



## E-commerce In Enterprise Marketing Management Environment

Mangesh S. Dabhade\*  
Department Of Computer Science  
Govt College Of Engineering Amravati, India  
[mangeshdabh@gmail.com](mailto:mangeshdabh@gmail.com)

Dr. P. N. Chatur  
Department Of Computer Science  
Govt College Of Engineering Amravati, India  
[chatur.prashant@gcoea.ac.in](mailto:chatur.prashant@gcoea.ac.in)

Prof. R. V. Mante  
Department Of Computer Science  
Govt College Of Engineering Amravati, India  
[mante.ravi@gcoea.ac.in](mailto:mante.ravi@gcoea.ac.in)

**Abstract-** Enterprise Marketing Management (EMM) Suite is an end-to-end, integrated set of capabilities designed for the needs of marketing organizations. EMM Suite empowers organizations and individuals to turn their passion for marketing into valuable customer relationships and more profitable, timely and measurable business outcomes. E-commerce is no longer simply about presenting and selling products online. In wsc it is about delivering a smarter shopping experience that is seamless and integrated across all customer touch points. It is about providing rich, relevant, personalized experience. Similarly Unica Interact integrates with your customer facing systems—such as Web sites and call centers—and allows you to retrieve optimal personalized offers and visitor profile information in real-time to enrich the interactive customer experience, but Websphere commerce is less effective in some part like prediction of customer response based on customer purchasing history, customer response based on behavioral pattern. So by using Unica Interact it is possible to overcome all this functionalities. So the integration of unica Interact is carried out with Websphere commerce. In this integration Unica Interact API and Websphere Commerce API are used.

**Keywords:** emm, API, websphere, interact

### I. INTRODUCTION

Enterprise Marketing Management (EMM) Suite is an end-to-end, integrated set of capabilities designed for the needs of marketing organizations. EMM Suite empowers organizations and individuals to turn their passion for marketing into valuable customer relationships and more profitable, timely and measurable business outcomes. EMM Suite helps marketers understand customer wants and needs and leverage understanding to engage buyers in highly relevant, interactive dialogs across digital, social and traditional marketing channels. EMM provides robust web and customer analytics, event detection, campaign management, real-time interaction management and recommendations, lead management, digital marketing optimization, email marketing, targeted advertising, search engine marketing and marketing resource management capabilities [1]. E-commerce is no longer simply about presenting and selling products online. It is about delivering a smarter shopping experience that is seamless and integrated across all customer touch points.

Interact is a module within the Unica suite of enterprise marketing management tools, and is integrated with Marketing. Interact exploits both online and offline data—in-depth historical knowledge of customers as well as current customer activities—leads, increase conversion rates, optimize channel usage, and lower Web Sphere Commerce provides a next-generation solution for all of a company's e-commerce needs. From a simple online store to a fully

integrated, multi-channel sales network, Web Sphere Commerce [3] can be used for any or all of a company's business models and touch points. Are provided. is the single, unified platform you need to do business directly with consumers, with businesses, indirectly through channel partners - or all of the above simultaneously. Campaign's Universal Dynamic Interconnect (UDI)[8] data communication layer allows to seamlessly access and manipulate data from all of your data sources, including relational databases (regardless of database type) or flat files. Campaign processes populate contact history and response history, and support. response attribution and Ease of Use. By integrating Interact with wewbsphere commerce provides depth historical knowledge of customers as well as current customer activities. Recommendation of different offers to the customer provide Standardization, Automation and Oraganization, Predict Customer response, identify best product for Customer sell and forecast lifetime value.

Interact [5] exploits both online and offline data—in-depth historical knowledge of customers as well as current customer activities. Recommendation of different offers to the customer using unica Interact in WebSphere Commerce. provide Standardization, Automation and Oraganization. Predict Customer response, identify[2] best product for Customer sell and forecast lifetime value. Interact consists of at least two major components, the design environment and the runtime environment. Interact does at certain points in touch point by configuring interactive channels then divide customers into segments by creating interactive flowcharts. Within interactive flowcharts, it can perform test runs to

confirm that customer data is segmented correctly. It is Web-based Enterprise Marketing Management (EMM) solution that supports the direct marketing processes, handle customer interactions, it deploy that data to either a testing runtime environment for testing or a production runtime environment for real-time customer interaction.

This software representation is used to coordinate all of the objects, data, and server resources involved in interactive marketing. An interactive channel is a tool you use to define interaction points and events. It can also access reports for an interactive channel from the Analysis tab of that interactive channel. Interactive channels also contain production runtime and staging server assignments. WebSphere Commerce provides a powerful customer interaction platform for cross-channel commerce. It can be used by companies of all sizes, from small businesses, to large enterprises, and for many different industries. It provides easy-to-use tools for business users to centrally manage a cross-channel strategy. Business users can create and manage precision marketing campaigns, promotions, catalog, and merchandising across all sales channels. Campaign enables users to design, execute, and analyze direct marketing campaigns. Campaign provides an easy-to-use graphical user interface that supports the direct marketing processes of selecting, suppressing, segmenting, sampling, and creating output lists of customer IDs.

Campaign's Universal Dynamic Interconnect (UDI) data communication layer allows to seamlessly access and manipulate data from all of your data sources, including relational databases (regardless of database type) or flat files. Campaign processes populate contact history and response attribution and reporting. Although the application supports raw SQL, macros, and functions, users do not need to know SQL to design campaigns. Once mapped, database tables can easily be selected, merged, sampled, and segmented and the resulting customers can be associated with a variety of offers. Also, the results of a campaign can be recorded, responses tracked, and the return on investment (ROI)[2] calculated. Campaigns can be scheduled to run at a particular time or triggered by a particular event, all without knowledge of SQL.channels are developed. Campaign treats a marketing campaign as a discrete entity that is made up of one or more flowcharts, which are in turn comprised of one or more processes. A campaign can be associated with one or more strategic segments, offers, and reports, and can consist of multiple flowcharts.

The processes, which are the building blocks for campaign flowcharts, are the heart of Campaign, as they perform the actual data manipulation, scheduling, offer matching, list generation, and optimization; in effect, you use the processes to define and implement a campaign. Campaign is designed to be used by marketing experts, as well as by experts in data-mining, On-Line Analytical Processing (OLAP), and SQL.Campaign design, execute, and analyze direct marketing campaigns.Campaign lay the groundwork for their colleagues by performing initial and ongoing tasks such as mapping database tables, adjusting configuration settings, and defining custom attributes and offer templates for users.

## II. SYSTEM DEVELOPMENT

WebSphere Commerce is Recommendation of different offers to the customer using unica Interact in WebSphere Commerce. provide Standardization, Automation and Organization. Predict Customer response,identify best product for Customer sell and forecast lifetime value.To achieve this the integration is carried out in between Interact and WebSphereCommerce.

A visitor logs into a web site and navigates to a page which displays offers. The visitor selects an offer and logs out. While the interaction is simple, there are several events which occur both in the touchpoint and the runtime server.When a visitor logs in, this triggers a startSession. startSession method does four things. First, it creates a new runtime session. Second, it sends a request to load the customer profile data into the session. organizational editing before formatting. Please take note of the following items when proofreading spelling and grammar:

### A. Enterprise Marketing management:

It includes web services, Business context service, Optimistic locking. A web service is a series of open protocols and standards used in communication between two systems. web services perform functions ranging from simple requests to complicated business processes. After a web service is registered, other applications can discover it.It web services perform functions ranging from simple requests to complicated business processes. After a web service is registered, other applications can discover it. Optimistic locking allows the isolation level in database transactions to be lowered from "repeatable read" to "read committed." [6] In an optimistic locking scheme, database rows that are not normally accessed concurrently are not locked with an intent to update when they are read. Instead, when the update is eventually made, the row is checked to make sure that it has not been updated concurrently since it was read. If it was updated concurrently, then the transaction is rolled back and the command can be restarted from the beginning in a new transaction.

In such a scheme, performance is improved when concurrent updates do not normally occur, because the relatively expensive process of obtaining the database locks with intent to update is avoided. For those operations where concurrent updates are more likely to occur, then pessimistic locking, whereby intent to update locks are obtained when the row is read, continues to be used. Pessimistic locking avoids the more expensive process of rolling back and restarting from the beginning in a new transaction.It is staging runtime environment—which is the same as a production runtime environment except that it is not customer-facing—we can test the entirety configuration, including the API integration with touchpoint.During runtime, a customer—or in the case of a staging server, someone testing the system—takes actions in the touchpoint. These actions send events or requests for data to the runtime server by means of the runtime server then responds with results, such as presenting a set of offers (data) or re-segmenting a customer into a new segment (event).

## B. Ecommerce:

WebSphere Commerce provides a powerful customer interaction platform for cross-channel commerce. It can be used by companies of all sizes, from small businesses, to large enterprises, and for many different industries. It provides easy-to-use tools for business users to centrally manage a cross-channel strategy. Business users can create and manage precision marketing campaigns, promotions, catalog, and merchandising across all sales channels. WebSphere Commerce is a single, unified platform which offers the ability to do business directly with consumers (B2C), directly with businesses (B2B), and indirectly through channel partners (indirect business models). WebSphere Commerce is a customizable, scalable, and high availability solution built to leverage open standards. network stream. An online site where users may obtain information regarding products, and conduct business transactions over these products. Business transactions may include retail purchases, transactions between businesses and transactions between a government organization and citizens or businesses. WebSphere Commerce uses the generic term 'store' to describe the online space where all of these business transactions take place. WebSphere Commerce supports the following customer-facing stores.

A store that represents a business partner's operational assets. This store also handles the business logic that allows a WebSphere Commerce site to interact with an external business partner. For example, a proxy store may capture the orders transferred to a remote order capture system, as well as capturing the suppliers' inventory information or the information sent to a supplier's fulfillment centers. A proxy store does not include a storefront and cannot be accessed by users. Administrators working on behalf of the external business may have administrative access to the proxy store through the WebSphere Commerce Accelerator. The WebSphere Commerce[7] development environment uses a development database. Developers can use their preferred database tools (including Rational Application Developer) to make database modifications.

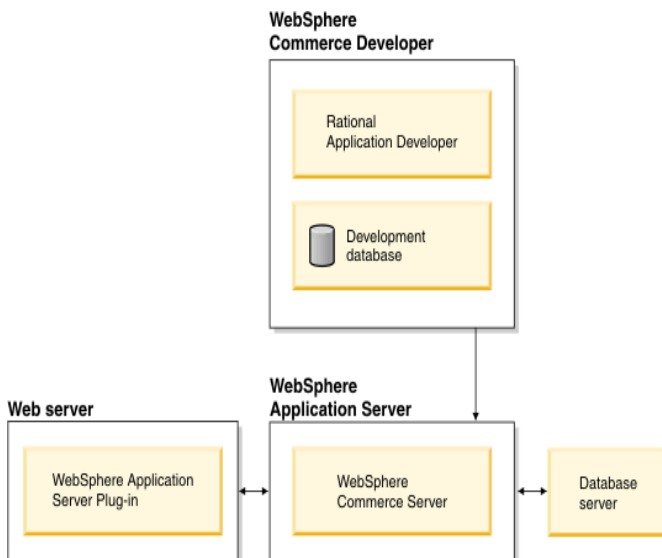


Figure.2 commerce environment

The Web server is the first point of contact for incoming HTTP requests for e-commerce application[4]. In order to interface efficiently with the WebSphere Application Server, it uses the WebSphere Application Server plug-in to manage the connections between the two components. The WebSphere Commerce Server runs within the WebSphere Application Server, allowing it to take advantage of many of the features of the application server. The database server holds most of your application's data, including product and customer data. In general, extensions to your application are made by modifying or extending the code for the WebSphere Commerce Server. In addition, you may have a need to store data that falls outside of the realm of the WebSphere Commerce database schema within your database. The WebSphere Commerce web application changed from a proprietary model-view-controller implementation to the struts open source implementation. Struts, industry standard for deploying model-view-controller applications, is a well-documented framework for J2EE web application development [7]. Struts enforces best practices and design patterns, boasts a large developer community

After all of these tasks are completed, components necessary for Interact configuration in the design environment ready for deployment. Interact administrator deploys the configurations to the runtime servers. The Interact API needs to reference several of the configuration elements within the design environment. API must work together to agree on naming conventions, element purpose, and so on. This is an iterative and collaborative process. As the person works with the Interact API and the touchpoint, may need to create more events and interaction points. As design the interaction in the design environment, may have more requirements. During runtime, the Interact API does request information from interactive flowcharts and treatment rules, however the API calls for that information indirectly. For example, the API never calls an interactive flowchart[3]. However, the API does call an event requesting a re-segmentation, which runs all of the interactive flowcharts associated with the interactive channel. Likewise, when the API requests offers with the get Offers method, that starts a sequence of events that includes referencing the treatment rules. When a runtime session starts, that is, when the visitor initiates a contact, the Interact API triggers a startSession.

- a. WebSphere Portal[4] includes several new functions and enhancements that make it easier to design, administer, and use. Portlets are a central part of WebSphere Portal. Portlets are small portal applications that are independently developed, deployed, managed, and displayed. Administrators and users compose personalized portal pages by choosing and arranging portlets, resulting in customized web pages.
- b. In WebSphere Commerce,[7] the server runtime defines the framework for handling system and user requests, and performs the appropriate business logic to process the requests. The framework is built using an MVC design pattern and provides an environment that hosts business logic and handles persistence. It performs such

tasks as transaction management and session management.

- c. WebSphere Commerce and WebSphere support a variety of security mechanisms that can be used to protect access to data and other assets of the server. The access control framework in WebSphere Commerce prevents users for executing particular business logic. Not only does this access control framework provide fine grained control on business logic, it also provides the flexibility to restrict access on what data the user is allow to view and modify. A visitor logs into a web site and navigates to a page which displays offers. The visitor selects an offer and logs out. While the interaction is simple, there are several events which occur both in the touchpoint and the runtime server. When a visitor logs in, this triggers a startSession. startSession method does four things. First, it creates a new runtime session. Second, it sends a request to load the customer profile data into the session. Third, it sends a request to use the profile data and start an interactive flowchart to place the customer into segments. This flowchart run is asynchronous. Fourth, the runtime loads any offer suppression and global and individual offertreatment information into the session. The session data is held in memory for the duration of the session.

**C. Integration:**

Enterprise Marketing Management (EMM) Suite is an end-to-end, integrated set of capabilities designed for the needs of marketing organizations. EMM Suite empowers organizations and individuals to turn their passion for marketing into valuable customer relationships and more profitable, timely and measurable business outcomes. EMM Suite helps marketers understand customer wants and needs and leverage understanding to engage buyers in highly relevant, interactive dialogs across digital, social and traditional marketing channels. EMM provides robust web and customer analytics, event detection, campaign management, real-time interaction management [6] and recommendations, lead management, digital marketing optimization, email marketing, targeted advertising, search engine marketing and marketing resource management capabilities. By integrating websphere commerce and interact provides rich commerce functionalities, if a customer has accepted an offer on Web site, it can use that data in Campaign to ensure either that the same offer is not sent by mail, or that it follow up the offer.

The design environment is where perform the majority of Interact configuration. In the design environment, define events, interaction points, smart segments, and treatment rules. After configuring these components, deploy them to the runtime environment. The design environment is installed with the Campaign web application. An interactive channel is a representation in Campaign of a touchpoint [4] where the method of the interface is an interactive dialog. This software representation is used to coordinate all of the objects, data, and server resources involved in interactive marketing. An interactive channel is a tool you use to define

interaction points and events. It can also access reports for an interactive channel from the Analysis tab of that interactive channel. Interactive channels also contain production runtime and staging server assignments. It can create several interactive channels to organize your events and interaction points if you only have one set of production runtime and staging servers, or to divide events and interaction points by customer facing system. A profile is the set of customer data used by the runtime environment. This data can be a subset of the customer data available in your customer database, data collected in real-time, or a combination of the two.

The Interact application programming interface (API) can work as Java serialization over HTTP or as a SOAP implementation to integrate Interact with touchpoints. Designing Interact configuration is a multi-step process involving many people in organization. This focuses on the various configuration steps required within the design environment. A large portion of the Interact configuration consists of setting up the integration with touchpoint using the Interact API [6]. For details regarding working with the Interact this diagram shows a linear progression, in practice, many people can be working on different components at the same time. A store that contains a collection of sharable resources (business artifacts, business processes, and storefront assets) that can be leveraged in other types of stores. For example, a catalog asset store is a collection of catalog artifacts that creates a virtual catalog. A storefront asset store is a collection of JSP files, commands, business processes (for example order processing), business policies and access control policies that create a virtual storefront. Asset stores do not perform or record business transactions. They are simply holders of assets that can be used by other stores.

**III. CONCLUSION**

Integration of Interact with websphere commerce achieves goals like Recommendation of different offers to the customer using Interact in WebSphere Commerce. To provide Standardization, Automation and Organization. Customer response, identify best product for Customer sell and forecast lifetime value. Campaign provides an easy-to-use graphical user interface that supports the direct marketing processes of selecting, suppressing, segmenting, sampling, and creating output lists of customer IDs. Campaign’s Universal Dynamic Interconnect (UDI) data communication layer allows you to seamlessly access and manipulate data from all of your data sources, including relational databases (regardless of database type) or flat files Campaign treats a marketing campaign as a discrete entity that is made up of one or more flowcharts, which are in turn comprised of one or more processes. A campaign can be associated with one or more strategic segments, offers, and reports, and can consist of multiple flowcharts. which are the building blocks for campaign, protocol analyzers.

#### IV. REFERENCES

- [1] Hoffman, D.L., Novak, T.P. and Chatterjee, P.(1995) , ``Commercial scenarios for the Web:opportunities and challenges'', Journal of Computer-Mediated Communication, Vol. No. 3, pp. 1-20.
- [2] Angehrn, A. (1997) , ``Designing mature Internet business strategies: the ICDT model'',European Management Journal, Vol. 15 No. 4,pp. 361-9. I. S. Jacobs and C. P. Bean, "Fine particles, thin films and exchange anisotropy," in Magnetism, vol. III, G. T. Rado and H. Suhl, Eds. New York: Academic, 1963, pp. 271–350.
- [3] Neng Wang. Material information management system design in enterprise. 2010 The 2nd International Conference on Computer and Automation Engineering (ICCAE), 2010, (4):521-525.
- [4] Ju-Pak, K.H. (1999) , ``Content dimension of Webadvertising:cross-nation comparison'',International Journal of Advertising, Vol. 18,pp. 207-31.
- [5] YU Jian-yuan and LI Yong-qiang,“On Integrated Marketing for Quick Marketing Response System——Marketing Theories and Methods in Post-industrial Era,” China Industrial Economy. Beijing, vol. 4, pp. 111–118, April 2005.
- [6] Kalakota and Robinson, E-business: The Race to Mobility.McGraw-Hill Publishing Co., 2001.
- [7] Zhang Jing. “Concepts Distinguished of E-commerce and E-marketing”. Commercial times, Peking, China,2005(33), pp.51-52.
- [8] Addison Wesley, Ravi Kalakota, Marcia Robinson.E-business: Roadmap for Success. 1999.