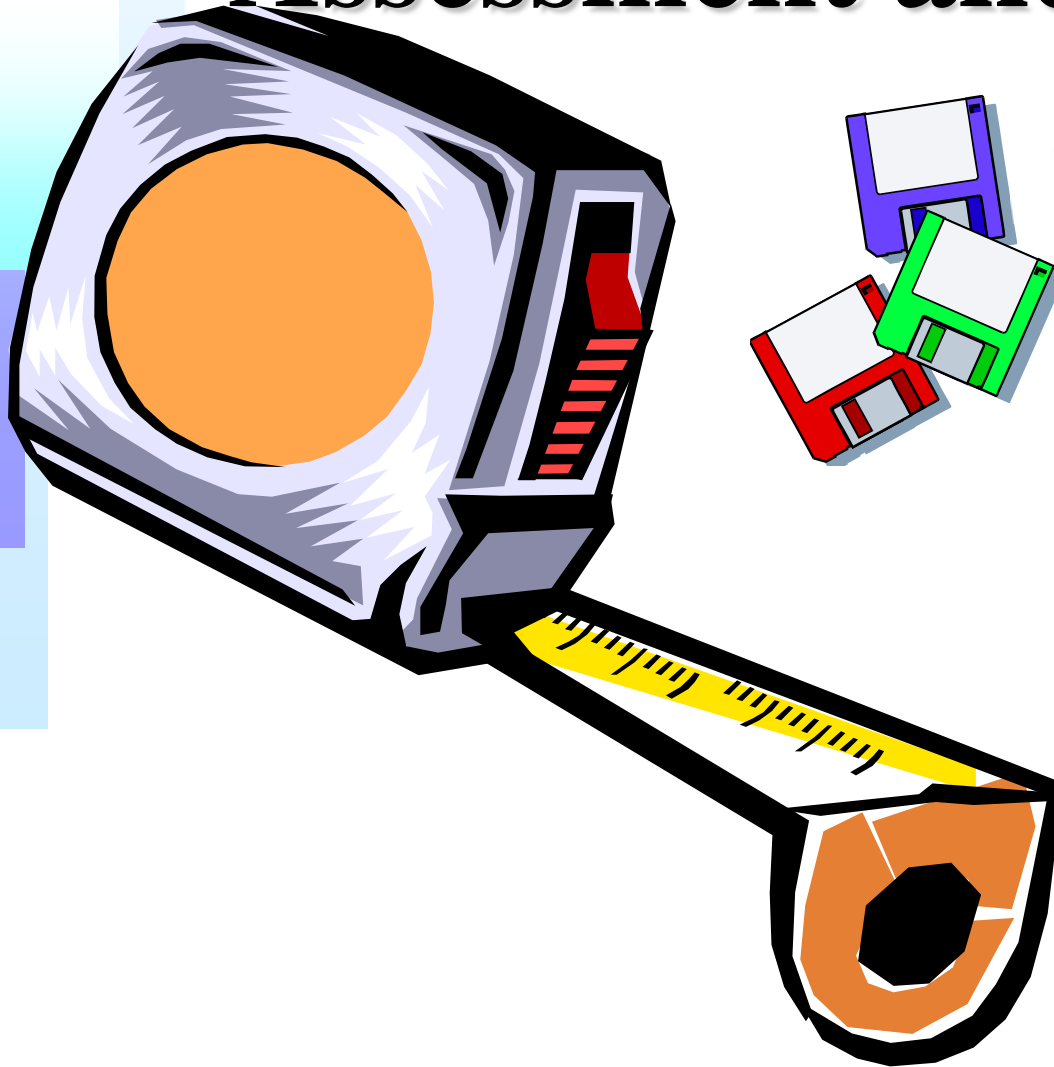
L'esperto?



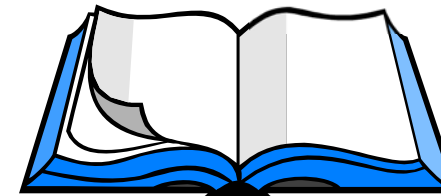


OO Products:

Assessment and Metrics



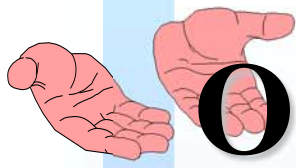
Code



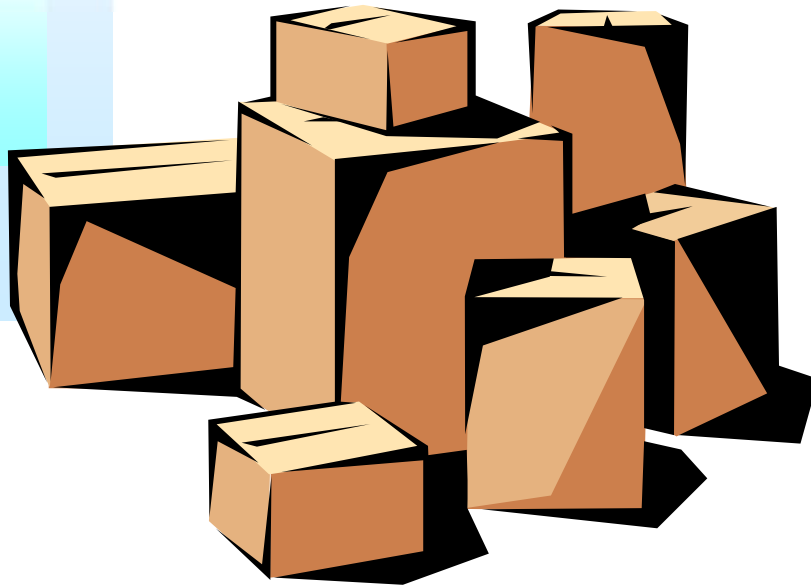
Document

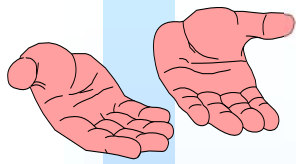


Operationality

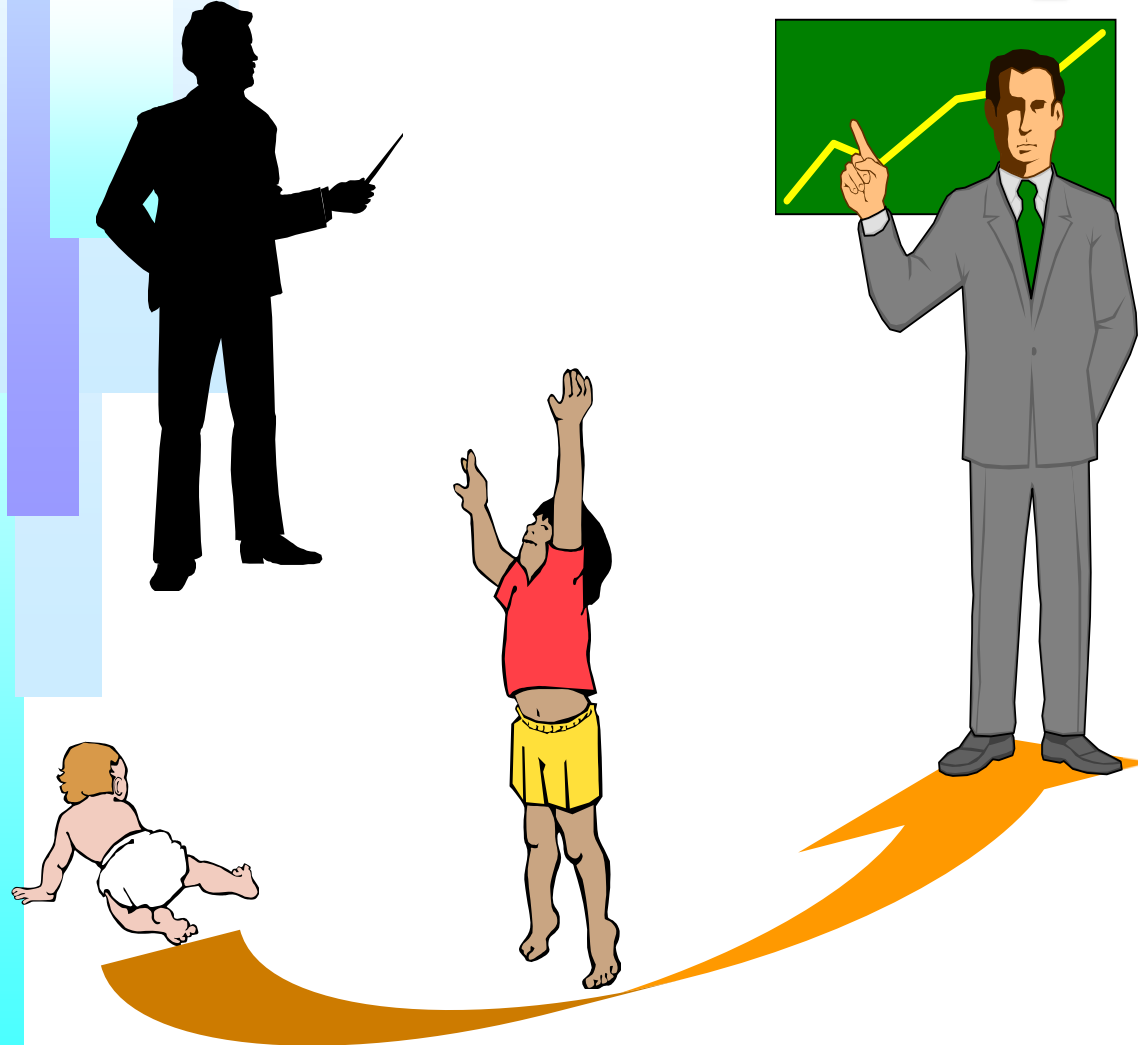


Object Oriented Management of Projects





Managing with Continuous Improvement



- Learning:
- ♣ Facts
 - ♣ Understanding Facts