

# Knowledge of Culture to Create System Thinking, a Study of News Media Digital

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## 1 Context

Intelligent systems have emerged as a criticism of reductionism. Reductionism is the idea that any system can be understood by studying its parts. But for intelligent systems, the whole is greater than the sum of its parts because they are based on the understanding that the world is systemic and the whole cannot be fully comprehended only by its constituent parts. (FLOOD, 2010; MORVILLE, 2014)

One of the first steps to a successful intelligent systems design is one that is able to map and understand both the company's culture as well as the culture of its customers so that it fits to both poles, as shown in Image 1.



Image 1: design for a bi-cultural fit. (MORVILLE, 2014)

Culture is a powerful set of forces that shape our individual and collective behaviors. In order to understand any culture one needs to study its context. (MORVILLE, 2014)

This article aims to contribute to a survey conducted with professionals which produce or broadcast newspaper articles, how daily news are presented today, and what are the main challenges for the Brazilian news industry. The Delphi technique was selected for data collection of these professionals.

## 2 Method

The Delphi technique is aimed at reducing the degree of uncertainty and the response of complex problems used as a mechanism for a consensus by expert opinion (EVERLING, 2011). The purpose of applying the Delphi technique was to obtain the opinion of newspaper professionals on how daily news are broadcasted today and what are the main challenges faced by the newspaper industry. For this research 4 questions were drawn up, with 3 open and 1 as rating scale.

The questions were sent to 20 professionals from whom 11 answers were obtained, thus ending the first phase. At the 1st. stage 4 questions were sent in the email body, allowing the application of the technique with greater agility within the proposed time frame.

For the 2nd. phase of the technique, an online form was drawn up. The 11 respondents were able to evaluate all the data collected and delivered on the form, in written, a new answer that would ratify, amend or alter previous answers. At the end of the process, 10 experts answered the second phase.

The results obtained from the surveys of each phase were grouped into a single document in order to facilitate document analysis, generating the research corpus. The floating reading process was started so that later relevant similar information could be grouped, creating the registration units.

## 3 Results

At first, you can see a concern in defining a new business model, re-thinking the service provided and how it should be charged so that it could be commercially viable.

Social networks operate, dichotomically, as collaborators and competitors. While contributing to the visibility of more traditional media news, the new media make use of this highly popularized feature to offer free services to the reader, getting aggregate revenue. With this, subtracting revenue from traditional vehicles, thus becoming one of its biggest digital competitors.

In the case of newsrooms, with lost revenue, some of the challenges mentioned are dealing with the huge amount of raw information that is received as well as filtering it to the reader. Thus, in order to maintain the credibility of the vehicle, it takes a correct and constant polling of what will be published. There is still concern about the maintenance of the investment on good working staff and major news stories.

Digital media have strong features that intertwine with contemporary lifestyle, so maybe this is why its popularity has grown exponentially, even before traditional media managed to follow these changes. Such characteristics are: agility, immediacy, innovation, potential and dynamics. But in order that digital media can achieve these qualities, quick calculation, accurate information and updates, investment in technology, differentiated content and focusing on multimedia news is necessary. However, questions on how to retain loyal users, distrust the source of the information and low profitability are still challenges to overcome.

We noticed a democratization of information and the questioning on whether or not it is necessary to poll everything that is broadcasted. Out of 10 participants, 8 believe that the relationship and cooperation established between newspaper and reader is positive. An inevitable and necessary relationship where readers gain space and power in the digital environment, creating dependence on news media with these

readers for the distribution of news links. It is followed by the journalist's loss of privilege to the new role of readers as "reporters", getting them closer to the newspaper and creating a more direct and real-time relationship; without taking away the merits of the journalist. However, the journalist still has the responsibility of being an intermediary between fact and disclosure, making him in charge of responsible measurement, filtering the information coming to the public.

With the coming of digital news media in the market, multiple devices can serve as access to news consumption. Regarding the content, considering that each device has its specificities, should it be the same, different or complementary to the devices? Although 6 out of 10 respondents think they should be the same, the justification for such varied widely. For this majority it should be the same, as long as the form and interaction are tailored to each device, on the grounds that it should deprive the reader of content that may be on different devices. But those who bet on the complementary content, as each medium has its particularity, the delivery of content should be different on the layout, text volume and audio visual appeal. For those who think that content should be different, the device has to reflect the interaction with its user. There were also those who failed to classify, but explained that the content needs to be consistent across all devices.

Participants were asked how important are some media that stand out in the context of news posting. One can see in Image 2 the distribution of social media in relation to their importance in the opinion of respondents.

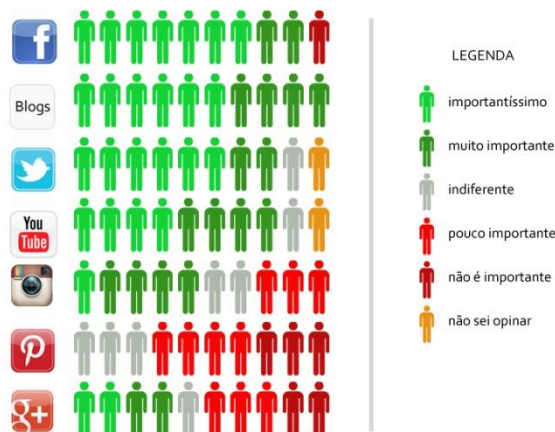


Image 2: representation of the results from Question 4

It is noticed that social networks are important media for news broadcasting. They are already inserted in the routine of newspapers for the dissemination of news, so that the largest traditional newspapers have accounts on social networks that are more accessed by users. Social networks, because they are free to users, and promote the democratization of information, enable the reader to non-passivity of reading, making them able to interact "liking", commenting or forwarding the news. Social networks have broken barriers between reader and newspaper, but still they are another vehicle that newspapers need to include in their newsrooms, as each network has its characteristic to convey news.

## 4 Conclusions

Managing content in multi-channels, integrating products and services, require designing integrated systems. In this new business model, intelligent systems appear to be a feasible solution. Designing thinking that the relations between products and services are interrelated and influence each other, makes the professional view the project as a whole, and not split into parts. Therefore, the system behaves as bigger than the sum of its parts, it is an organism that only works if the inter-relationship between the parts communicate effectively.

A good start to design better systems is mapping the culture of the parts involved. This article proposes to analyze the opinion of those who produces, transmits or is somehow involved with the transmission of a journalistic news. Despite the small sample collected by Delphi technique, the answers from the professionals were enlightening for some processes through which the newspaper industry is facing. According with the opinion of the survey participants, it is imperative that companies adopt new business models; however, the ways for this to occur is still unclear. The parameters to produce a daily newspaper also changed greatly, since the news is broadcasted at the time the event occurred. News is also another term susceptible to transformation, since the democratization of information, much driven by social networks, decentralizing it from the newsroom.

Regardless of the directions the news companies take, it is essential to understand how the news user is getting this information, in order to design new business models from the behavior and needs of these users.

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