Importance of intelligent business applied to sales in restaurants to attract tourism in Pueblo Magico Salvatierra

Importancia de los negocios inteligentes aplicado a las ventas en los restaurantes para atraer turismo en Salvatierra Pueblo Magico

RAMIREZ–ARENAS, Juan Carlos †*, GOMEZ–CANO, María del Carmen and MONTALVO-LUNA, Ana Rosa

Instituto Tecnológico Superior de Salvatierra, Calle Manuel Gómez Morín 300, Janicho, 38933, Salvatierra, Guanajuato. Universidad de Guanajuato

ID 1st Author: *Juan Carlos, Ramirez–Arenas* / **ORC ID:** 0000-0002-2165-7808, **Researcher ID Thomson**: X-3129-2018, **CVU CONACYT ID**: 911986

ID 1st Coauthor: *María del Carmen, Gomez–Cano/* **ORC ID:** 0000-0001-6773-5472, **Researcher ID Thomson**: S-6931-2018

ID 2nd Coauthor: *Ana Rosa, Montalvo-Luna* / **ORC ID:** 0000-0001-7476-7480, **Researcher ID Thomson**: X-3179-2018, **CVU CONACYT ID**: 672888

Abstract

Obtaining knowledge of the satisfaction of Both the first and the last client arrives at the establishment That leads to a series of Circumstances That need to be identified. The objective of the research is to Identify If They carry out smart business to know the needs of Their customers and the management of Their information through the use of information from the ticket and the command to generate information That will lead to Proposals and Modifications in the operability of the restaurant with the purpose of attracting tourists. Qualitative Approach with an action research design and a sampling for convenience to the main restaurants in the city of Salvatierra Where the magical town more tourist affluence is marked by the location of the places. The research will help restaurant managers analyze the information can be generated That with a ticket and a command is very useful for the knowledge of your client

Smart Business, Tickets, Commands

Resumen

El obtener conocimiento de la satisfacción tanto del primer como del último cliente que llega al establecimiento con lleva a una serie de circunstancias que es necesario identificar. El objetivo de la investigación es identificar si llevan a cabo los negocios inteligentes para conocer las necesidades de sus clientes y el manejo de su información a través de la utilización de la información desde el ticket y la comanda para la generación de información que conllevará a propuestas y modificaciones en la operatividad del restaurante con la finalidad de la atracción del turista. Enfoque cualitativo con un diseño de investigación acción y un muestreo por conveniencia a los principales restaurantes de la ciudad de Salvatierra pueblo mágico donde la afluencia turística es más marcada por la ubicación de los lugares. La investigación contribuirá a que los encargados de restaurantes analicen que la información que se puede generar con un ticket y una comanda es de gran utilidad para el conocimiento de su cliente.

Negocios Inteligentes, Tickets, Comanda

---

* Correspondence to Author (email: juramirez@itess.edu.com.mx)
† Researcher contributing as first author.

Introduction

Identify areas of opportunity where you can innovate and to apply a smart business model to help boost economic activity in Salvatierra food businesses.

The development of a magical town in the state of Guanajuato also depends on its cultural attractions, the quality of their customer such as: hotel services and restaurateurs. It is therefore important innovation to provide a value proposition that will enable competitiveness and yet another attraction for visitors, so that people coming from outside want to revisit these places which are in a situation of growth , so in Salvatierra magical Pueblo, restaurant services should not be left behind and require design strategies to growth in its range of services and income and see into the future and use new models of smart business resulting in an added attraction for visitors and for the local market as they also demand good service. To identify the factors that determine competitiveness, it should be done directly on the company and the sector and identify those that added value recognized in the market and if they can really be sustainable in the medium and long term. The quality of service is the ability of this to meet the needs and expectations of customers. In order to achieve customer satisfaction and confidence it is important to have a value proposition.

The purpose of this study is to analyze the business model smart Cano (2007) under the perspective of sales tools such as tickets and food orders applied to restaurant services Salvatierra city to attract more tourism.

Literature Review

Business competitiveness

To identify the factors that determine competitiveness Porter (2009) notes that this should be done directly on the company and the sector and identify those that added value recognized in the market and if they can really be sustainable in the medium and long term. Measures to establish as are those factors that lead to the goal "will be competitive" are different and enter different decisional areas as one in which the analysis of competitiveness (Dávila, 2010) is performed.

Service Definition

A service is any activity or benefit that one party can offer to another. It is especially intangible and can not possess. Production need not necessarily linked to a physical product (Kotler et al., 1995).

The quality of service is the ability of this to meet the needs and expectations of customers. In order to provide quality, the supplier should continuously assess how the service is experienced and what the customer expects in the future. What a customer considers normal may be something special for another, and yet the client eventually gets used to what he considered especially at first. The results of the evaluation of the service can be used to determine whether it should be modified if the client should receive more information, or if necessary change the price of the service. Quality is the set of characteristics of a product or service that influence satisfaction explicit and implicit needs (ISO-8402).

Define Customer

In the same way there are a variety of definitions of what a customer some are more technical than others, however generally it thought that the customer is the person requesting the service.

There are two types of external customers who are final consumers and inmates who are workers of an organization. Satisfaction of both is essential for the company.

Which involves developing an attitude where the customer is considered: It is the most important in a business person. Does not depend on us, we depend on it. We are not interrupted, it is our goal to work. It makes us a favor when he comes and we do not we are to see you. It is no stranger. Manriquez, LR, & Martinez Villegas, F. (2011).

Customer satisfaction and confidence

Satisfaction is a determining factor for establishing trust (Oliver, 1980; Crosby and Stephen, 1987; Anderson and Narus, 1990; Morgan and Hunt, 1994; Ganesan, 1994; Garbarino and Johnson, 1999; Rust, Zeithaml and Lemon, 2000; Ganesh, Arnold and Reynolds, 2000; Bauer, Grether, and Leach, 2002).

Corroborated by research such as (Oliver, 1980; Anderson and Narus, 1990; Ganesh, Arnold and Reynolds, 2000) describe as a propitiatory satisfaction variable or as the main element to build trust between the relationship "customer-company". In agreement, Selnes (1998) adds that the higher the level of satisfaction in the highest level of service will be the customer confidence towards the company. As a client acquires confidence in a company when there is total satisfaction,

Satisfied customers with certain brand or supplier, are more likely to recommend a company willing to engage in positive communication about the service (mouth - ear) (Athanassopoulos, Gounaris, and Stathakopoulos, 2001), ie the customer after experienced satisfaction, you are willing to transmit information for (positive) on services of the company, linking companies restaurateur sector. With the effect (mouth - ear) a reaction as a result of satisfaction or compliance with service experience restaurants.

Smart business

It is a business strategy that seeks to increase the performance of the company or business competitiveness through intelligent organization of its historical data (transactions or daily operations), usually residing in corporate Data Warehouse or Data Marts department.

The concept of BI (Business Intelligence) is not new, since the idea was introduced in the mid-60s, it has continued to evolve more effective and adapted to the new technological environment prevailing solutions. With the price of hardware in decline, more powerful processors, the hegemony of Internet-Web and software more efficient management, the concept of business intelligence (BI) within reach of many modern organizations who are interested in maximizing placed their investments in the computer area (Sánchez, Suriaga, Bonilla, 2016).

Smart Business Models

DSS (Decision Support Systems) was the source of all, then appeared similar concepts such as the EIS (Executive Information Suystems), until the state of art today, the BIs and BIWeb.

The pioneers of the field were Dr. Ralph Timbal, considered Dr. DSS, and Bill Inmon, the father of Data Warehouse (Sanchez, Suriaga, Bonilla, 2016).

Business Intelligence Technology

Companies have discovered the need for data to support the decision-making process optimization and perform operational reports. Technology vendors have built business intelligence software niche to implement each new pattern of applications that companies invent. These application patterns result in software products focused exclusively on five styles of Business Intelligence such as:

Business report. Written reports are used to generate highly formatted intended to expand its distribution with many people static reports. Analysis Cubes. Cubes based BI tools are used to provide analytic capabilities to business managers. Views Ad Hoc Query and analysis. Relational OLAP tools are used to allow experts to visualize the database and see any response and turn it into low-level transactional information. Data mining and statistical analysis. They are tools used to perform predictive modeling or to discover the cause and effect relationship between two metrics. Delivery of reports and alerts. Engines distribution reports are used to send complete reports or notices to a large number of users, those reports are based on subscriptions, calendars, etc. (Sanchez, Suriaga, Bonilla, 2016).

The main programs for Smart Business

Business Objects: Provides consistent and simple and clear to relevant data so user access, to facilitate analysis of information that has been stored, and the subsequent development of separate reports to improve overall business processes (Sánchez , Suriaga, Bonilla, 2016).

Cognos: This provides an effective system to carry out accurate assessments of information and later making appropriate decisions. Notably, Cognos also has a special tool that has been developed to enable the realization of models, forecasts and business simulations, in order to offer the possibility to plan future operations (Sanchez, Suriaga, Bonilla, 2016).

Microstrategy: This is another of the most widespread tools, whose main characteristic is that it provides the necessary solutions to customers of any type of business or functional area thereof, with the aim of providing a framework of support that will allow them access a better understanding of the information being handled by the company (Sanchez, Suriaga, Bonilla, 2016).

Oracle BI: As the various applications of its kind, offers the possibility to access information, share that data with the various sectors of the company, and allow analysis of such information to carry out the decision-making right, which they will be based on data obtained easily and quickly (Sanchez, Suriaga, Bonilla, 2016).

WorkMeter: Collects information on the use of computer applications and other devices (PBX, phones, ...) to determine the charge level and effort of people. This information is consolidated and submitted to both the manager and the same employee, creating an atmosphere of objectivity and transparency. WorkMeter provides the factual basis necessary to facilitate evaluation and improvement processes also possible to measure the positive impact of changes (Sanchez, Suriaga, Bonilla, 2016).

OpenPYME is a repository of free software (FLOSS or better said) which are collected so categorized, solid products that can be incorporated in any production area of the company or organization. It offers free applications from the field of Business Intelligence to the office, through CMS, Groupware, CRM, ERP or e-Commerce (Sanchez, Suriaga, Bonilla, 2016).

Birt Report is a generation system based on Eclipse Web reports. BIRT (Business Intelligence and Reporting Tools) includes a report designer and runtime component that can be added to the application server.

Its design allows easily integrate reports into applications. It also allows running scripts or develop extensions to extend the basic functionality (Sánchez, Suriaga, Bonilla, 2016).

Jasper Reports consists of a set of java libraries to facilitate reporting in both Web applications and desktop. Reports are defined in an XML file which will be compiled by Jasper Report libraries to generate a file. jasper used to fill and display the final report. Output reports can be PDF, CVS, XML, TXT, HTML, XLS, RTF, Jasper Viewer, and many others (Sanchez, Suriaga, Bonilla, 2016). Jfire is a powerful ERP, CRM, eBusiness and SCM / SRM solution for businesses. It was designed to give any company a powerful tool in the analysis and reporting, including customization options. This provides a highly scalable system that supports small companies as well as global companies that have a large user base, multi-currency and multi-lingual (Sanchez, Suriaga, Bonilla, 2016).

KNIME is a data mining platform that allows the development of models graphically. It has a number of nodes, which encapsulate different algorithms, and dates, which represent data flows, both deployed and combined interactively (Sanchez, Suriaga, Bonilla, 2016).

Odoo is a complete business management system (ERP) that meets the needs of the areas of accounting, sales, purchasing, and warehouse and inventory, among others. It supports multiple currencies, multiple companies and multiple accounts; also it includes document management functionality to streamline collaboration between departments and teams within the company; and can work remotely via a web interface from a computer connected to the Internet. It also includes the ability to create blogs, online shops, design professional emails, events (Sanchez, Suriaga, Bonilla, 2016).

Openbravo is an open source application of ERP business management types for enterprises with small and medium size. The data structure of the application is originally based on an old version of Compiere. The functional cover product includes all typical of an integrated management system (Sanchez, Suriaga, Bonilla, 2016) areas. Pentaho is a BI platform "solution-oriented" and "process-centric". Pentaho is a comprehensive Business Intelligence Suite includes all major components required to implement BI solutions, such as: Reporting, Analysis, Dashboard, Data Mining and Data Integration (Sánchez, Suriaga, Bonilla, 2016).

Requirements: Server J2EE compliant application as JBOSS® AS, WebSphere, Tomcat, WebLogic and Oracle AS. Database: JDBC, IBM DB2, Microsft SQL Server, MySQL, Oracle, PostgreSQL, NCR Teradata, Firebird (Sanchez, Suriaga, Bonilla, 2016).

RapidMiner is a flexible knowledge discovery in databases, machine learning and data mining Java environment. It has an XML-based graphical user interface a plug-in mechanism, and the layout of high dimension (Sanchez, Suriaga, Bonilla, 2016). It provides a mechanism easy to use extension that allows operators to integrate new and adapt the system to individual needs. Spago BI is a unified platform for developing business intelligence solutions in the company. Available analytical tools and intuitive user interface. SpagoBI provides support to the daily and strategic business, both in decision making and operational level (Sanchez, Suriaga, Bonilla, 2016).

Characteristics of a system and business intelligence

– Focus your business information in one place (security and economy) • Maintains history information (days, months and previous years) • The different working groups analyzed the same information • The business information can be easily related • it works 365 days a year if the company requires • Self-employed in extracting information (Sánchez, Suriaga, Bonilla, 2016).

Modules can understand

– Sales • Accounts Receivable • Shopping • Accounts payable • Inventories • Finance

Technical characteristics

a)   Information cubes
b)   Data Warehouses
c)   Based development components
d)   Extracting information on Windows, Linux and Unix
e)   Transparent migration to other tools
f)   Unique permissions per user (Sánchez, Suriaga, Bonilla, 2016).

Business benefits

a)   Quick decision making
b)   Support management boards
c)   Staff dedicated to tasks visualizing trends and patterns (instead of wasting time on building the information needed)
d)   Creating your own analyzes without third
e)   Global information day or retail (analysis type Drill Down)
f)   Assessment of information against targets • Information TOP 10
g)   protected confidential information (Sánchez, Suriaga, Bonilla, 2016).

Since most companies in Latin America are SMEs, in terms of size, the big challenge is to determine how they can allocate time and resources to experiment with (BIG) Data, the companies that profit being perhaps could get technologies given their role in generating employment and wealth. These could see highly benefit from access to technology through the cloud, relatively low-cost, pay per use model and high scalability, enhancing their capacity for innovation, efficiency and competitiveness (Diaz, Zaki, 2015).

Business intelligence is defined as corporate decision-making ability. This is accomplished by using methodologies, applications and technologies to collect, refine, transform data, and apply them analytical techniques for extracting knowledge (Parr 2000), data can be structured so that indíquenlas characteristics of an area of interest (Stackowiak et al. 2007), generating awareness of the problems and business opportunities so that they can be corrected and exploited respectively. (Ballard et al. 2006)

Implement BI tools within the organization can support the decisions made; assistance to internally staff management (Sharma et al. 2009) and the external side produces advantages over its competitors (Maureen 2009). There are times when you can not achieve all the benefits that BI; because the process involves implementing a project of this nature, you can make mistakes in defining the approach to the needs of enterprise knowledge; not to determine the extent of information problems solving usually affects the failure of the project.

RAMIREZ–ARENAS, Juan Carlos, GOMEZ–CANO, María del Carmen and MONTALVO-LUNA, Ana Rosa. Importance of intelligent business applied to sales in restaurants to attract tourism in Pueblo Magico Salvatierra. Journal Schools of economic Thought and Methology. 2018

ICT have made significant progress over the last 50 years have been miniaturized with multiple features capabilities that allow the holder to have multiple skills, coupled with lower prices for accessibility (Ansoff, 1965; Porter, 1985).

Developments in ICT is very significant in the area of mobile devices that are able to offer a repertoire of literally solutions in any field of knowledge that empowers and assistance for better decision-making of the leaders of an organization. This evolution has managed to migrate from fixed status of ICT to literally ubiquitous use, and diversity of international business applications in mobile state. This evolution is accompanied for better or worse with the phenomenon of globalization and a clear trend of so-called economy based on knowledge, where the main asset in a company or organization is the intangible, knowledge is seen to deliver tangible results (Ansoff, 1965; Porter, 1985).

When we talk about strategy in a business or market context, we usually refer to a plan or series of measures with which a company seeks deal or take advantage of own assets or circumstances in their environment (circumstances that can represent both opportunities and threats) to improve or defend its competitive position in the market (Ansoff, 1965; Porter, 1985).

Undoubtedly, information technology (IT) have revolutionized the business landscape in the world and the tourism industry is no exception. IT has changed the hotel industry, restaurants and travel services and now play a key role in the rules governing the business world and how to approach customers. The advantages of IT in terms of increasing competitiveness, reducing errors and creating new functionalities are unquestioned in any sector, including tourism (Valles, 1999).

According to Valles (1999), there are two factors that make the tourism industry is potentially attractive for development of information technologies: tourism is an inter-regional activity that promotes and markets activities offered far from where the client is and; On the other hand, being part of an industry that involves leisure and entertainment needs-based media that are attractive audiovisual media promotion.

Value creation and competitive advantage. Compete to be unique and translates as an increase in profit that offers a product or service that encourages consumption thereof; It is to attract people to the products or services that meet their needs efficiently.

It aims to offer alternatives through the use of electronic data to the restaurants to improve their services (Porter, 2012).

Value proposal

A value proposition is the element of strategy that looks outward, by customers, reflects the decisions about the kind of values that the company offers. Porter (2012) defines the value proposition as the answer three fundamental questions:

What customers you serve?
What needs have to know?
What price relative provide an acceptable value for customers and profitability acceptable to the company? (Porter, 2012).

Value in the service

An important virtue in an organization is a good attitude in service to understand and meet the needs of customers, give them what they expect and need.

The value offered to customers the service they offer is the set of all those benefits that the customer expected and that will be to your complete satisfaction, as such companies have to place special emphasis on ensuring that the services offered have the higher added value than competitors (Porter, 2012).

Methodology

Qualitative approach with action research design and sampling for convenience to the main restaurants in town of Salvatierra magical town where the tourist influx is marked by the location of places.

Research design action because its purpose is to understand and solve specific problems of a group linked to an environment (group, program, organization or community) (Hernández, Fernández, Baptista, 2014).

BI is an interactive to explore and analyze structured information about an area (usually stored in a data warehouse), to discover trends or patterns, from which derive ideas and conclusions (Cano, 2007) process.

According to Cano (2007) an interview was applied to managers of the 3 restaurants with more tourist influx of Salvatierra and internet services have information and consultation on the site.

According to Cano (2007) restaurant information can be generated from:

A ticket

– Total amount of sales of the day
– Number of tickets per hour or fraction of time
– Ticket number served by a cashier / a
– Sales items and amount units
– Number of tickets per day
– Amount charged by cash or credit cards
– Amount average ticket
– Number of tickets per day, time, ATM / a.

This information is used to detect:

I. Replenish stocks, accumulating the amount of sales per item
II. Assign shifts cashiers / as, depending on the number of tickets sold per hour
III. See what have been the best sellers
IV. See what the means of payment used by our customers.
a) However, if a sales decline occurs is detected:
V. Decreased number of tickets

This is possible also to also recognizable stocks of a product and the best selling product. According to Cano (2007) smart businesses are useful for:

– Purchasing managers
– Sales Managers
– Responsible for negotiations
– Marketers
– Personnel managers
– And all those people in our organization who have to make decisions.

– In customers with smart business applications since it makes the commands can be detected:
– Customer preferences
– Number of customer consumption
– Number of times you visit the establishment
– Timeout on saucers customer
– Number of people you visit the restaurant
– The reason of the visit
– Schedule visiting the restaurant
– Satisfaction at every visit

Here he met a group of 3 managers of restaurants to see if issued tickets and if these tickets generated some information.

As well as in the interview conducted it was questioned whether people had a data storage system to exploit information that is generating the commands.

Results

3 restaurants that were interviewed managers found that if they do not generate tickets yet:

– Number of tickets per hour or fraction of time
– Ticket number served by a cashier / a
– Sales items and amount units

In the food orders do not generate information that may favor the customer preferences

Conclusions

When performing this study we realized the need to implement a model of smart business to transform the information obtained in better customer service with this information offer customers a variety of options and promotions that attract your visit more regularly. Information gathering is very important to know the tastes and habits of customers and be updating menus and products that are offered in addition to continuously innovate for the benefit of the customer, from the moment it reaches the customer and find a place to park your auto considering that is a place where parking is scarce and are not open after eight o'clock at night, to have valet parking and as the waiting time, attention from staff,

–   Making decisions late
–   Complex analysis of information
–   Difficulty concentrating my information (s) company (s)
–   Operational problems detected studs
–   complicated analysis tools taking time and staff
–   Difficulty accurately measure the performance of managers, vendors, suppliers, etc.
–   The need for more complete and graphics support (Sanchez, Suriaga, Bonilla, 2016) reports.

References

Días de Santos (2007). Plan de negocios. Ediciones Publishing, M.

Anderson, J. y Narus, J. (1990). A model of distributor firm and manufacturer firm working partnerships. Journal of marketing, 48 , pp. 42-58.

Athanassopoulos, A., Gounaris, S., y Stathakopoulos, V. (2001). Behavioural Responses to Customer Satisfaction: An Empirical Study. European Journal of Marketing, vol. 35, núm. 5 - 6 , pp. 687-707.

Cano, Josep Lluis (2007). Business Intelligence: Competir con Información.

Díaz, D., Zaki, M. (2015). Innovación en Modelos de Negocios Basados en Datos: los "Big" y los "No Tanto" Centro de Innovación para el Desarrollo.

Galindo, M. (2013). ¿Qué es una slow citi en España? Recuperado 5 de junio de 2016, a partir de http://ecoesmas.com/que-es-una-slow-city-hay-7-en-espana/

Garbarino, E. y Johnson, M. (1999). The Different Roles of Satisfaction, Trust, and Commitment in Customer Relationships. Journal of marketing, 63 , pp. 70-87.

Ganesh, J., Arnold, M. J. y Reynolds, K. E. (2000). Understanding the Customer Base of Service Providers: An Examination of the Differences between Switchers and Stayers. Journal of Marketing, 64 , pp. 65-87.

Hernández Sampieri R., Fernández Collado C., Baptista Lucio P. (2014). Metodología de la Investigación. Mc Graw Hill. Sexta Edición. México.

Michael Porter (2012). La Cadena de valor de. Publicado por Web y Empresas, enero 30, 2012 en planificación estratégica.

Oliver, R. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. Journal of Marketing Research, 17 , pp. 460-469.

Oliver, R. (1997). Satisfaction: A behavioral perspective on the consumer. New York: Mc-Graw-Hill.

Rust, R., Zeithaml, V., y Lemon, K. (2000). Driving Customer Equity. Boston, MA: The Free Press.

Selnes, F. (1998). Antecedents and Consequences of Trust and Satisfaction in BuyerSeller Relationships. European Journal of Marketing, 32 (3/4), pp. 305-322.

Sánchez Parrales Luis Alberto, Suriaga Sánchez Marco Antonio y Bonilla Freire Janet del Consuelo (2016): "Finanzas en los negocios inteligentes", Revista Caribeña de Ciencias Sociales (marzo 2016). En línea: http://www.eumed.net/rev/caribe/2016/03/finanzas.html

Stutely, R (2000). Plan de negocios; la estrategia Inteligente. México: Prentice Hall
Valles, David Martín. "Las tecnologías de información y el Turismo"