

Oracle E-Commerce Solution ATG

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Abstract: Electronic Commerce is process of doing business through computer networks with the help of sophisticated online web commerce portal. A person sitting on his chair in front of a computer can access all the facilities of the Internet to buy or sell the product. Designing and developing e-commerce application involves various activities like providing merchants to have complete access to all products and customer data, able to control create and optimize the cross-channel infrastructure and customer experience without requiring IT engagement, site-definition, product-related capabilities like catalog and category management, pricing, promotions, and merchandising strategies experience management features like layout, content creation, page management, and integrated intelligence etc. Oracle E-commerce solution ATG is designed to provide the above stated activities under a single application framework in which merchants or users can have flexibility in using it in B2B model of application development. For increasing the use of e-commerce in developing countries the B2B e-commerce is implemented for improving access to global markets for firms in developing countries.

Keywords: E-commerce, Models, Oracle Commerce, ATG, B2B.

I.INTRODUCTION

E-commerce is buying and selling goods and services over the Internet. Ecommerce is part of e-business. E-business is a structure that includes not only those transactions that centre on buying and selling goods and services to generate revenue, but also those transactions that support revenue generation. These activities include generating demand for goods and services, offering sales support and customer service, or facilitating communications between business partners.

The followings are the business uses of the Internet. These services and Capabilities are a core part of a successful e-commerce program. They are either parts of a value chain or are included as supporting activities:

- Buying and selling products and services
- Providing customer service
- Communicating within organizations
- Collaborating with others
- Gathering information (on competitors, and so forth)
- Providing seller support
- Publishing and distributing information• Providing software update and patches

One of the most popular activities on the Web is shopping. It has much allure in it — you can shop at your leisure, anytime, and in your home place. Literally anyone can have their pages built to display their specific goods and services[1][2].

History of ecommerce dates back to the invention of the very old notion of "sell and buy", electricity, cables, computers, modems, and the Internet. Ecommerce became possible in 1991 when the Internet was opened to commercial use. Since that date thousands of businesses have taken up residence at web sites as shown in figure 1.

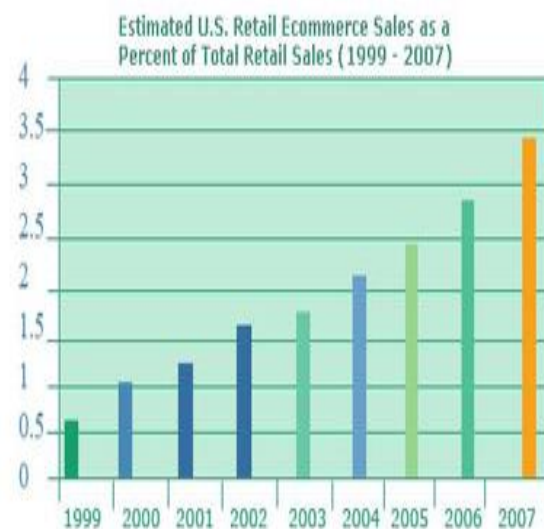


Fig :1 sales status of E-Commerce

II. ECOMMERCE MODELS:

The ultimate goal of an e-business is to generate revenue and make a profit, similar to traditional businesses. It is factual that the Internet has improved productivity for almost all the organizations that are using

A.Merchant model

This model basically transfers the old retail model to the e-commerce world by using the Internet. There are different types of merchant models. The most common type of merchant model is similar to a traditional business model that sells goods and services over the Web. Amazon.com is a good example of this type. An e-business similar

toAmazon.com utilizes the services and technologies offered by the Web to sell products and services directly to the consumers. By offering good customer service and reasonable prices, these companies establish a brand on the Web. The merchant model is also used by many traditional businesses to sell goods and services over the Internet. Dell, Cisco Systems, and Compaq are popular examples.

B. Brokerage model

The e-business brings the sellers and buyers together on the Web and collects a commission on the transactions by using this model. The best example of this type is an online auction site such as eBay, gittigidiyor.com which can generate additional revenue by selling banner advertisement on their sites.

C. Advertising model

This model is an extension of traditional advertising media, such as television and radio. Search engines and directories such as Google and Yahoo provide contents (similar to radio and TV) and allow the users to access this content for free. By creating significant traffic these e-businesses are able to charge advertisers for putting banner ads or leasing spots on their sites.

D. Mixed model This model generates revenue both from advertising and subscriptions. Internet service providers (ISPs) such as America On-line(AOL), and Super Online generate revenue from advertising and their customers' subscription fees for Internet access.[1]

E. Info-me diary mode

E-businesses that use this model collect information on consumers and businesses and then sell this information to interested parties for marketing purposes. For instance, bizrate.com collect information related to the performance of other sites and sells this Information to advertisers. Netzero.com provides free Internet access; in behaviour of customers. This information is later sold to advertisers for direct marketing. EMachines.com offers free PCs to its customers for the same purpose.

III. E-COMMERCE BUSINESS MODELS

1. Business-to-Business (B2B)
2. Business-to-Consumer (B2C)
3. Consumer-to-Consumer (C2C)
4. Consumer-to-Business (C2B)

A. Business-to-Business (B2B)

E-commerce encompasses all electronic transactions of goods or services conducted between companies. Producers and traditional commerce wholesalers typically operate with this type of electronic commerce direct marketing. eMachines.com offers free PCs to its customers for the same purpose.

B. Business-to-Consumer (B2C)

The Business-to-Consumer type of e-commerce is distinguished by the establishment of electronic business relationships between businesses and final consumers. It corresponds to the retail section of e-commerce, where traditional retail trade normally operates. These types of relationships can be easier and more dynamic, but also more sporadic or discontinued. This type of commerce has developed greatly, due to the advent of the web, and there are already many virtual stores and malls on the Internet, which sell all kinds of consumer goods, such as computers, software, books, shoes, cars, food, financial products, digital publications, etc.

When compared to buying retail in traditional commerce, the consumer usually has more information available in terms of informative content and there is also a widespread idea that you'll be buying cheaper, without jeopardizing an equally personalized customer service, as well as ensuring quick processing and deliver of your order.

C. Consumer-to-Consumer (C2C)

Consumer-to-Consumer (C2C) type e-commerce encompasses all electronic transactions of goods or services conducted between consumers. Generally, these transactions are conducted through a third party, which provides the online platform where the transactions are actually carried out.

D. Consumer-to-Business (C2B)

In C2B there is a complete reversal of the traditional sense of exchanging goods. This type of e-commerce is very common in crowd sourcing based projects. A large number of individuals make their services or products available for purchase for companies seeking precisely these types of services or products. Examples of such practices are the sites where designers present several proposals for a company logo and where only one of them is selected and effectively purchased. Another platform that is very common in this type of commerce are the markets that sell royalty-free photographs, images, media and design elements.

In the above models even though B2C is attractive it has its own flaws. The latest U.S. Census data indicates that business to business (B2B) revenue transacted online is approximately \$354 billion annually.² Compare that with \$200 billion³ in annual B2C transactions, and the B2B commerce story suddenly becomes more interesting. B2B organizations are incredibly complex, making cross-channel commerce markedly more difficult than their B2C counterparts. Unlike B2C, B2B companies support a broader range of business models – many of which have become possible with the entre of online commerce. B2B business models can range from pure B2C (a Web site) and pure B2B (large account site for dealers), to B2B2B (multiple distributor portals) and B2B2C (portals,

consumer stores). In addition to more business models, B2B organizations operate in a complex multi-channel, multi-currency, multi-brand, multilingual world, further complicated by massive product catalogs, custom contracts and pricing, complex supply chains, and localization issues[3][4].

While the challenges may seem overwhelming, it is an exciting – and demanding – time for B2B commerce. Digital channels have become the dominant medium for influencing decision-making and building a stronger relationship between the brand and the end customer. It's no secret that B2B purchasing is shifting away from traditional selling methods for the less expensive and more convenient Web, but there are no simple (or prescribed) decisions from a technology or people perspective.

IV. ORACLE COMMERCE SOLUTION-ATG

For organizations selling to other businesses across the globe, the Oracle Commerce Solution provides what no other combination of technologies on the market can: a unified, end-to-end commerce solution that delivers more lucrative experiences while simplifying management, reducing total cost of ownership, and accelerating time to value.

The Oracle Commerce Solution allows B2B organizations to more efficiently manage their cross-channel commerce efforts, including the ability to:

- Manage complex organizational hierarchies and delegate user administration.
- Easily integrate with homegrown and third-party back-end systems containing pricing, inventory, product, and customer information.
- Set up and manage custom catalogs, pricing, contracts, and payment terms.
- Schedule recurring orders and manage invoices.
- Create and manage configurable SKUs.
- Manage personalized cross-channel customer experiences.
- Facilitate transactions across digital channels and devices.
- Provide advanced search and faceted navigation.
- Deliver intelligent recommendations and merchandising.
- Gain real-time insight to product performance and customer behavior.

The Oracle Commerce Solution unifies the leaders of cross-channel commerce (Oracle ATG), customer experience (Oracle Endeca), and content (Oracle WebCenter Sites, formerly known as Fatwire) to deliver

best-in-class commerce applications focused on personal user experiences, business user enablement, and scalability to meet the evolving demands of commerce.

Oracle Commerce Solution provides

1. Delivery of relevant experiences to every customer
2. Operational efficiency
3. Scale for the complexities of B2B

V. DATA ANYWHERE ARCHITECTURE

Delivery and optimization of cross-channel experiences wouldn't be possible without constant access to multiple data and content sources. The Oracle Commerce Solution has the unique strength to automate processing of large volumes of diverse data to deliver more engaging experiences at a lower cost to the business. With an extensible data ingest layer, the Solution unlocks value from data wherever it lives, allowing organizations to extract more value from investments across their technology ecosystem and centralize it in a single index.

The flow of data and content from disparate systems in to the Oracle Commerce Solution is an ongoing process, as B2B product catalogs and customer data changes dramatically over time. Systems that B2B organizations use produce structured and unstructured content, coming from traditional sources like ERP, PIM, MDM, OMS, and DOO systems, and newer sources for online environments like feeds from third-party Web analytics and user review providers, and rich media coming from a DAM, blog, or video platform. As data and content from these systems is created and modified, the Solution continually collects and aggregates it. As it is centralized, the engine finds relationships between different data points and connects them at run-time to be rendered in the customer experience, influenced by any applicable business rules. Centralizing multiple data sources creates better customer experiences: virtual product data and virtual customer data come together to create a complete picture of who the customer is and what they want, delivered to any touch point[4].

The Oracle Commerce Solution leverages ATG for creating and defining the sites, data, and content that drives customer experiences. These capabilities include creating and managing multi-site and multichannel infrastructures, content creation, collection of session data, management of the product catalog, pricing, creation of promotions and offerings, processing of transactions, management of customer profiles and segments, and the creation of personalization strategies which enhances the e-commerce solution creation. The Solution allows retailers to learn more about customers over time by tracking their behavior to ultimately deliver more granular, valuable experiences. Building upon the default experience, the degree that a retailer can personalize

experiences to is dependent on the availability and quality of customer and product data.

Oracle Commerce Solution takes a revolutionary approach to multichannel delivery. The Solution has a presentation-agnostic API that serves up consistent, optimized experiences to any digital channel that a retailer may have. This API centralizes and brokers all content assembly logic, personalization strategies, and any applicable business rules, serving relevant experiences to the requesting digital channel(s). This approach simplifies management while enhancing performance and delivering a consistent experience everywhere customers engage. With the same core data, content, and business rules powering cross-channel experiences, experiences are seamless, sales are expedited, and delivery management is streamlined.

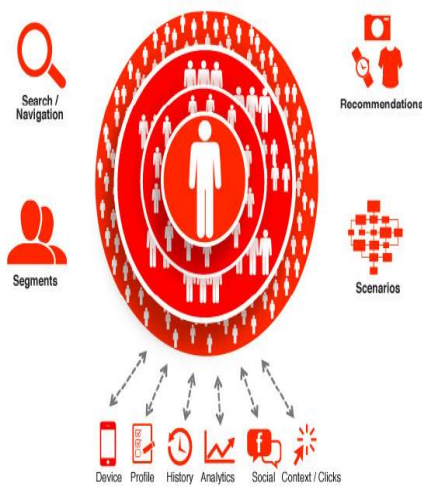


Fig:1 The Oracle Commerce Solution leverages the most granular data available to layer personalization strategies, wherever consumers are.

VI ORACLE ATG TOOLS

The Oracle Commerce Solution provides merchants with simple to use tools inspired by their use cases and needs to work faster and execute business plans more efficiently. With a single solution, merchants have complete access to all products and customer data, and can centrally create and optimize the cross-channel infrastructure and customer experience without requiring IT engagement. This includes site-definition, product-related capabilities like catalog and category management, pricing, promotions, and merchandising strategies experience management features like layout, content creation, page management, and integrated intelligence, and customer-related capabilities like creating and managing customer profiles and segments, personalization, and targeting strategies[4].

Business users can also manage all aspects of merchandising with an intuitive, highly-visual application, allowing them to view the pre-production site through the lens of a customer. Merchants can easily drag and drop content and products, edit content in-line, quickly apply

updates to multiple assets, create and stack promotions, and preview layouts for future dates using a Flex-based tool.

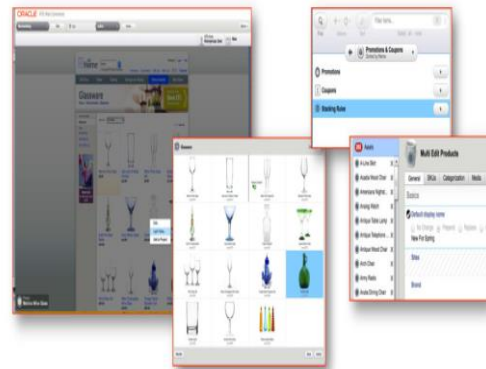


Fig:2 The Oracle Commerce Solution delivers robust, visual merchandising tools for simplified cross-channel management.

Merchants have a simple visual interface to override default relevancy strategies to hand-place promoted products for specific categories. More substantial updates can be made to give groups of users a specific experience, like applying a specialized page layout, merchandising strategy or banner promotion to users coming from Google or a social network.

VII ATG AND ANALYTICS

For online retailers, determining where to focus efforts is a challenge. They struggle to interpret and connect separate reports and analytics sources, but visibility and insight is only part of the problem. The Oracle Commerce Solution allows retailers to close the loop with an application that centralizes and connects multiple analytic and data sources to provide a comprehensive, real-time snapshot of the performance of their online business.



Fig: 3 With Oracle Commerce Business Intelligence, merchants can close the loop with actionable insight from a combination of existing data sources in real-time.

A. Operational Efficiency

Architected for operational efficiency, the Oracle Commerce Solution has ability to process data and deliver dynamic experiences at unparalleled scale. Powering the most demanding environments on the web, the Solution handles large and complex catalogs, processes volatile data from multiple sources and leverages it at run-time, and delivers advanced custom experience demands like custom catalog views and pricing structures[3][4].

The Oracle Commerce Solution is architected for operational simplicity, so that one index and a single business user application drives consistency across touch points, even as the business expands. The Solution removes the complexities of site expansion and management, enabling business users to create new properties with prebuilt, reusable components that can be shared between sites and touch points. With this approach, retailers can quickly launch new branded sites, enter new markets, and expand in to new channels



Fig:-4 The Oracle Commerce Solution allows business users to take control of complex management and expansion with pre-built, re-usable components for multi-site, multi-language, and multi-currency environments

VIII ORACLE ATG AND OTHER PRODUCTS

For customers using other Oracle products, the Oracle Commerce Solution enhances the ability to support connected interactions across channels, and centralize management at a lower cost of ownership. The Oracle Commerce Solution allows customers to leverage and enhance other commerce products to create an endless aisle, where consumers can purchase anywhere and fulfill anywhere. This means that inventory and experiences can be managed effectively and holistically, leveraging complimentary commerce technologies like Oracle Retail products, Oracle WebCenter, Siebel, Oracle Product Information Management (PIM) and others. Oracle allows customers to assemble a custom assortment of technologies based on their needs, enhancing the Oracle Commerce Solution while providing customers with insight and control to streamline operations and achieve their business goals.

IX CONCLUSION

Online Business activities are growing day by day which require faster development solutions to build a rich and robust E-commerce solutions for merchants to use it. ATG by oracle is commerce solution provider with centralized management for building enhancing the customized e-commerce sites which leverage customer satisfaction for merchant online business activities. ATG provides tools to manage e-commerce websites easily with minimum effort and allows various analytics on data for better business.

X REFERENCES

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