



**Marketing Analytical Consulting**  
*Mathematics at the Service of Marketing*

Subject No 11 – June 2008

## Engagement Analytics

*An analytical approach to a concept can help when it comes to defining it*



*To achieve higher sales we will focus on analyzing people's behaviors rather than their emotions*



### **Introduction**

In a world in constant change, where every day we come across a new type of consumer, and with new forms and new communication channels, the need to measure the effectiveness of Marketing programs becomes even greater. When it comes to speaking about effectiveness, we can't help but ask ourselves how to measure it and what is the influence of the different forms in which consumers receive the messages or the different forms in which they interact with brands.

“Engagement” could be defined as the measure of consumer's value and of the brands' strength. Now, speaking strictly, what do we mean by that?. The purpose of this Newsletter is to clarify the “Engagement” concept and to approach it in an analytical way.

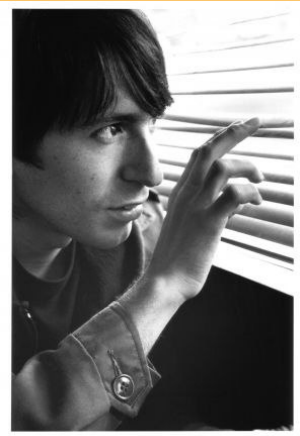


### **Emotions vs. Behaviors**

- When a consumer connects, consciously or unconsciously, to a particular brand in response to a Marketing drive (normally advertising), it is said to be an emotional contact, being referred to as an **“Emotional Engagement”**.
- The metrics analyzed here, relating this type of “Engagement” with Marketing actions, are all those which measure brand awareness, attributes assessment, readiness to recommend to others, intention to buy, etc.
- Nevertheless, these variables don't show significant changes in the short-term, and can hardly be linked to the financial results of companies. The “Emotional Engagement” is necessary but not sufficient: our brands emotional positioning must not be lost; however, even though consumers can identify themselves with our communication, that will not necessarily lead to higher sales.
- To achieve higher sales we need to measure, not just the emotions but the behaviors as well. This is what is called **“Behavioral Engagement”**.



*Behavioral analysis allows for greater predictive power*



*With so many combinations, it's difficult to measure something*



**Behavioral Engagement**

• When we talk about analyzing and measuring people’s behavior, we are not confining ourselves to either purchase or not to purchase a certain product, but rather to a series of behavioral patterns, preceding and following the purchase, which will allow us to forecast future or repeated purchases.

**TYPES OF “Behavioral ENGAGEMENT”**

- Visiting a webpage
- Clicking on an advertisement in a webpage
- Downloading a file
- Watching a video clip on the Internet
- Opening a promotional e-mail
- Asking for more information
- Visiting a shop
- Buying a product
- Contacting customer service
- Making comments in a blog
- Giving referrals
- Filling out a questionnaire
- Buying again
- .....

• The difficulty, when measuring this type of “Engagement” and Marketing actions, is due to the intrinsic complexity of the purchasing process and to the set of all the possible combinations between channels and behaviors.

*Just two channels  
can give at least four  
combinations*

+	X	+	=	+
-	X	-	=	+
+	X	-	=	-
-	X	+	=	-

*The data may come  
from different  
sources and being of  
different types*



• For example, if we only had two channels (The Internet and the Store), the possibilities could be the following:

1. The consumer could go to the store, see a product and buy it. **THEREFORE WE WOULD HAVE TO GIVE SPECIAL ATTENTION TO THE STORE CHANNEL: POSITION IN THE LINEAR, QUANTITY OF PRODUCT, PRICE, ETC.**
2. The consumer could go to the store, see a product, return home, get information on the Internet about the product, compare it with the competitors products, go back to the store and buy another product. **THE IMPORTANCE OF HAVING A PROFESSIONAL WEB, PROVIDING ACCURATE INFORMATION. COMPETITORS WEB PAGES FOLLOW -UP.**
3. The consumer could have found out over the Internet information about the type of product before visiting the store, and then having gone to the store, bought the product. **THE IMPORTANCE OF HAVING A PROFESSIONAL WEB, PROVIDING ACCURATE INFORMATION. COMPETITORS WEB PAGES FOLLOW-UP.**
4. Or, lastly, the consumer could have found over the Internet information about the type of product, and made the purchase via the Internet. **TO THE FOREGOING IT MAY BE ADDED THE SECURITY SYSTEMS USED ON THE INTERNET, AS WELL AS THE EFFICIENCY OF DELIVERY SERVICES.**

• The correct way of measuring this would include the measurement of each channel and their interrelationships. This should have to be done through personal questionnaires at the time of purchase (Store or Internet), asking consumers questions to find out about all possible previous behavior patterns that we might consider to model the purchase process.

### The Forrester Model

- Forrester Research quantifies “Engagement” with a combination of four metrics, which in turn depend on a series of variables (See Table 1).
- These four metrics are: Involvement, Interaction, Intimacy and Influence.
- Data being entered both online and offline, quantitative and qualitatively meaningful, as well as a whole combination of areas which constitute what today is called social backgrounds.



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## The Forrester Model



### Variables explicativas

- Visits to the web
- Surfing time
- Pages viewed
- Searches
- Surfing
- Logins

- Blog comments
- Blogs and Forum comments frequency

- Analysis of comments on blogs, forum, etc.
- Analysis of consumer comments made internally

- Net Promoter Score
- Satisfaction measurement
- Brand affinity
- Content resent to friends and acquaintances
- High profile blog comments

### How to measure them

- Web analytics

- Brand Tracking
- eCommerce Platform
- Social backgrounds Platform

- Brand Tracking
- Customer Service

- Brand Tracking
- Customer Service

*We can expect a return from the "Engagement" without having to get it today from current sales*



• This type of measures can provide information to companies not only about in which of the four stages consumers might be, but also the speed at which they are moving from one stage to another.

- At a point in time (***t***) we measure the number of individuals that there are at each stage ***e(t)***.
- We do the same at ***t'***: ***e(t')***.
- How much we have grown or decreased from one stage to another will be given by ***e(t') - e(t)***.
- And the speed at which we will have done it, will be determined by  **$(e(t') - e(t)) / (t' - t)$**

• In this way, assuming the speed to be constant, we will be able in a simple way to estimate how much time we will need to achieve a given objective.

• Additionally, connecting the change between stages with the different Marketing investments, we will quantify the Return that they have had on the "Engagement".



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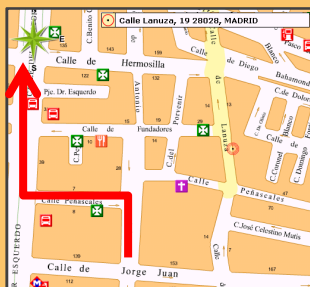
*As usual, the pressing need to know where we want to get*



*Information based on data*

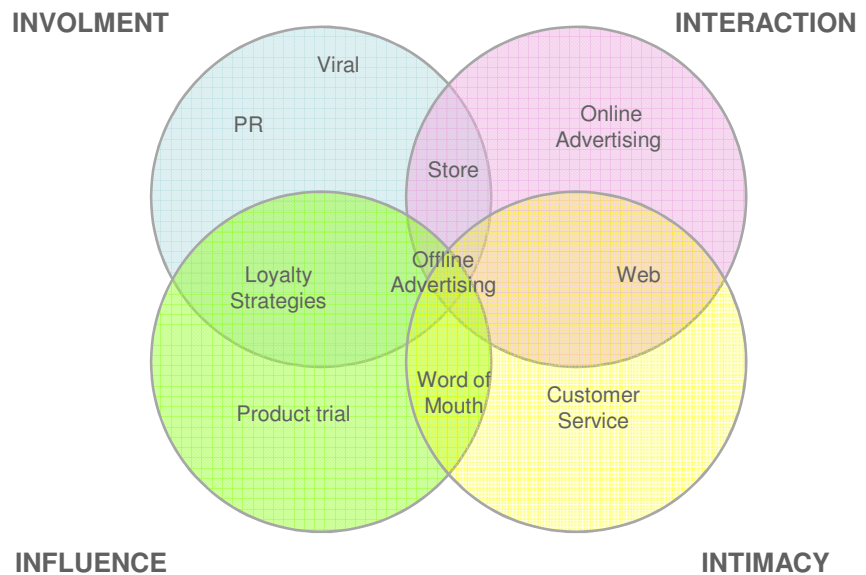


*And being able to know what's the best way to achieve our targets*



## Behavioral Engagement Rules

- **To have a clear objective.** It is not worth while to try and measure “Engagement” if we don’t have clear objectives. With these clear objectives, we can outline the different stages in the purchasing process, the relations between one another, where we want to get, and how to achieve it



Although the Forrester Model will evolve from one stage to another, the fact is that the different actions we can perform have an influence on several stages at the same time, and some actions like advertising, in all of the stages. Without a clear objective, it will be difficult to know what piece to move.

- **Data generation.** There will be stages in which we have data studies to provide us with information, but other areas will not have any data. In such cases, we will be able to make assumptions based on our experiences, but it will always be necessary to verify the veracity of them with an experimental design or doing some simple research to see if we are at least on the right track.

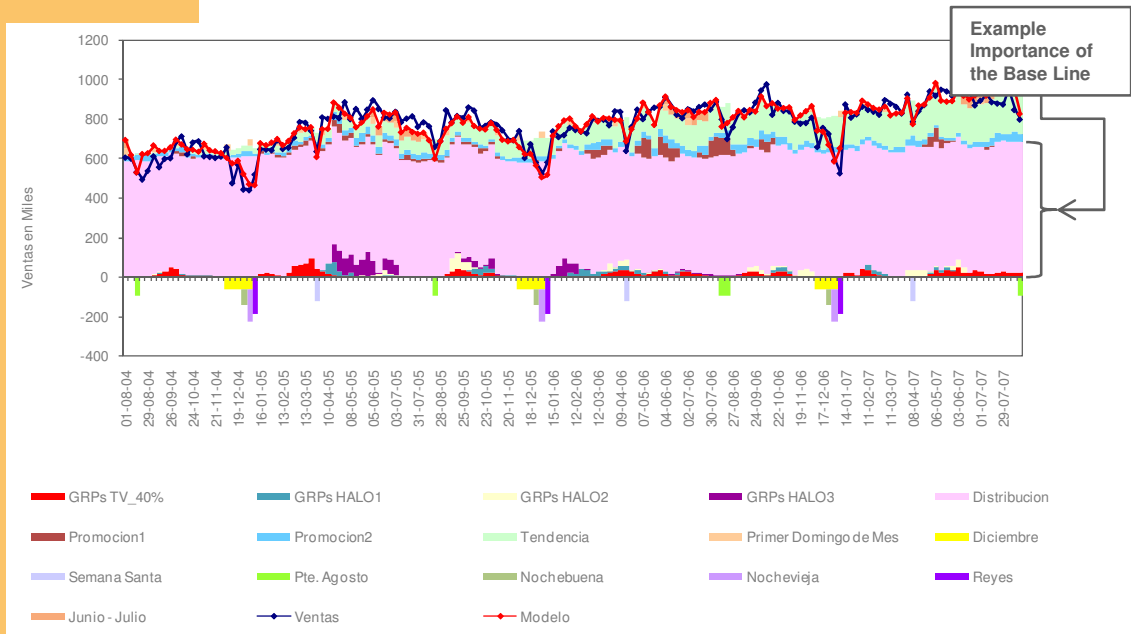
- **A framework for measuring the importance of variables.** In a manner as to achieve our objectives as soon as possible and in the best possible way. For example, if we knew that 60% of the people who made a purchase do so because someone who was already buying the product spoke well of the product, then our main focus will have to be on encouraging Word Of Mouth among our Customer base.



*The level of "Engagement" from a Distribution Chain perspective, even for the same individual, might not be the same as that one from a Manufacturer's perspective*

**Conclusions**

- In view of the above, the main conclusion must be that Engagement Analytics is not an easy matter. Not only because of the number of elements at play, but also, and in addition, because all of them are dynamic and their interrelationships evolve over time.
- Similarly to Web analytics (Newsletter April 2008) and that of Word of Mouth (May Newsletter 2008), Engagement analytics requires a technological platform permanently in tune with new developments on an ongoing basis.
- "Behavioral Engagement" is not limited to a product or service purchase. There are many attitudes preceding and following a purchase, which can be predictive both for future purchases and for future repeat purchases.
- The importance of repeat purchases, in many cases represents more than 70% of Sales of certain products, which is neither more nor less than the famous "Base Line" of Econometric Models:



- Thus, once more, the urgency to have Just-In-Time Information, as well as to elucidate non-linear complex relations involving ever more variables, makes Mathematics an indispensable tool.