

# The process

# 5ive process competency...

The new order economy is poised to bring about drastic changing in the way you do business, the digital economy shall in the near future leave the basic scope of business only for two categories of companies - companies that do business on the net and companies that do not do business at all. We at **eSols** Worldwide with our insights and techniques, use technologies to develop ENTERPRISE AND CUTTING EDGE SOLUTIONS for you that provide the much-needed edge in the digital architecture.

The 5ive process model combines all the essential domains in the digital order and delivers the much more than technology to your business. The model combines our skill sets in all the domains of technologies, techniques and process to churn out the solutions to transform your bare ideas and your existing businesses into successful digital enterprises. The 5ive process model compliments our expertise and services and blends into the framework of your enterprise to deliver the perfect digital solution. We implement the 5ive process model and partner with you through the entire PRODUCT/PROJECT life cycle of your enterprise, from conceptualization to completion and help you carve your niche in the new order economy.

The in-depth understanding of your business and enterprise is highly essential for the accurate development of the digital strategy. The domain knowledge of your enterprise ensures the precise input for the application development for your ENTERPRSE SOLUTION. The application development process takes into the account the deliverables of your digital enterprise and the right platform for the operation of the same. This process forms the backbone of your digital business solution. The data administration and content management process revolves around the fact that the best of applications developed require the right quantum and quality of data and content to deliver the best. This process ensures that the data updating and the content management procedures are absolutely seamless in architecture and ease of use and operation is of primary concern. The audience development process caters to the requirement of the precise content reach the user vide the perfect methodology. This process ensures the user has a rich experience and thus ensuring the success of your enterprise initiative. Finally the technology enhancement process keeps a tab on the technologies evolving in the digital world thus ensuring that that your enterprise initiative is abreast with the latest technological trends and is capable of delivering the right kind of content to your user in the most interactive way possible. The technological edge shall for a fact ensure the highest efficiency for your digital enterprise. The 5ive process model that all the diverse competencies and cutting-edge technologies are integrated for the success of your digital enterprise. This is the 5ive process model.

The 5ive process competency model

- Understanding the Business Process
- The Application Development
- > The Data Administration & Content Management Process
- > The Audience Development Process
- > The Technology Enhancement Process

#### UNDERSTANDING THE BUSINESS PROCESS

This process involves **eSols** Worldwide engaging in the in-depth understanding of your enterprise. At **eSols** Worldwide we consider this domain knowledge extremely essential as this forms the base of all the other steps in the 5ive process model. This process gives us the power to develop the ideal solution for your digital enterprise and helps us define how best can we leverage the Internet and other networking solutions and technologies for your digital endeavor.



This process includes the in-depth study of your business process, the marketplace your enterprise operates in, the target audience, your customer, your value sources, your deliverables and also your competition. This process could in certain situations result in the inclusion of new products and services, an extended targeted audiences and reshaping the value chain that your enterprise operates in, to leverage the maximum from your competencies in conjunction with the technologies to be implemented. The process of understanding the business process involves the analysis of the value chain, business efficiency and information flow, these parameters are used to spot additional sources of value in the entire enterprise structure. These sources essentially arise from the integration of technology into the business process for the web initiative. This process enables us to develop the base for the processes down the ladder in the 5ive process model, which eventually ensures that you leverage the fullest potential of the Internet and other networking solutions and technologies in your digital endeavor. This process has taken many enterprises to the digital path, it has enabled many enterprise gain the digital edge, retail chains have been created out of the corner stores and leader created along with niche segment powerhouses in the new order economy. At eSols Worldwide this process is considered and executed with utmost concentration and all the expertise pooled to create successful digital enterprises.

# THE APPLICATION DEVELOPMENT PROCESS

The application development process is at the nerve center at eSols Worldwide, where the code for the heart of the digital solution is generated. The application development process consists of customized and high-end solutions and interfaces designed and developed for your projects. These applications are always in conjunction to the feedback and the input from the other processes of the 5ive process module. The architecture of the applications is designed with the precise input from the other processes, the platforms to be used in the developmental architecture, the cutting-edge technologies and skill-sets enhancements. Some of the platforms and technologies that the development team at eSols includes: ASP, Site Server, SQL, VB, COM/DCOM, PHP, mySQL, Java, EJB, Servlets, J2EE, JSP, Web Sphere, Net.commerce, Oracle, JavaScript, Web Logic, Dreamweaver Ultradev, Flash, and Generator. The application development and the platforms to be used are zeroed on keeping into view the inputs and the feedback from the various processes; based on them the front-end for the perfect user interaction (the ideal GUI), the precise navigation and flawless data flow is arrived at. The backend for the application development process is decided upon with feedback from various processes pertaining to the user logins the data updating and the security. Similarly coordinating between the front end and the backend the middleware (our product NETLOGISTIX) is put in to place. Further depending on the extent of personalization and interactivity required various other servers are plugged into the application development process. The applications developed in this process are integrated carefully and meticulously with the other processes as they rely largely on the integration of these applications. The audience development process provides valuable feedback for the applications development, the inputs from the business understanding process forms the basis of the applications to be developed for a particular digital enterprise solution. The gray cells involved in the application development process based on the input from the other processes converge with the graphic designers database managers, the information designers and front-end programmers and develop interfaces that bring the digital endeavor of the enterprise to life.

# THE DATA IS CONTENT HERE, WHICH LEADS TO KNOWLEDGE MANAGEMENT THE DATA ADMINISTRATION AND CONTENT MANAGEMENT PROCESS.

This process deals with the aspect of the periodic updating of the databases and the content for the online user community in a digital enterprise. After the application development process is through and the applications have been deployed, there obviously is the requirement for the regular updating of the data and the content. We at **eSols** Worldwide believe that this data updating and mining forms a critical part of content management process and should be automated to the extent of comfortable interfaces for a non-technical individual. The administration model is of very high priority and plays a vital role in the maintenance of the



product. The content management system has accurate modules for dynamic updation of the content, the archival of data, progressive indexing systems, secure administrative controls and scheduled deployment system. The data administration system should allow complete control on the registrations, the restricted and administrative access to the various user databases, the personalization controls and a monitoring system for the user habits. The data administration and the content management process further on plugs in the personalization server; this per-se controls the data, content and the parameters being served to the online user. This process tracks the user habits, the navigations and maintains the records by databases; these records serve as the input for the user logins, the personalization server tracks these accurately. This process also aids in the delivery of mass mails, for the purpose of newsletters or announcements. This process ensures the smooth operation and connectivity between the other processes of the 5ive process model.

# THE AUDIENCE DEVELOPMENT PROCESS

The personalization process is the major contributing factor to the audience development process; this process almost gives an infinite nature to the content of your digital enterprise. The architecture of the audience development process is based to a great extent on the inputs received by the site and the scalability of the modules in the application development and personalization server process to handle and interpret the same. Development modules such as chat servers, discussion forums, contests servers and ad-servers add tremendous value to your digital enterprise. These modules deliver a rich experience to your online community. The information architecture is meticulously designed and deployed to offer the online data and content in the best possible way. The navigational flow and the shortest possible path to the relevant content are the two important aspects that are kept in the forefront of the audience development process. Rigorous user beta testing and experimentation with different ways of navigation with the digital enterprise perfects these methodologies. The process of the study of your business process is the backbone of this audience development process; the habits of the targeted user community, the basic requirements, the quality of the digital experience and the identification of value chains within the brick and mortar architecture provide the fatal input to the preceding processes. This audience development process essentially is the most important indicator to the success of your digital enterprise.

# THE TECHNOLOGY ENHANCEMENT PROCESS

This process essentially addresses the need for the constant incorporation of cutting-edge and leading-edge technologies within the architectural framework of your digital enterprise. This process of evolving new technologies to increase the efficiency of the delivery platforms to your online audience and thus enriching the online experience of the community also assists in the audience development process. This process also throws open new avenues for you digital enterprise; such as the developments in the mobile application have the online communities moving towards an entirely new host of wireless applications. Your digital enterprise can thus converge on these wireless applications, eventually widening the scope of the entire business model architectural framework. The technology enhancement is a seamless process and shall continue to emerge and converge within and beyond the architecture of your digital enterprise.



# DE Model...

The evolution of business-to-business trading systems has seen the parallel progression of six areas of focus - collaboration, procurement, supply chain management, customer management, auctioning, and content management. The convergence of these segments provides a full-service solution for marketplaces that links companies while spanning all areas of their customers' businesses from supply chain needs, to product life cycle and customer management requirements. To support this wide range of customer needs while minimizing marketplace management efforts, a technology platform that provides standard tools and re-usable components is needed.

The Requirements The DE-Model Highlights

# THE REQUIREMENTS

This platform, needs to

- be based on industry standards wherever possible;
- > have an extensible, multi-entity data model to facilitate true many-to-many processes;
- > support distributed transactions across multiple applications and organizations;
- have an open application programming interface (API) for easy integration with other marketplaces and applications;
- > have access to and allow creation and management of rich content; and
- have a personalized user interface (UI).

At its core, the platform must have certain critical technical components:

Security - covering both outside the firewall as well as inside the marketplace's firewall; Monitoring - tools to ensure that users are getting good response times across all applications; Integration - tools that provide easy integration to customer data sources and applications; Content - formatted and unformatted data for user needs;

Robustness - tools to ensure that applications are as close to 100% available as possible; Collaboration support - using workflow tools and;

M2M (Marketplace-to-Marketplace Integration)

In addition, the platform should have certain critical business components

- > User profile management tools to reduce administration efforts.
- Site management tools to administer which services are being offered and to whom and; content syndication and rendering.
- Billing management tools that allow a marketplace to accurately bill its subscribers based on their usage.
- > Marketplace transaction management tools to track transactions through their lifecycle.
- > Catalog management tools to manage formatted content.

Furthermore, there are a number of nice-to-have features for marketplaces to increase user retention and easier to maintain. These include

- Personalization tools to support rule-based content display;
- Analytic tools to facilitate intelligent reporting and data analysis;
- Workflow tools to enable redesign of services;
- Deployment tools to quickly react to customers' changing needs and;
- > Communication tools to facilitate integration with EDI, Fax, Email, wireless devices or XML.



# THE DE-MODEL

The DE-model Platform meets these needs by providing an integrated solution that employs an open, standards-compliant architecture. The DE-model Platform is comprised of six logical components.

A Personalized UI Content Management Tools Transaction Back-plane Supply Chain Model Marketplace Management Infrastructure and Integration

The DE-model Platform provides

- > a complete infrastructure for secure, robust and scalable performance of both private and public marketplaces.
- $\succ$  quick time to implement.
- > a personalized UI that creates marketplace "stickiness" through a tailored user experience.
- > marketplace enablement via a supply chain model.
- > increased revenues through marketplace-to-marketplace integration.
- confidence to handle complete transaction lifecycles across multiple entities and marketplaces.
- > a common infrastructure for deploying multiple services.
- support for multi-enterprise optimizations.
- > a platform to handle present and future needs- minimized administration costs.

The DE-model Platform is a set of interoperable tools, applications and services that allows trading communities to create architectures that support their marketplace deployments. Leveraging "best-in-class" components, the DE-model Platform provides a wide variety of technical and business functions. The DE-model Platform supports the six DE-model solutions: Design, Buy, Plan, Sell, Fulfill, and Service. The Content layer supports these intelligent business applications and both are managed by the DE-model Platform.

#### **HIGHLIGHTS**

The DE-model Platform is made up of six key layers that can be used individually or in combination.

Personalized UI - provides an ideal user experience through a rules-based display engine;

Content Management - provides content creation and management tools;

Transaction Back-plane - provides transaction lifecycle management across multiple applications and entities;

Supply Chain Model - permits the storage of constraints that affect the marketplace users including pricing, contracts and business relationships;

Marketplace Management - provides the user and marketplace service management tools;

Infrastructure and Integration - ensures open, scalable, robust, and secure operations and integration with other marketplaces, applications and data sources.

#### PERSONALISED U I

Personalization, in the simplest sense, allows consumers and organizations to benefit from the interactivity and rich content delivery enabled by the Internet. This service provides content and promotions that can be delivered to a segment of one, based on the organization's understanding of the unique needs of the consumer. This understanding is captured as a set of heuristics. There are three levels of supported personalization.



Static - keeps track of key clicks and changes the display between sessions based on the heuristics.

Dynamic - in addition to Static functions, changes the display during a session based on the user's actions.

Intelligent - in addition to Dynamic functions, changes the display based on the real-world constraints.

#### CONTENT MANAGEMENT

Content, either in a formatted form such as a catalog, or in an unformatted form such as a news stream, needs to be managed, possibly by aggregating information. Once the content is available, it may be presented in a personalized fashion using heuristics to enhance user acceptance and, ultimately, to increase marketplace revenue. Catalog Management of catalogs is facilitated by this service, which provides the ability to administer the catalogs and their publication. This service is also fully integrated with the DE-model Platform Personalized UI.

#### TRANSACTION BACKPLANE

#### Transaction Management

When a transaction, such as an order, is created on the marketplace, the marketplace needs to track it throughout its lifecycle to completion. This is done through the Transaction Management tool, which tracks the order from a technical and business point of view across multiple entities.

#### Financial Settlement

Once a transaction is complete, the Financial Settlement tools ensure that the vendor receives payment. Leveraging leading vendors' tools and services gives the marketplace owner confidence that transactions will be successfully completed in a timely manner.

#### SUPPLY CHAIN MODEL

For optimal business interaction, the marketplace needs to keep track of participants' business rules; for example, constraints relative to supplying goods and services, and constraints relative to procurement. These constraints could include buying/selling contracts, flexible pricing models, preferred vendors lists, excluded companies lists, excluded countries lists, and capacity restrictions. The Supply Chain Model is used by the marketplace to optimally co-ordinate buyers, sellers and other trading partners. This environment is typically seen in a Private Marketplace where the marketplace owner co-ordinates its partners. This could also occur when two or more parties form a virtual private marketplace within the public space.

#### MARKETPLACE MANAGEMENT

When managing a marketplace, there are a number of administrative activities such as

- offering particular services on the site;
- providing access by particular companies and their employees to specific services and content;
- billing and recognizing marketplace revenues; and
- using reporting tools to analyze activities and plans.

The Marketplace Management layer of the DE-model Platform provides these services.



#### Site Management

The ability to manage the services provided on the marketplace is provided through the Site Management tool set. This works with the Content Management service to ensure that the correct users have access to the correct services.

#### Billing Management

Based on the user's profiles and the Transaction Management module's accumulation of individual transactions, the Billing Management solution collects users' bills until the billing milestones, as stipulated in the user's profile, are reached. Billing Management then creates appropriate bill records, which can be funneled through a company-specific solution or printed directly from this solution.

#### Profile Management

The Profile Management solution provides a single repository for managing marketplace user accounts. Data includes preferences, billing profiles, subscribed services, and other common data. To facilitate administration, these profiles can be kept in a four-tiered hierarchy such as: - Global entity- Division entity- Group level- Single user.

#### Analytic/Business Process Intelligence

The Analytic/Business Process Intelligence solution provides rich and deep business process intelligence on the data collected through the marketplace. Stored in a multi-dimensional OLAP reporting cube, this can be used to improve profitability and revenues.

#### MARKETPLACE INFRASTRUCTURE

The Marketplace Infrastructure components are a set of interoperable tools that provide commonly used functionality in an open, scalable, robust, and secure environment.

#### Security

The Security service is a software solution which gives IT and business personnel confidence that IT operations are safe and secure. Supporting both internal and external operations in a threetiered approach, the Security service ensures that multiple transactions within middleware layers are secure. Supporting such features as single sign-on, authentication, authorization, secure communication (TCP/IP, messaging, IIOP), firewalls, privacy and encryption, application licensing, and non-repudiation, the Security service is a rich and deep solution that covers the needs of public and private marketplaces.

#### High Availability (HA)

The DE-model Platform HA service provides continuous access to corporations including those with global sales and service needs. With a scalable architecture designed to handle large volume transactions in a perpetually changing environment, the HA solution presents a customizable solution than can keep pace with worldwide organizations' future technology advancements while providing reliable, fail-safe capabilities that support today's needs



# **Communication**

When an application needs to send or receive information, it should do so without concern as to the destination's needs. The Communication service allows this by providing a standards-based technology framework for EDI, e-mail, fax, XML, and wireless adapters.

#### Session Management

When a user loses a connection during a session, the session manager will attempt to reconnect the user to that precise instance when they log back on, if that is the preference established in the user profile. This tailor-able service includes time-out features.

# Directory Services

The Directory Services provide user referrals, replication and federation to ensure smooth management of users and applications.

# <u>Deployer</u>

With the ever-increasing rate of IT and business changes, it is necessary for process owners and IT personnel to be able to react in a quick and efficient manner. These changes can be driven by: - changes in business processes;- application changes, either via iterations or completely new applications;- process loads; and,- hardware configurations.As a result of these changes, companies have a need for a toolset that can quickly deploy and re-deploy applications, sub-workflows and entire workflows, with little effort and time. DE-model Platform Deployer provides this functionality and is fully integrated within the DE-model Platform.