## **06.Social Media**

#### A definition of social media

Social media are Web 2.0 sites, i.e. sites that support any form of sharing of user-generated content by leveraging the social relationships among individuals. The extent to which social media leverage social relationships can vary from pure sharing of interests (e.g. YouTube channel) to a form of interaction among actual friends (e.g. Facebook).

In recent time there is also LLMs. Social media is a big innovation as it becomes a new way to communicate.

## A wave of social change

There is contamination between real-life social relationships and the networks of relationships on social media:

- social media create new social relationships (e.g. indirect contacts through Linkedyn)
- social media change existing relationships (e.g. dropping a fiancé by changing status on Facebook)
- social media change the time frame of social relations (e.g. keeping track of past work relationships with Linkedyn connections)
- social media reduce the barriers of knowledge sharing (e.g. Slide share) and, thus, reduce the klout of knowledge holders
- overall, social media make social relationships easier, reduce the importance of knowledge holders and increase the importance of content
  - Social media can influence the real world. You can now know people that you do not know in real life. Linkedin for example enable the connection with people you have done interesting works and enables a "log" of your works to let the other person remember that they worked with you and on what.

Can have different type of relationships: friends, work related, acquaintance etc...

Social functionalities can either be free or paid, the difference is based on the span and the scope of the functionality.

Social media also tries to lower the barrier of shared knowledge. Also nowadays with a book you receive also a lot of extra material with the intent to limit your searches through social media for material. LLM gives out a decent average of the subject, this is good if you have no knowledge on the argument.

If the content is high value added is protected from other people and LLM training, you cannot find everything publicly available. Expect to find a decent average on social

media/internet(usually this can help you to achieve a good work/gain knowledge for the job you need to do).

Long term forecast are difficult to make, easier to look back and see if there are recurring events that can help for our predictions.

If you do not embrace changes you can be in a lot of trouble as you are protecting/using material that is not adequate enough/is partial.

### Content vs. content holders

Since clout on social media depends very much on content, social media tend to care about the quality of content and invest in keeping it clean and dependable (e.g. wikipedia).

In general, if something is on social media, we take it as «true». In general, the source is not considered enough to guarantee that content is true. People trust social media content thanks to the «wisdom of the crowds». If something is not true, somebody would know it and tell the community.

Some knowledge is worthy of protection as it is still true and good. The problem with social media is that there can be fake knowledge around, even in emergency.

You can hear the opposite information from two different users, so we need dependable and accountable sources to gain information from.

#### Classes of social media

- 1. Content sharing (videos(e.g. Youtube, Vimeo), pictures (e.g. Flickr), music (e.g. Napster), knowledge (e.g. GoogleDocs, OS), experience (e.g. Yelp, or any feedback system))
- 2. Social networks (e.g. Facebook, Orkut ...)
- 3. Forums (moderated interactions, netiquette, evolution of bulletin boards and newsgroups, e.g. 4chan.org). Forum didn't desappear but they changed their way of fruition as they are a good way to exchange information
- 4. Blogs (personal blogs, corporate blogs, news blogs, political blogs, prison blogs...). Platforms: blogspot, wordpress

## The crowdsourcing paradigm

Wikipedia – «Crowdsourcing is the act of sourcing tasks traditionally performed by specific individuals to a group of people or community (crowd) through an open call.» Crowdsourcing is a distributed problem-solving and production model.

Why is crowdsourcing powerful? Because of the wisdom of the crowd.

We can exploiting the fact that some people find fun to contribute in the diffusion of information to let them do it for free.

## Crowdsourcing examples

- Amazon Mechanical Turk
- Wikipedia
- crowdSPRING
- Waze
- CloudCrowd
- CrowdFlower
- Kickstarter
- Stardust@home
- Distributed Proofreaders
- Wikimapia
- Threadless
- uTest

- OpenStreetMap
- Innocentive
- Google Answers
- Yahoo! Answers
- Digg
- Reddit
- Foldit
- BlueServo
- Cerberusgame
- Freelancer
- Get a Slogan
- TopCoder
- iStockPhoto

Engagement is a keyword as it is needed to be taken in consideration to have a better reach.

#### The wisdom of the crowd

Wikipedia – **The wisdom of the crowd** refers to the process of taking into account the collective opinion of a group of individuals rather than a single expert to answer a question. Historical case:

The classic wisdom-of-the-crowds finding involves point estimation of a continuous quantity. At a 1906 country fair in Plymouth, eight hundred people participated in a contest to estimate the weight of a slaughtered and dressed ox. Statistician Francis Galton observed that the mean of all eight hundred guesses, at 1197 pounds, was closer than any of the individual guesses to the true weight of 1198 pounds. This has contributed to the insight in cognitive science that a crowd's individual judgments can be modeled as a probability distribution of responses with the mean centered near the true mean of the quantity to be estimated.

You can extract the common leaf of social media to gain a good knowledge that can be better than the one of the experts taken one at a time. The non experts need to have a little knowledge on the arguments we are talking about to let the wisdom of the crowd works. No collective knowledge, you need some training to be part of the crowd.

#### **Co-creation – definition**

Co-creation is a product/service innovation paradigm based on the cooperation between a supplier and the potential customers of the new product/service.

Cooperation can be:

- Direct, i.e. customer participation in the innovation process is deliberate (aware) and active.
- Indirect: innovation occurs by taking advantage of the suggestions, comments, and opinions
  that customers provide in a variety of ways (call center, corporate site, social media...)
  without making them explicitly part of the innovation process (and related decision-making
  tasks).

Working with a non cooperating client is difficult as they have unreasonable expectations and gives little feedbacks.

Giving credits helps in maintaining retention/helps as reward as they can be used to get a better/another job. The system should be designed to recognize the efforts of the users that give useful inputs.

Social media is unmanageable as people can talk freely and exchange opinions whenever they want(so it is difficult to control).

Need to be creative and fast as you may need to relate advertisement campaigns to some events and you cannot let these opportunities to slip from your hands.

## **Co-creation and «listening»**

- On social media, customers spontaneously provide suggestions, comments, and opinions.
- Listening can provide indications on all the inputs provided by customers that can be useful for product/service innovation.
- Listening is important in both types of co-creation, direct and indirect. Companies should try to listen outside their communities to understand the real market opinions and not the ones that belong to already loyal customers. This helps to understand their strength and weaknesses. Only problem is that the social media employer is also responsible of the press image of the company so there is a conflict of interests as the employer could try to resolve the negativity they found or they can hide these negativity as they can hinder their job. Worst case is when you delegate these job to a consultant agency.

#### **Direct and indirect co-creation**

There exist success stories of both types of co-creation.

Usually, indirect co-creation represents the first step (according the the «listen first» principle) A broad-range listening, outside of one's own community can help identify a few indirect co-creation initiatives useful to set clear goals for direct co-creation.

## **Co-creation and crowdsourcing**

Co-creation can be effective by leveraging crowdsourcing.

There exist successful companies entirely based on co-creation and crowdsourcing.

When co-creation is aimed at design, it can focus on «influencers» Example:

Nyden, a new H&M brand, engages with hand-picked "tribe leaders," to "co-create" the clothing range. He comfirmed that the tattoo artist Doctor Woo, who has 1.3 million Instagram followers, as well as the Swedish actress, Noomi Rapace are already on board to work on the new line (Source: Fashionunited).

Influencers are content creators with a big loyal audience. Companies tries to engage these influencers giving them recognition, inviting to events or giving products for free to try to use their channels for advertisement. Usually the people that interact with the influencers are social media people and will not forgive easily when you lie. So the problem that arise from this situation is that the followers can vanish really easily if you misbehave/tries to change your brand and do not advertise product/behaviour related to their brand. So advertisement is done carefully to not damage their image.

#### Main risk of co-creation initiatives

A fundamental risk of co-creation initiatives is to assume that customers will be happy to cooperate and will contribute to the initiative just because they are provided a chance to do so. Contribution should be encouraged and coordinated with a careful design of co-creation initiatives.

Moderation can helps in limiting the trolling and false information spread in your initiative.

### Main design variables of co-creation initiatives

#### Checklist:

- Participation mechanisms
- Technology platform
- Roles and tasks of community members
- Types of users in the community
- Incentive systems and rewards
- Quality control mechanisms

## The traditional marketing paradigm

Marketing is defined as «market orientation». It involves sensing market requirements to respond with organizational flexibility.

Traditionally, the first step of marketing was to make an organization's products and services known to the market, as a necessary action to stimulate feedback. Unfortunately, this communication has been found to be very effective also to drive the market especially through broadcasting. As a consequence, traditional marketing is often equated to advertising and there is always the idea that you can both sense and drive the market.

Through advertising you can create needs that aren't there to begin with, you can create a

market for your products or you can change the opinion on your product so much that the customer will buy it instead of the product of on of your competitor.

**Suspension of consciousness**: if the advertising is interesting enough you just watch the advertising and if the content is good enough you accept it even if they are lying to you. Usually you need to maintain a behaviour that let you have content discussion from below to up the line and not vice versa.

You do not want your messages to be lost. You need to think how the ads will let you feel, so needs to adapt it to let people feel good, customer wish to have their feeling understandood(Ex: Intesa once done an ad with a mcrofilm where they said that they would have financed the projects of italians that went to work abroad if they would return to Italy. Problem arose when they published the ad to youtube from television(They where going from above the line to below the line taking a traditional ad to social media) in a period where in academia there were a lot of protests(an academian was at the center of the ad). So the company would receive a lot of negative comments and the company followed the wrong path firstly trying to delete/switch off the comments infuriating more the people that started to spread their discontent on others social media. Best approach is to apology from an high enough person in the company to be felt as a true apology, needs to contains believable, heartfelt content. The traditional marketing director had to answer and engage with the people that commented on the apology).

## Broadcasting vs. communication

In broadcasting, one broadcaster makes a content simultaneously available to many listeners (the audience).

In communication, all players are both broadcaster and auditors at different points in time. Communication involves the ability to «listen». In communication processes, each one of us expects to be listened to at some point in time.

## Viral marketing

On social media, marketing is «viral», i.e. it takes advantage of the ability of all users to become broadcaster.

If each of us can broadcast with 500 people simultaneously, in three hops over 100 million users are reached.

However, people are free to choose whether to broadcast or not at all hops. Engagement is the new word that represent the fact that you are an active participant in the discussion.

Television was a good channel as it would ensure a good amount of engagement at strategical time. Also even if the customer is not active listening to your ad he/she will still learn the basics of your ad.

Nowadays you can have your own channel on social media.

Evangelist is someone that do not sell but only talk about things.

The followers that will see your sponsored content will be only a fraction(because they uninstalled the platform, missed it or skipped it). First of all you need to make the follower read the content of the ad, then understand it and maybe repost it(marketing funnel). So you need

multiple influencers to distribute your message. Usually in a fast pacing social media(as Twitter) you will have the maximum repost in the first 30 minutes. To have a great reach either you have a really interesting and engaging content or pay a lot of money to remain relevant.

## Content vs. content holders on Twitter

On traditional media, the number of readers represents a reliable proxy of the influence of articles (and related news, opinions, etc.). Is the number of followers a corresponding reliable proxy of influence on Twitter? On traditional media, negative news receive more attention than positive news. Is it the same on Twitter?

Influencers try to never sponsor for free as it is also part of their job.

Usually you do not want negative twitter as they tend to stick more.

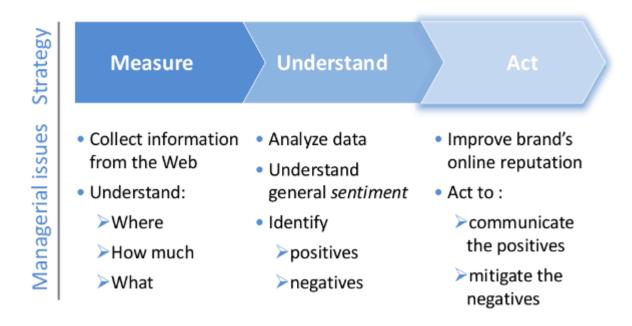
Even if on social media you have a positive bias if you are recognizable from your content as your reputation is putted at risk.

#### **Findings**

- On average, negative tweets seem to be more retweeted than positive ones. However, social networks have a general positive bias. You do not want to be too negative, try to use as much diplomacy as you can
- However, the dynamics (i.e. speed) of retweeting seem to be independent of the sentiment carried by tweets.
- The volatility of tweets is a critical variable, as 80% of retweeting occurs within the first half an hour from posting.
- Having more followers increases the probability of being retweeted, especially for negative opinions. However, about 40% of retweeting is performed by non followers.
  - An example is LinkedIN where people tries to be as much positive as they can, even if when someone say something negative that you agree on you might be inclined to give a like/thumbs up.

40% of retweeting is performed by non followers. This means that if you want to have a bigger reach you need to really think about your content, you need to be world class.

# The Process Strategy to manage a brand's online reputation



You need to engage in a conversation.

Companies collect information as you need to listen on what is happening on social media. Usually you have to listen to your company names, product brands and some keyword related to your position(you need to be competitive on some aspects of your product). Social and web reputation are different: web reputation is how much you are talked about in the various media; instead for social reputation is how much you engage with people and it depends on the media regarding the topic. So if your products are not papable for discussion online you agglomerate the two and call it online presence. Companies are interested in the volume of talks as it is related to the sell capabilities(high volume with good sentiment). You also need to think what your product is related to and think accordingly. Tag clouds are a way to extract topics and see where your brand is mentioned. Then you need to see where you can improve your brand reputation. One way is to research the events related to your products and sell discount/some incentives on the event so you can correlate your product to the event and creating the indirect association between brand and topic even if they are basically separated(essence of communication: you talk, engage in discussions even if they are not related to your product as you need engagement and a way to correlate yourself with the brand, took a chance to communicate. Also if you are in the tourism industry you can take a chance to share the beautiness of your place to increase engagement).

## Starting point of social CRM

Social CRM usually starts in one of the following ways:

- Hosting and supporting a branded or private-label community and providing the surrounding functions
- Monitoring, listening-to and surveying private-label or independent social networks

- Facilitating the sharing of common B2B or B2C contacts through the use of an internal community
- Community product reviews to facilitate the online sales process
   Do not have the same faces of the traditional CRM as you have different social media, messages are tailored on the social media they are posted to and you will have different budgets and third party platform rules and limitations. You can monitor the tag cloud to measure your effectiveness on social media, also because the returns will not be immediate as in traditional media, you have to build a reputation, do some thing to increase it.

### Typical social CRM user functionalities

Different to traditional CRM where users weren't talking

- Discussion forums
- Bookmarking
- Message boards
- Tagging
- Comments
- Search
- Polls and voting
- Surveys
- Reviews
- Ratings
- Chat
- Blogs
- Wikis

## Typcal social CRM administrative functionalities

- Moderation
- Reputation management
- Dashboards
- Reports
- Events management
- Privacy management
- Video management
- Outbound campaign functionalities

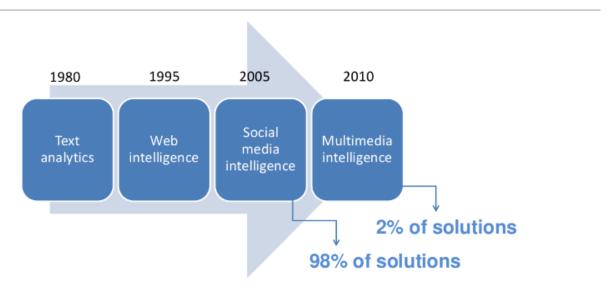
## Social CRM vs. listening platform

 Social CRM performs listening through surveys, direct interaction, manual monitoring (e.g. fan pages)

- Listening should be broader and include posting from non-members of private- label networks (e.g. non-fan)
- Listening should help understand a brand's competitive position, strenghts and weaknesses
- Listening is technically challenging, as it involves the semantic understanding of natural language

Listening platform are specialized in listening. first of all social media listening is easy, web listening is bad as you need to crawl and analyze the information. You can design an HTML crawler that analyze the html code, but you cannot use it to have some useful data as the time some people visited the site. You can design a scraper and also see the APIs. You can also look at the local content(useful for companies that sell information about the risk you do when doing transactions with other companies/business, see if a company is dependable and we uses local news as they might include news about the various companies more easily than the international ones). Listening platform are services that collects information automatically and do that only.

#### **Market evolution**



From 2014, traditional software vendors have started to integrate social media intelligence.

SW sold as a service nowadays. This is called self service mode, end users are capable of using the SW without assistance/self training to use it. This assumption reuses the assumption used in data training. You also can self train in theory on everything that can be put on paper. However going through normal training has some advantages in regards to self training(this is real for every role). The advantage of formal training is that it speed you up as you do not have to read a lot of paper instead of having someone that will teach you the things and filter out the useless stuff. Also formal training is more useful as when you are working as going through training while learning is easier. Training forces you to put it in your agenda and paying so you surely will go to the training.

Also social media has some formal training needed to speed up your understanding and capabilities.

## **Highlights**

- All platforms (both syntactic and semantic) have a trial Web version, however in most cases it cannot be downloaded and can be accessed online only upon «appointment»
- 50% of platforms provide consulting services
- Platforms providing consulting have 4X average revenues
- Platforms providing consulting have 4X global (large?) customers
- Semantic platforms have started on average in 2004, 3 years earlier than purely syntactic tecnologies

The quality of the technology is really important. The business was revolutionized by the LLM.

Sometimes the fact that you have an online service let people think that there is nothing to do after you set it up, but in reality there is still a managerial part that you need to take care of. Also there is a lot of drop out as with self training people cannot understand your SW more easily so you should engage them better to your site and understanding better. Do not think that the setting up the site and doing some google ads is enough, you also need to explain what you can do with your technology and let people learn how they can learn to use your application.

Much easier to sell a technology that enhance and give more work than substitute the employees.

Advantages: you will give consultancy, have more and bigger clients

### **Data sources**

Most platforms state that they crawl «the Web» or «all the Web»

They provide a generic list of sources, typically: «blogs, forums, news, social media»

Most of them (90%+) include Facebook and Twitter among their sources

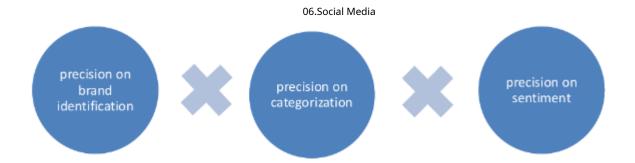
Can use LLMs but you need to cope with the errors in the DB that come from the use of LLMs.

So data quality is the issue with LLMs but they are used as they make a lot easier to gather data.

Usually the accuracy is done on single component but not on the global pipeline.

## **Quality of results**

Lowering recall is considered an «intelligent» way to increase precision Precision is typically 1) not assessed 2) assessed on a single type of analysis No platform provides an overall assessment of precision calculated as:



#### **Real time services**

75% of top platforms (Forrester sample) state that their service is real time Real time is not defined as an absolute metric, but is intended to be «quasi» real time (below 1 hour)

Real time is not guaranteed for all sources

Platforms do not specify whether real time applies to all data or only a subset

How fast is to get information from a source. The service on demand is based on the fact that the service provider will provide the service when he can and see the request, bad for web based service. In data analytics Radian6 is a solution for real time/quasi real time service(you can even cope with some error if you can provide a real time service with a great volume). Do not make things more complex than this should.

Radian6 was the first company that invest basically everything in marketing and not technology, they based their business on getting there first, sense where the world is going meanwhile you have a very simple product.

Nilsen has social media analytics and sentiment analysis of the customer.