THEORY OF EVERYTHING FOR MEDIA MEASUREMENT
Quantum Communication Approach
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Almost ten years ago, on Friday, 13th October 2006, the WRRS' Programme Committee gathered at Amberley Castle and drew the conclusion that it was time to bravely face the impact of convergence.

In the words of Chairman Erhard Meier, the question to be answered was, "how do we embrace change?".

At that time, some had envisioned that "protocooperation" (term borrowed from biology) could be the path for the future: cooperate to be more competitive.

Cooperation among companies is not an easy thing to implement (which also faces legal restrictions in some countries), but we have seen several acquisitions as a shortcut. Yet to be proven, this seems to be one of the main pillars of survival for large research groups.

Moving to the next stage, Albert Einstein (1879-1955) once said that we cannot solve problems by using the same kind of thinking we used when we created them.

On commenting substances, Paracelsus (1493-1541) said that dosage renders them either a poison or a remedy.

If we could invite them both to our advisory board and ask what we should do to meet the challenge of changes in the media world, we would probably conclude that it is necessary to think differently and find a solution with the same elements used to create the problem.

Let us accept this challenge and consider:
- What does 'think differently' mean as to research approaches?
- Which are the main vectors of change in the media landscape (the elements that created the "problem")?
- How can we use the idea of protocooperation to improve our performance?

Thinking Differently

Flavio Ferrari and Vanessa Mathias presented a paper entitled "The Fascinating (and Frightening) new Multiscreen Consumer" at the Esomar Latam 2015 conference (April/15), which aside from addressing the proposed theme, offered relevant insights for the research industry.

They defied the mythical idea built in our industry that people do not want to answer surveys.

The growth in penetration of social networks is, by itself, a strong indicator of the desire to express opinions.

The authors proposed and demonstrated that people are prepared to answer surveys if the issue is relevant for them, if access is easy and the process is engaging.

One of the main conclusions of the paper was the recommendation to let people answer the survey in their preferred format.

This seems pretty obvious, but how often do we try to force people to answer questions on the phone when they would be happier to send you a selfie of what they are doing at that moment?

Just to illustrate the power of this idea, the authors presented a real case where they had an impressive 85% average response rate interviewing people during the FIFA World Cup games.
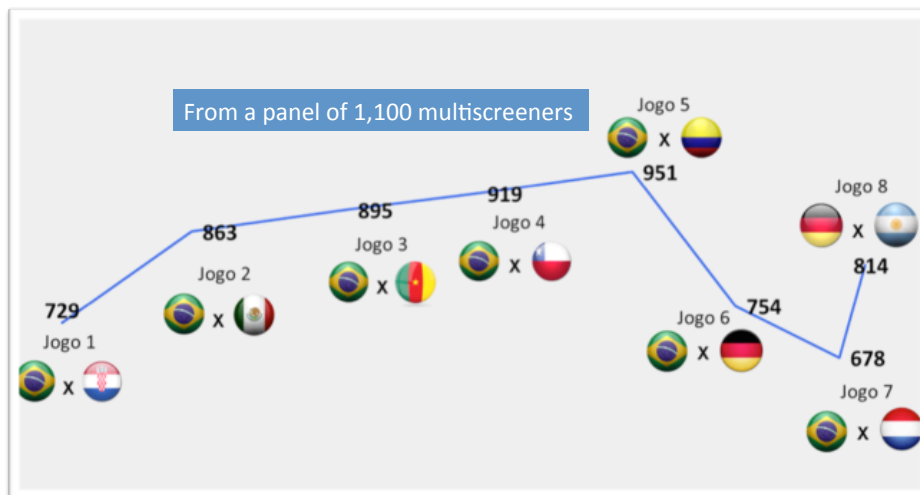
People may be less interested in answering what we want, but are available to cooperate when they believe the matter is important for them.

Elements of Change

There are at least two interesting approaches to peer into market changes.

First one is to observe the manifestations.

Comparing the old and the new media world, it is possible to produce a long list of transformation items and reduce them into a short list of conceptual elements.

We have done so through group discussions and personal interviews with marketing, communication and media professionals, following new emerging "brotherhoods" and accessing published expert's opinions during the last twelve months.

Albeit not being a traditional research method, the idea was to follow Einstein's recommendation.

In fact, we have used the recommendation to encourage professionals to build a mind map of the new media world.
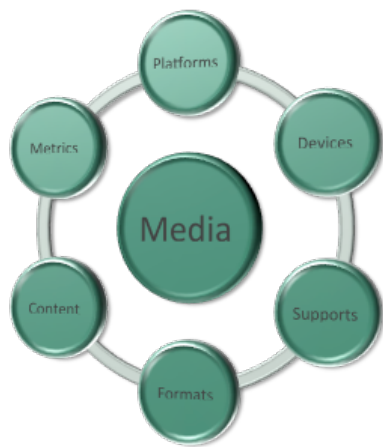
Platforms: Waves, cables/fiber, physical distribution, projection, installation.

Devices: TV and Radio sets, computers, tablets, smartphones, videogames, paper, urban furniture.

Supports: media brands and owned properties cross platforms and devices

Formats: Video, pictures, audio, text, apps, games, installations, interventions, performances.

Content: Individual, collective, curatorial, shared, hosted.

Metrics: GRP, reach, frequency, viewability, clics, likes, time spent, share rate, engagement, ROI.

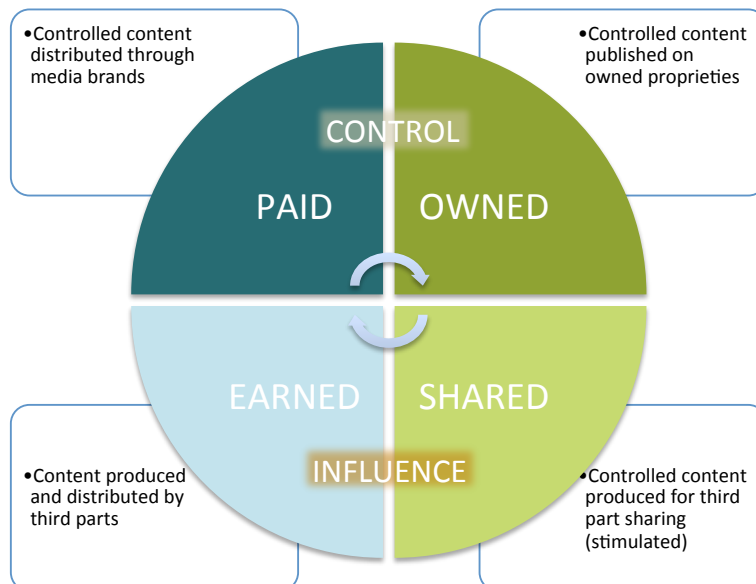Note that "Internet" is not part of the resulting media mind map.

The Internet is a global system of interconnected computer networks that use the Internet protocol suite (TCP/IP). It could be compared to the antennas and communication protocols that allow us to use our cell phones.

Considering the Internet as a media entity is the mistake Einstein called our attention to.

The new media world is about content being distributed through platforms to devices on various formats.

In this new context, B2P Communication follows the POSE model:

- Controlled content distributed through media brands

- Controlled content published on owned proprieties

CONTROL

PAID   OWNED

EARNED   SHARED

INFLUENCE

- Content produced and distributed by third parts

- Controlled content produced for third part sharing (stimulated)

Although the traditional metrics (GRP, reach and frequency) are still very useful to evaluate the quantitative dimensions of the communication effort, it is necessary to review the idea of audience to assess the relevance of the new emerging metrics.

Audience as the Attention Inventory

Much of the success of any business depends on the competition for consumer attention.
Early last century advertisers developed a linear model to explain how advertising operates: AIDA - Attention, Interest, Desire and Action.
Although the communication scenario has since become more complex, particularly in the collective context, this basic process remains valid within the individualized communication range.
If the brand is what causes a business to stand out, attention is what enhances consumer conversion through relevant communication.
Attention is the "mouth of the funnel" of consumer conversion.
Mass media brands have a role of utmost importance in this competitive landscape. Its main asset is the "audience."
Audience is the consumer's attention reservoir. It is the stock from which businesses can access the attention they need on-demand (Jeffrey Rohrs - Wiley - Nov / 13).
Any business can build its own audience (their stock of attention) for owned properties using integrated resources like email, social networks, mobile apps, hot pages, sites.
But when this is not the core business of the company, the risks and costs for building and maintaining the audience may be much larger than the price for acquiring access to consumers from companies whose main activity is the construction of such reservoir (the media brands).
Media brands not only capture consumer attention, but also establish relationships that facilitate their conversion. The connection context between the media brand and its audience defines an affinity territory for the message to be delivered to potential consumers.
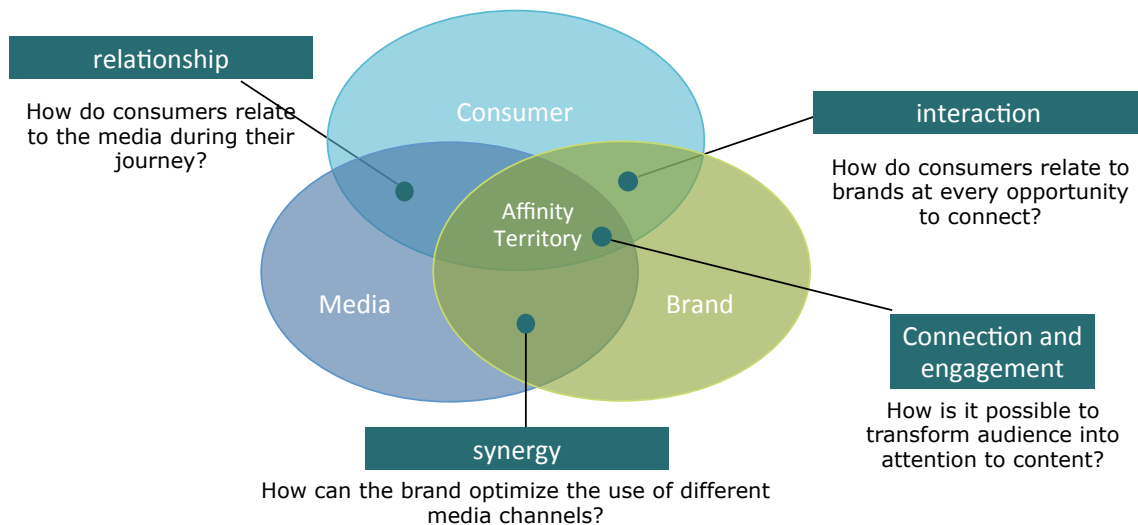

Main Vectors

There has been a clear inclination towards electing technology as the main transforming agent of the communication universe in recent decades.
Technology, in fact, has created conditions that enforced manifestations of others social trends.
In practice, technologicy advances offer endless possibilities for product and service development, but only those that are synchronized with the wishes and needs of society.
Understanding the forces that act macroscopically on society (mega trends) allows us to anticipate trends and optimize the resources to be invested, both for media brands and companies looking to communicate through media supports.
In cooperation with the CIFS - Copenhagen Institute for Futures Studies –, we have identified three macro trends that explain many of the changes that have happened in the communication scenario of this new century and, together with four other peripheral macro trends, it is possible to make certain guesses on what the future holds next.
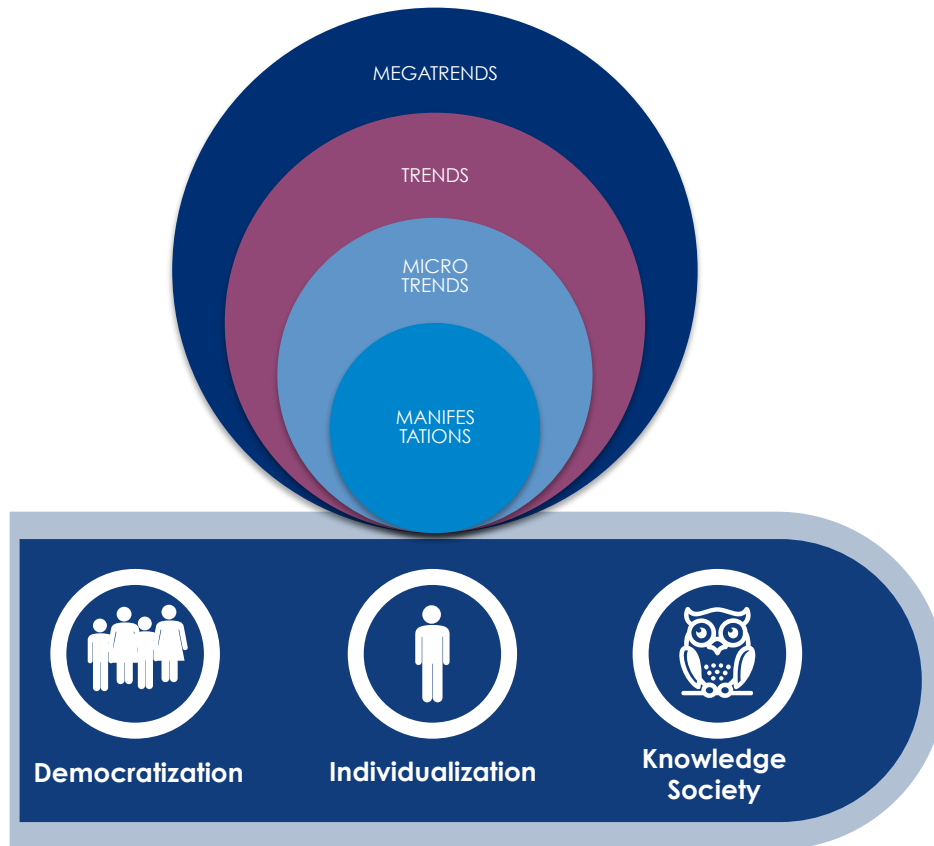
"Democratization", "Individualization" and "Knowledge Society" are the primary macro trends.
"Technological Development", "Immaterialization", "Network Society" and "Acceleration and Complexity" are the peripheral ones.

Democratization is the process of transforming society in which equality, human rights and individual freedom evolve. It entails individual empowerment, the demand for transparency and the dismissal of institutional authorities (a group in which companies and media brands are included). Consumers keep media brands and companies under constant surveillance, they believe they have the right to expression and have their opinions considered. They also value free content sharing and collaborative construction.

Individualization translates into a central objective of modern life, which is to be distinguished from the others and wins important positions in social groups. This force pushes to the dissolution of traditional social groups, the difficulty in engagement and demand for individual attention.
Consumers value customization and privileged access (for information or products), adopt different lifestyles and tribal patterns of consumption.

Knowledge Society defines the growing importance of knowledge as a personal asset, taking over the space once reserved exclusively for material goods, labor and capital as economic resources.
For consumers, "knowing" becomes equally or more relevant than "having", there is a growing concern relative to the obsolescence of knowledge. As such, the tendency is to dedicate "free time" to personal and professional development (educational entertainment). Quick access to reliable information is recognized as a need.

The combined impact of these three macro trends transforms consumer relationship with the media brands and raises personal issues of relevance:
What does this brand represent for me?
Does it speak for me?
Does it allow me to express myself and get involved in its construction?
How does it contribute to my development?

It is the ability to consistently respond to these questions that offers media brands the possibility of building a heritage of audience.

The peripheral macro trends also motivate other important questions:
Acceleration and Complexity: how does this brand help me understand the world?
Network Society: does this brand promote my inclusion?
Immaterialization: what kind of services does this brand offer to me?
Technological Development: how does this brand use technology to my advantage?

If the media brand answers the questions motivated by the triad of primary macro trends, the answers to the peripheral questions may represent a relevant differential and strengthen engagement with its audience.

Multimedia Programmatic

Programmatic Media is a concept arisen from the Internet world that has been developed in recent decades and has gained momentum as from 2002, with the launch of Google AdWords and the mechanisms to display media advertising.
Programmatic, in the Internet environment, considers the use of a set of technologies that automate media buying, distributing communication (contents) through the best opportunities within the available inventory (targeting). The traces of user navigation (big data) are used to build a favorable response profile to the advertiser's message reception and contact opportunities are auctioned automatically according to pre-established rules. This mechanism aims to optimize the distribution of posts in the chaotic environment of the Internet. It seeks to spread the message according to affinity territories conducive to the advertiser's communication. Ultimately, the models of artificial intelligence are used to identify the best contact opportunities and ensure attention to the message. Such automated models have evolved in recent years and their assignment errors, quite common at the beginning of its implementation, have been reduced.
Although this is deemed a completely new phenomenon, it only encompasses an array of technologies that replaces well-known human-based methods automatizing the buying process.
As we have seen, mass media brands build affinity of territories that are ready to receive the message of the companies that want to communicate with their customers.
The communication of the company must nevertheless respect the territory affinities built by media brand and tailor its communication to this context.

Touchpoints

BRAND

CONSUMER
Experiences
Stories
Ideas
Brand speech

Affinity Territory
(content and context)

Reach, frequency, connection and engagement

Reach and frequency are complemented by the purpose of generating connection and engagement through relevant content, consistent with the affinity territory created by the media brand.
In said conditions, the company (and its brand) will be inserted into the universe of consumer experiences in a unique way, respecting their ideals, integrating their stories and inspiring the construction of an individual brand speech compatible with the communication goals.
The extension of this principle to the multiple media brands in its various platforms leads us to the idea of multimedia programmatic.

Theory of Everything for the Media Research World

A theory of everything (ToE) is a hypothetical, single, all-encompassing, coherent theoretical framework that fully explains and links together all aspects of the media world (adapted from Wikipedia). Vlatko Vedral, professor at University of Oxford, has introduced the description of the Universe through quantum information on his book "Decoding Reality" – Oxford University Press, 2010.

Bringing Vlatko's concepts to the media universe has helped us better understand its architecture and behavior, and also to envision new paths for research.

The solution to the challenges faced by its stakeholders lie at the heart of the quantum behavior of the elements that compose the universe of communication.

The quantum perspective of the world, though quite new for physicists, has its ancient roots on the Buddhist concept of impermanence and the idea of inter-related existence in Hinduism.

If we look close enough, this single theory also applies to big data and social network research. One cannot make sense out of one single piece of information or from the random behavior of a single person. People and single information are defined by their inter-relation and this is the essence of the research approach for our new media world.

Let us remember "The Hitchhiker's Guide to the Galaxy" , which refers to the story of a race that built a computer named "Deep Thought" to calculate the "Answer to the Ultimate Question of Life, the Universe, and Everything". After 7.5 million years, the answer was revealed to be 42. This answer was incomprehensible because the beings did not know what their ancestors asked.

Before anyone questions the usefulness of "big data", it is important to note that the ability to collect, store, process and analyze massive amounts of information brings, in fact, many opportunities.

The first and most obvious is the possibility to find answers without having to fall back on traditional methods.

People have somehow answered the questions you would like to know through their product choices, their posts and comments on social networks, their calls to client service or even by their pattern of energy consumption or any registration data scattered across the world. All we have to do is to connect all such dots.

Another equally useful opportunity is to confirm hypotheses and conjectures by identifying patterns.

A third one, derived from the second, is the ability to quantify trends (projecting their evolution from historical data) and measure related business opportunities.

The understanding of social movements and personal motivations (People Intelligence) generates the "insights" that feed the identification of the questions we need to answer for business purposes.

A major challenge for the research industry is to confront the false paradox between "big data" and the traditional research and deconstruct the vertical approach to respondents.

Traditional research approach and big data are complementary as the methodologies developed to work with them.

As Vlatko Vedral proposed in his book, there is a need to review the concept of information and its value.

Although Vlatko's mathematical definition of information as the logarithm of the inverse of the probability looks hermetic ($I = \log 1/p$), it offers the right perspective.

Translating the formula into practical terms, it means that the more surprised we are by an event (low probability), the more information it carries.

Mathematically, the combination of events results in lower probabilities, and, therefore, in more information.

We should spend more time combining the available records of events than producing new data or discussing which one is better.

There are already some initiatives in the media research world illustrating such approach.

Fusion among media currencies like the ones that are being promoted for readership purposes, unifying print and digital metrics in several countries, are a good example of the value of matching sources.

The combination of Census Data (describing universes) with mobile records (for location) and single source surveys (media, U&A) to model OOH media research, already in progress in some countries, is another interesting initiative.

The use of navigation tracking tools (from programmatic media) associated with social media analytics, transaction records and traditional single source research, as described by Marcelo Coutinho at Esomar Latin America 2015 congress, in his paper, "Market Research, Big Data and Competitive Advantage" indicates the next level.

Research Principles on the Quantum Theory

Media research is about understanding human behavior in the media context.

Through the quantum approach, we may consider the human species as a single entity and each piece of data collected at the individual level as a manifestation of such entity.

Based on this perspective, it is possible to establish a parallel with quantum principles.

The first one is to assume that interaction during the research process will affect results (Heisenberg approach).

Next comes the recommendation to start with a simple system for which a mathematical solution is known, and add any additional "perturbing" aspects after that (perturbation theory). If the disturbance is not too large, the various physical quantities associated with the perturbed system can be expressed as "corrections" to those of the simple system. The complicated system can therefore be studied based on the knowledge of the simpler one.

The third one is to accept that probability is all we will ever know. Reality is beyond our reach.

The fourth one is to consider that correlations may be non-local (entanglement). Behaviors can often only be explained through interactions among individuals or situations, no matter how far apart they are.

The last one is that, at the individual level, everything that is not forbidden is mandatory. Every possible action, decision, thought or feeling will be happening at the same time – despite what we see in the whole.

Final Remarks – Ten Central Ideas

1. Protocooperation is the central idea to cope with media research demands, now and in the near future.
2. There is a growing desire to express opinions. Let people talk about what they want through the channel they prefer.
3. The new media world is about content being distributed through platforms to devices on various formats. Internet is not a media entity.
4. Communication B2P follows the POSE model: paid, owned, shared and earned.
5. Audience is the reservoir of consumer attention to be accessed on-demand.
6. The connection context between the media brand and its audience defines an affinity territory for the message to be delivered to potential consumers.
7. Reach and frequency are complemented by the purpose of generating connection and engagement through relevant content.
8. People and single information are defined by their inter-relation, and this is the essence of the research approach for our new media world (the theory of everything).
9. We should spend more time combining the available records of events rather than producing new data or discussing which one is better.
10. Probability is all we will ever know. Reality is beyond our reach.