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E-INTELLIGENCE TOOLS IN THE CUSTOMER CONSUMPTION ANALYSIS

INTRODUCTION AND BACKGROUND OF CUSTOMER INTELLIGENCE'S TOOL

The marketing segmentation divided the market in different customers groups and users. These ones are differentiated by their needs, their characteristics or their behavior. There are two types of segmentation: by the needs or by the profile. The basic way of market segmentation is by the customer needs. In order to find these needs it is very important the commercial investigation. The profile and the customer characteristics can be measured and described (geographical and demographic characteristics, consumption behavior, etc.); those ones can be subdivided in smaller groups, that have some important characteristic and also have the same behavior to the stimulations¹.

Now is the time to choose the analysis techniques that will be developed in the first phase. In this case, the target is a process that:

A. Must evaluate every market segmentation and chose some of these to include them in the process.

B. Must determine the variable element's that are included in every potential segment.

C. Must identify and value the potential segment.

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¹E. Borralla Ortega, *Customer Relationship Management*, Madrid: Grupo TURHORECA, March 2002, p. 28 and the following show that: their benefits are: to concentrate the resources in segments more profitable, to analyze the competition, to help to the company to found the balance of his market strategy and his marks in long term, to understand better the market, to have better communication between the external customer and one part sales channel and an another part, also the product, the brand; the segmentation more important for the business unit.

Something very important that we are going to find out by following this procedure is: the cross-selling. The goal of the cross-selling is to max the customer value with Data warehouse² and the benefits can be summarize in:

1. Customers with less churn rate; that means more loyalty at the time of the purchase. When the churn rate it's been analyzed it's important to calculate the percentage of clients that the company lose but also the customers' quality and profit. In this case it's necessary to set a plan against the customer's lost, the plan must be organized in this points:

a. Create a map with churn rate information that includes the customer's profile and it's consumption.

b. Detect the causes that produce the customer abandonment and to relate them to the customer lifecycle.

2. The customer's loyalty can't be reached by a timely program or special offers. It is obtained by quality service³.

TO DEVELOP THE HYPOTHESIS AND THE USED METHOD

In the analysis just introduced and elements used-the goal of the cross-selling, the target, the customer loyalty and the segmentation, which are the elements of Customer Intelligence⁴ should indicate the company's benefit that use it and could be organized in this hypothesis and analyzer's method.

A. To provide facilitates and increase sales. To have loyal customers and by repeating the purchase, It gets easier to sell new products.

B. To reduce the promotion's costs. It's expansive to get new client when is easier to sell new products to our loyal customer.

² K. Anderson, *CRM para directivos*, Madrid: McGraw-Hill Interamericana 2003, p. 187. Explane a tecnica that try to increase the business by the selling of extra product's or extra services' to a previously selected customers with a special profile associated with his purchase intention. When get the "client's moment" is the time that exist the possibility to create a loyalty between the customer and the company.

³ S.A. Brown, *Administración de las relaciones con los clientes: un imperativo estratégico para las organizaciones de negocios*, México: Oxford University Press 2001, p. 352. The term loyalty understood in marketing, usually involve solid links and a long-term relationship with most quality customers that help us to get the operative break even. So, we came from a tipe of Marketing focused on the short term and go to a marketing with strategy approach.

⁴ P. Greenberg, *Las claves de CRM: Gestión de relaciones con los clientes*, Madrid: McGraw-Hill 2003, p. 504.

C. To keep the same workers. To keep a large number of customers helps a company to have business security and employment stability. Motivation and keeping the same workers could get better when the company has a large number of customers⁵.

D. Loyal consumers act as positive prescribers. One of the most important aspects of having loyal customers is that the customers communicate the positive aspects of the company to other people, probably new clients and that is what make them positive prescribers.

SETTING TARGETS AND SALES INTELLIGENCE CONTENT

When we use the term Sales Intelligence as a strategic element of the *Customer Relationship Management (C.R.M.)*, we are basically talking about the use of data in a company to facilitate decision-making in the Organization. It took the current knowledge of the company and the anticipation of things to come for the purpose or ultimate goal, to offer possible situation for action to support business decisions.

Sales Intelligence is similar to *Business Intelligence*. The main difference is that *Sales Intelligence* is specifically designed for decision-making in the area of business management. Intelligence operational tools are based on a set of three elements oriented to information processing, organization and scope of the use of a real need by using tools and techniques ELT (extract, load and transform) or currently ETL (extract, transform and load) that extract data from various sources, finally purged, and then prepare to load into a data warehouse⁶. This set of tools use a methodology that has the following characteristics:

⁵ J. Curry, *CRM: Cómo implementar y beneficiarse de la gestión de las relaciones con los clientes*, Barcelona: Gestión 2000, 2002, p. 276 establish: a loyalty project that it's going to help to the company :to know better the customer value and to get more in a large-term, to get more accurate business goal organized according to profiles, to detect a growth and improvement area, to assign resources to each client's profile, increasing the profit, implement specific initiatives to retain the customers and offer them added value, so the relationship with the company will get intensifies and that will prolong the time and will retain new customers in the long term.

⁶ R. Mckenzie, *La empresa basada en las relaciones: impulsando el éxito en la empresa a través de la gestión de las relaciones con los clientes (CRM)*. / Ray Mckenzie y el dmr consulting's center for strategic leadership, Bilbao: Ediciones Deusto 2002, p. 364.

1. Accessibility information.
2. Support decision making.
3. Orientation to the final user.

As a result we can consider that Geomarketing is a tool of Sales Intelligence SIG (- geographic information system-) that combines variables of marketing with social demographic variables in specific areas, causing them to show profiles of customers through studies and market analysis. They are based on the correlation between the place of residence consumers' and their habits of consumption and shopping behavior.

SALES INTELLIGENCE'S MEASUREMENT OF THE VARIABLE ELEMENT'S AND ADVANTAGES

Nowadays it is a helpful tool in business management that helps to identify which geographical area of activity is being more viable and also to know which markets are more profitable in sales operations. With the SIG system and the maps results we have a practical vision of the commercial relationship and benefits. Some of those are:

1. Optimize investment in marketing actions.
2. A greater and better knowledge of markets.
3. Focus effort on certain segments of the market.
4. Dentify points of sales.
5. Answer questions such as: is the current location of my business the optimum?
6. Analyze the market potential and points of sale by income range.
7. Add value to processes of direct marketing or attention to customer.

TO DESIGN OF THE SAMPLE IN SALES INTELLIGENCE

A SIG is a dynamic system used to the storage and processing of data that is intended to select and delete any criterion analysis for the production of useful spatial information in different fields. It uses location information such as addresses, postal districts, or longitude and latitude coordinates, for ordering information and thereby improves the analysis in the decision. Only SIG technology allows to store and manipulate information using geography to analyze relations and information trends which help sales management to

make more profitable decisions.⁷ Implicit analysis references can be derived from explicit information using an automated process called *geocoding* with models vector and raster. In the vector model, the information about points and lines is encoded and stored as a collection of coordinate x /y.

The vector model is extremely useful to describe discrete features, but less useful features to describe characteristics of continuous variation. The raster model has evolved to model such continuous features. A raster image is made by a collection of cells like a map or a figure scanned.

ANALYSIS AND VISUALIZATION OF THE RESULTS

The key technological components of the software SIG are:

- A. Data base management system (DBMS)
- B. A graphical user interface (IGU) for easy access to tools in order to achieve four outcomes:
 - a. Perform geographical queries.
 - b. Improve departmental integration into the organization.
 - c. Help make better decisions in business management.
 - d. Make maps with SIG.

The existing paper maps can be scanned and the information translated from computer-compatible to the SIG. The cartographic database based on GIS can be continuous and free of scale. Cartographic products can be created, focused at any location, at any scale and can show selected information to highlight specific characteristics.

These values are normally kept by the organization in two ways, with the operational systems of records or with Data Warehouse which is a repository of very easy access data, fed from numerous sources, transformed into information on specific topics of business groups to allow for further consultations, analysis and business decisions. The basic elements of a Data WareHouse are listed by:

- System source: operational systems of records where their functions are to capture business transactions. The source systems are also known as Legacy System

⁷ P. J. Reinares Lara, *Los 100 errores del CRM: mitos, mentiras y verdades del marketing de relaciones*, Madrid: Esic 2005, p. 179.

– Area of data traffic: it is a storage area and process group, that clean, transform, combine and remove duplicates, save, archive and prepare the data source to be used in the Data Warehouse.

It's goals are to make information accessible, consistent, elastic and adaptive.⁸ These Data Marts requirements have no borders nor fixed limits. The extraction of hidden and predictable information from large databases, is a powerful technology with great potential to help the companies to concentrate on the most important information in their information Data Warehouse databases.⁹

That is the reason why Data Mining Tools predict future trends and behaviours, enabling business decisions driven by a finish and deep knowledge of the information (- drive knowledge-) and proactive. The automated prospective analyses offered by a product go beyond past events provided by retrospective tools typical of decision support systems. Data Mining Tools can respond to business questions that normally need too much time to be resolved. This information is hardly accepted by users.

These tools explore databases in search for hidden patterns, finding predictable information that an expert could not find because it is outside their expectations. Data Mining techniques are the result of a long process of research and product development. This evolution began when business data were stored on computers for the first time, and continued with improvements in access to data, and more recently generated technologies to allow users to navigate through the data in real time. Data Mining takes this process of evolution beyond access and navigation retrospective data, to foresight and proactive information delivery. Data Mining is ready for your application in the business community because it is supported by three technologies that are already sufficiently ripe:

1. Massive data collection,
2. Powerful computers with Multiprocessors,
3. Data Mining algorithms.

Data Mining techniques can be implemented quickly in platforms that are already provided with hardware and software to boost the value of existing sources of information and can be integrated with new products and systems

⁸ K. Sindell, *CRM a través de internet: cómo identificar, atraer, atender y retener a los clientes con ayuda de internet*, Barcelona: Gestión 2000, 2003, p. 374.

⁹ *Harvard Business Review*, *CRM; customer relationship management*, Bilbao: Deusto 2002, p. 207.

online (on-line). The technique used to perform these activities in Data Mining is called modeling.

As a continuation to the presentation of Sales Intelligence tools we're going to make reference to the Micromarketing. It is a methodology based on the segmentation of the target by geo-demographic criteria.¹⁰ The target group is divided by profiles that are more adapted to the lifestyle. It is based on the principle that people who live in the same environment have similar behaviors before consumption. The advantage that contributes the Micromarketing is that allows you to develop an approach to individualized consumer and investigate your environment. This technique has two types of information, demographic information and product information.

In this form of marketing, commercial actions are performed more in a gritty way to specific people with shopping profile that reflects the database. That is, adaptation of products, advertising, promotions and activities of personal sales to specific segments. The mechanics of action may refer to:

A. Combine the data of the company with external information such as types of consumers and environments, socio-demographic data or figures from business and geomercados as well as the information of provenance.

B. The storage in one or more databases with different levels of graphic and alphanumeric information and also integrated and organized geographically

IMPLICATIONS OF THE PROCESS. MARKETING INTELLEGENGE

It is a technique which refers to the information analysis to understand the market and to determine the current and future needs of the customer. It serves to detect and evaluate the changes in the business environment that may affect the future market and helps improve relationships with customers so that they have a complete view of my company and vice versa. Currently the position of the company is much more proactive since it anticipates the needs of the customer through Marketing and thus be able to:

A. Eliminate stocks with special promotions.

B. Provide accurate segmentation to customize retention schedules of customers according to criteria defined as a model of consumption through e-mailing.

¹⁰ "Harvard Deusto Marketing & Ventas" N°.59, Caso HP design jet online: un éxito espectacular en CRM. Nov.-Dic., 2003, p. 52-64.

C. Let the client express their disagreements in a post sales service and with this, perform improvement processes via the web with e-fidelization and e-service.

Identification of opportunities of business in Marketing Intelligence emphasizes the following aspects:

1. Revenue generated by customer service represent a high percentage of the profits achieved by the company due to the increase of the frequency of purchase.¹¹

2. Customer retention is cheaper than obtaining new customers.

Discover new needs in the intention of the customer's purchase. Regarding the risks of business in Marketing Intelligence we can remark:¹²

A. Risk of saturating the market trying to coat customers needs.

B. Hounding the consumers rather than seducing them.

C. Does not meet the customer's expectations

D. Being able to differentiate from other brands, even generic brands.

The ultimate aim of the variables of business are the types of contracted advertising, sales channels used, client 's antiquity, the volume of recruitment and defaults translates into being able to segment actual clients in order to determine strategies to employ in each target. And so we can speak of the following types of customers:

– Risky customers have the possibility to leave the company and employ a model of abandonment with technical chaid

– Attracting clients are potential customers who might be new clients and employs a model of growth with neural networks techniques. Growth models are the most common type of models of opportunity. The basic premise of this model is the growth of the customer value decreasing cycle or increasing the number of products and services with every purchase of repurchase, that is selling you the same amount of product but more often.

The best example is the cross-selling. This model is constructed using purchasing information and creating statistical associations between products that are purchased together.

– Preferred customers are those that reflect a greater benefit and use a model of valuation with log regressions

¹¹ P. Greenberg, *CRM at the Speed of Light*. USA, Mc Graw Hill. 1st. Edición, 2001.

¹² F. Newell, *Cómo manejar las relaciones con los clientes en la nueva era del comercio electrónico*, México, Editorial Mc Graw Hill. 1st. Edition in spanish, 2001.

– Recovery clients are those who left the company we intend to recover with a catchment model.

In this order of things and in relation to the topic under consideration it is important to refer to the strategic value of customers. The customer rating implies that a company has to evaluate and analyze historical consumption data from customers, with encouragement of predicting the future potential of purchase to ensure that time and resources are invested only in the best customers. Strategic value is therefore the real benefit of a company with the real client.¹³ There are three key aspects in the calculation of the strategic value of a customer for a company:

1. Commercial activities executed.
2. The change of behavior in its permanence.

3.-The growth of the client's consumption and therefore we have to take into account that by segmenting some clients, necessarily, some of them become more valuable than others. In case of failure to do so the unit costs of acquisition (u.c.a.) could increase and become unacceptable. When companies provide the same level of service to all customers and sales opportunities would be lost when our best resources were not aligned with the best prospects of growth.

Once the segmentation of our actual and potential clients is defined It must be designed through which channels we will get to them; that is, knowing the customer development plan through the management of campaigns. We recommend creating a hierarchical structure of type campaign management system campaign, program and cell or cell. The campaign is in the top level and uses a lot of programs designed to reach a set of marketing's goals. A good example might be: "2013 customer loyalty campaign". At that moment the company establishes the elements of measurement and allocates budget to retain profitable customers during the year 2013. The campaigns management is the heart of the implementation of CRM strategy command center. A program is a specific marketing tactic within a campaign. An example might be: "program coupons which reward customer loyalty". The programme defines most of the content on the tactics of marketing to use, including bid, the message, the means to be used, the segments to attack, etc. Cell or test cell have more refined level. Its purpose is to test the effectiveness of the program or a component of the program. Cells must have an associated response code

¹³ R. Kalakota, M. Robinson, *Del e-Commerce al e-Business: "El siguiente paso"*, México: Editorial Addison Wesley. 1^{era}. Edición en español, 2001.

that allows the measurement of the result, its quick identification and the degree of success achieved.

CONCLUSION OF THE INTEGRATION PROCESS: THE CRM

The CRM (Customer Relationship Management) refers to a business strategy focused on the client with an integration of the ERP; i.e., (Enterprise Resource Planning). In the process of CRM implementation should not be involved only the technological aspects, but rather across the enterprise and the manager's must live the adventure of the adoption of the CRM, unlike other applications that focus on the management of contacts to short term.¹⁴

UNIQUE APPLICATIONS IN THE MANAGEMENT OF CRM

1. Oracle CRM On Demand. Offers a scalable, flexible platform backed by powerful analytic capabilities that allow you to change, analyze and control of customer processes as well as simplify the management of customer data.

2. mySAP CRM. Within software solutions used for the CRM implementation systems, one of the most used by the majority of companies applications worldwide is undoubtedly mySAP CRM, since it provides a set of tools that offer the appropriate solution to the objectives focus on customers, thus improving the level of effectiveness of the company. The biggest advantage of mySAP CRM applications is that they organized by three types of tools defined:

1. The operational,
2. The analytical and
3. Cooperatives.

In the beginning, noteworthy that the so-called operational CRM applications are tools used to increase the range in the capacity of employees in the organization. This is possible thanks to the implementation of certain workplaces based on roles with e-CRM. He is an organizational challenge by providing:

¹⁴ J. Curry, A. Curry, *CRM - Customer Relationship Management: "Cómo implementar y beneficiarse de la gestión de las relaciones con los clientes"*, España: Editorial Ediciones Gestión 2000, SA. 1era. Edición en español, 2002.

A. Adequate information.
B. In real time.
C. in the amount necessary to satisfy the specific needs of the client and.
The functional architecture of e-CRM is summarized in the following criterion of exposure.¹⁵

1. *Electronic Channels*: To offer to customer's new sales' method as shop on-line.

2. *Enterprise*: The company understood better the experience of the customer consumption through the organization.

3. *Empowerment*: The customers choose how and when to communicate with the company.

4. *Economics*: The economic criteria will be more individualized to achieve a better return on investment (ROI).

5. *Evaluation*: To evaluate economic factors of the client.

6. *External information*: External information that the company need to understand customer's future needs.

OPERATING BUSINESS DEVELOPMENT IN CRM

The four current trends of CRM are synthesized as follows:¹⁶

1. *ACTIVE CRM*: It consists of the creation of a new centralized database which will be used to store the customer information in a more orderly manner that could then help the automation of common tasks and business processes.

2. *ANALITIC CRM*: This tool is used to analyze the customer's data and to turn them into useful information for the organization. His role focuses primarily on predicting the possible behaviors of some customers.

3. *OPERATIONAL CRM*: This tool its very important to the marketing's areas, sales and service since each business relationship initiated with a client is added to the CRM database.

¹⁵ C. Imhoff, L. Loftis, J. Geiger, *Building the Customer - Centric Enterprise, Data Warehousing Techniques for Supporting Customer Relationship Management*. U.S.A: Editorial Wiley, 1st. Edición, 2001

¹⁶ M. Podmoguilyn, G. Valverde, *El modelo de negocios CRM (Customer Relationship Management)*. Argentina IAPUCO XXIV CONGRESO: Ponencia Buenos Aires University- May 2002.

4. *COLLABORATIVE CRM*. It give us a tool that can help the organization to communicate directly with the customer without the sales channel.

E-INTELLIGENCE TOOLS IN THE CUSTOMER CONSUMPTION ANALYSIS

S u m m a r y

It's been analyzed in these pages a business strategy designed to reduce costs and increase consumption through customer loyalty. The new economy demands new strategies and new business models. Both approaches must be aimed at exploiting the new media where business is taking place: the Internet. Companies that simply add technology to old processes or ways to carry out business, will not survive.

The transformation process demands that upper management provide Leadership, and as a consequence its Operating Model becomes a true reflection of such leadership by fostering new employee roles, new financing models as well as education models. Employees will benefit from new means of communication and availability of resources that will empower them to carry out these changes. The success of the eBusiness transformation process lies on the ability to measure its progress and impact both periodically and precisely.

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Key words: business strategy, customer loyalty, difference in consumption, identifies relationships, reduce costs.

INFORMATYCZNE NARZĘDZIA ZARZĄDZANIA
WIEDZĄ O KLIENTACH (E-INTELLIGENCE)
DO ANALIZY ZACHOWAŃ KONSUMPCYJNYCH KLIENTÓW

Streszczenie

Niniejszy artykuł przedstawia analizę strategii biznesowej mającej na celu redukcję kosztów oraz wzrost poziomu sprzedaży przy pomocy klienckich programów lojalnościowych. Nowe trendy w gospodarce wymuszają stosowanie nowych strategii i modeli biznesowych. Strategie te i modele muszą opierać się na wykorzystaniu najnowszego środowiska aktywności biznesowej jakim jest Internet. Firmy, które próbują dostosowywać nowoczesne technologie do swoich tradycyjnych modeli prowadzenia biznesu nie mają szans przetrwania w nowych warunkach.

Proces transformacji firm wymaga, aby najwyżsi przedstawiciele zarządu stali się autentycznymi przywódcami swych przedsiębiorstw. Dopiero wtedy model działalności biznesowej firmy będzie realnym odzwierciedleniem ich roli przywódczej, która pociągnie za sobą zmiany na poziomie pracowników firmy i podejmowanych przez nich ról w przedsiębiorstwie, w modelach finansowania działalności oraz w strategiach kształcenia pracowników. Pracownicy skorzystają z nowych form komunikacji i dostępności zasobów, które pozwolą im czynnie włączyć się w proces zmian. Udana transformacja ku eBiznesowi zależy od tego, czy zarząd firmy posiadał umiejętność precyzyjnego i systematycznego określania jej postępu i rezultatów.

Kiedy dokonamy segmentacji naszych obecnych i potencjalnych klientów, musimy określić, jakimi kanałami zamierzamy do nich dotrzeć. Aby powstał plan rozwoju zasobów wiedzy o relacjach z klientami, konieczne jest zastosowanie narzędzia kampanii informacyjnej. Artykuł zawiera zalecenia co do stworzenia hierarchicznej typologii takich działań. Najwyżej w hierarchii autor umieszcza samo narzędzie kampanii. Kolejnym elementem jest system zarządzania kampaniami, a potem kolejno następują narzędzia o nazwie program i komórka oraz komórka. Kampania stanowi najwyższy stopień organizacji działań i wykorzystuje ona wiele programów opracowanych w celu osiągnięcia zakładanych celów marketingowych. Dobrym przykładem kampanii może być: „Kampania informacyjna na temat lojalności klienckiej w roku 2013”. W ramach tej kampanii firma określa zmienne, jakimi chce mierzyć lojalność kliencką oraz wyznacza budżet niezbędny do zatrzymania klientów, którzy okazali się najbardziej rentowni w roku 2013. Zarządzanie kampaniami informacyjnym jest kluczowym aspektem implementacji strategii CRM. Program to konkretna strategia marketingowa użyta w ramach konkretnej kampanii.

Przykładem programu może być: „Program wydawania kuponów nagradzających lojalność klientów”. Program definiuje większość informacji dotyczących planowanych taktyk, w tym ofertę, przekaz, środki realizacji, segmenty adresatów, itp. Komórka lub komórka testowa to elementy bardziej wyrafinowane strukturalnie. Celem komórki jest badanie efektywności programu albo części programu. Komórki muszą posiadać przypisany im kod reakcji, który umożliwi pomiar wyników działań i określenie ich skuteczności.

Słowa kluczowe: strategia biznesowa, lojalność kliencka, różnice w konsumpcji, określanie relacji, redukcja kosztów.

Tłumaczył Konrad Klimkowski