



CENTER 7/INC.

BUSINESS IN MOTION | WHITE PAPER
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Overview

Even by the most conservative forecasts, the growth of electronic commerce is projected to increase at phenomenal rates over the next several years. E-commerce and the Internet will be part of every successful business strategy. Given this environment, what is the quickest, least resource intensive, most reliable way to get a new or existing business online? Companies that are seeking to rapidly implement e-commerce solutions will find a comprehensive and powerful set of 'ready-to-run' e-business services available from Center 7.

Center 7's rapid-assembly Profit Center solutions include services like shopping cart, order management, payment processing, tax calculation, membership services, personalization, reporting, management and more. Each of these services is easy to customize and has been thoroughly tested under enterprise level, real world conditions. Creating an e-commerce solution using Center 7's Profit Center is the quickest way to get online. Companies can feel confident knowing that Center 7 provides a support infrastructure that will accommodate the highest volumes of traffic and the most massive e-commerce applications.

Center 7 provides these services based on a distributed collection of state-of-the-art data centers. This ensures robust scalability, endless bandwidth and the highest levels of redundancy and fault tolerance. These services and applications are hosted and available anywhere on the Internet through C7's world class network operations center and an innovative virtual network of storage and management services. Using Center 7 Profit Center, any e-business solution can be designed, deployed and operational for heavy and sustained use in a matter of weeks.

Profit Center services are accessible and operational through Center 7's HotFramework™ technology using a few lines of HTML, C++ or Java code. A distinct advantage of Center 7 solutions is the use of neural agent/Neugent technology from Computer Associates that not only monitors hardware but also intelligently monitors e-commerce applications and Web processes. This ensures the highest levels of availability and provides advanced tracking and management for application usage and load balancing.

This paper outlines the first wave of Profit Center e-business services available from Center 7. The C7 solution will be of interest to any company that requires rapid implementation of e-commerce services using an infrastructure that is reliable and designed to accommodate the most demanding applications and traffic levels.

Current Situation

Brick & mortar and dotcom companies large and small are not only scrambling to get online but are scrambling to stay current with new services and technology once they are there. For many of the early online businesses, building their own in-house, self-managed solution was the only option. This involved creating a custom solution that required custom Web development, database design, hardware procurement, Internet connection setup, integration with existing applications and a host of other requirements. Once an e-business system is in place, it requires ongoing management, maintenance and development to keep current with the fast-paced evolution of online customer requirements.

As the Internet and Web-based businesses have evolved, several leading solution vendors have emerged with specialized fields of emphasis. Applications have emerged that provide complete pre-packaged or semi-packaged services in the areas of storefronts, order management, transaction processing, fulfillment, accounting and finance, human resources, ERP and many more.

At the same time, Internet data centers have appeared. These sites provide hardware, storage and data connections in a secure, redundant and constantly managed facility. Data centers enable dotcoms and organizations to outsource the costly IT and physical asset management and only pay for the services and resources that they actually use.

Center 7 combines solutions from the leading Web application vendors and service providers with a distributed collection of state-of-the-art data centers to enable any e-business, dotcom or brick & mortar company to get online quickly with the best in e-commerce applications. The C7 advantage is that best-of-breed e-commerce applications, already been proven in real-world situations, are now available through a world-class hosted service for easy integration.

The Center 7 Solution

Center 7 is a new class of service provider that enables e-commerce solutions to be quickly deployed and easily maintained, even under the harshest rapid growth and high volume conditions. ASPs, dotcom companies, and brick & mortar institutions can quickly assemble a complete e-commerce solution and be fully 'open for business' in a matter of weeks.

The complete C7 solution is possible through arrangements with key technology partners such as Computer Associates, IBM, Sun Microsystems, Netscape, Allaire, Oracle, MTI, Evergreen, CyberCash, CyberSource, VeriSign, Vignette, and data center partners including Broadwing Communications, Qwest, and Level 3.

The selection of e-commerce of services available from C7 includes all of the functions that are required for a comprehensive online commerce presence. The major categories of C7 Profit Center services encompass the following:

Order Management - Order management includes all functions required to make a particular item or service available through the Internet. Services available from C7 include shopping carts, transaction engines, catalogs and merchandising tools. An integrated order management system enables customers to easily search, browse, compare, price, procure and pay for goods and services. The key success factor in an order management solution is a logical flow of information at the right level of detail throughout the procurement process.

Underlying technology that supports a good order management solution includes targeted search engines, product databases, pricing mechanisms and other e-business process integration. Targeted search allows customers to flexibly search for items by name, class, price, description or related key words. Search results can be refined or reordered enabling customers to find what they are looking for with the least amount of effort.

Properly designed product databases are integral to the overall success of any e-business solution. The product database is the source of all related item information including descriptions, characteristics, pricing, availability and associated media files such as photos or descriptive audio/video. Product databases are also an integral link with other e-business processes such as fulfillment, inventory and merchandising.

Pricing mechanisms allow merchants to automate the process of promotions, frequency and favored customer discounts and other pricing schemes. Merchants require the ability to alter prices based on events (sales), customer profiles (volume buyers), categories of goods (winter stock) or for all products (20% off everything). Adequate pricing mechanisms enable merchants to easily price products at any point to receive optimal revenue.

Another key order management component is bill presentment. C7 solutions calculate totals, apply discounts and present billing information in flexible formats. Bills may be enhanced with marketing information or customized to provide customers with other purchase related options.

Each order management function easily integrates with other e-business functions. Product procurement impacts inventory management, shipping, payment processing and should be reflected in any business analytics. C7 order management solutions are designed and pre-tested to seamlessly integrate with other e-business applications providing a framework on which to build a comprehensive and complete e-commerce solution.

Transaction Processing - The successful exchange of goods and services is dependent on a reliable and efficient transaction of currency. Center 7 incorporates the world's leading transaction processing services such as CyberSource, Signio (VeriSign), CyberCash and others.

Transaction processing includes the secure acceptance of payment information, payment authorization and verification, and the actual transfer of funds.

Several factors determine the success of e-business transaction processing. Security is a chief concern among both merchants and customers and providing adequate security mechanisms is mandatory. Authenticated, encrypted access, fraud detection, address verification, secure connections, and the ability to create custom business rules to prevent product or pattern specific fraud are solutions available with C7's transaction processing applications.

Merchants maximize revenue by accepting multiple forms of payment including credit cards, debit cards, corporate cards, electronic checks, gift certificates, coupons and establishing other financing vehicles such as loans or lines of credit. Other factors that impact a successful transaction processing solution include processing speed and transaction management. Reporting is also critical with access to information on which transactions have been processed, which are outstanding, which have been declined or are pending investigation. As with other e-commerce functions, it is important that transaction processing seamlessly integrate with other business processes such as finance and accounting.

Tax Calculation - Even though the U.S. government has not yet imposed a 'net tax', there are still significant tax calculations that are required for most transactions. C7 works with leading vendors to provide tax calculation for municipal, state, national, import and value added tax. Tax calculations can be integrated with bill presentment as well as book keeping and finance services for efficient and accurate accounting.

Fulfillment - The online purchase of an item triggers a sequence of delivery steps that can range from simple digital downloads to full warehousing and title transfer exchanges. Again, Center 7 works with leading industry partners to provide any level of fulfillment service required. For digital downloads, authentication and user validation are part of the process as well as dynamic generation of download URLs.

The purchase event initiates a 'customer update' process that notifies the customer of the successful transaction, verifies electronic proof of payment and then provides a virtual trail of information related to the physical location of the item. Delivery information and shipping status is available through integration with the world's leading shippers such as FedEx and UPS. Customers are provided product availability, processing, shipping and delivery status of purchases using a standard interface. Online fulfillment messaging methods include customer account management interfaces and e-mail.

Membership Services - Providing customers with a personalized experience online is the goal of membership services. An e-business site can allow customers to self-register and to provide profile information used to create a personal account management service for each customer. This enables rapid login, one click buying and also provides customers with transaction histories and a place to monitor fulfillment progress.

If gift certificates or coupons are used, customers can view redemption totals and account balances. Member services may also track discount opportunities or other cross-selling promotions as well as automatically notify customers during sales. Other membership tools include newsletters and e-mail, the ability to create member wish lists and product rating applications that allow customers to rate and recommend products or services.

Personalization - Web technology is providing a new class of solutions that enable merchants to know and understand customers more intimately. Using profiles and purchase pattern information, merchants can precision market to existing and potential customers. Based on customer preferences or past purchase behavior, a merchant can provide dynamic product recommendations or customized promotions.

E-business applications can deliver daily performance reports plus in-depth analysis of customer related statistics. Merchants can optimize advertising, promotion, and merchandising activities for measurable increases in sales, profitability, and customer loyalty.

By gathering profile or purchase sensitive information, merchants can employ highly effective cross-selling and up-selling tools. As the system learns a customer's preferences over time, recommendations become more relevant, needs are better matched and the likelihood of incremental purchases is increased. Personalization solutions also allow merchants to customize the user interface and user experience based on available information or profiles. For example, color schemes and graphics may be altered based on gender, indicated preferences or past buying patterns.

Other - The services mentioned above are several of the first tier e-business solutions available from Center 7. In addition, C7 is providing a complete list of other e-business applications and services that allow merchants to enhance or customize their e-business solution for specific uses and markets. Auctions, banner ad placement and tracking, directories, editorial vehicles, job postings, discussion forums, data mining, online training, surveys, sales management, project planning and many other applications are part of the Center 7 collection of services.

Integrating Center 7's Profit Center Services

Developers using Center 7 only need to map out the flow of Web/HTML pages with calls to the underlying services. In simple terms, rather than implementing a complete service, a developer only captures information through variables or XML and then passes it to the C7 service for processing. With a payment processing service for example, the developer would capture credit card number, name, address and expiration date in a *client interface* and then pass that information to C7's payment processing service where fraud detection, address verification, authorization, and funds transfer would be facilitated.

The Center 7 HotFramework™ architecture includes storage, testing and management services in addition to e-business applications. The entire system is centrally managed using Computer Associate's neural agent technology which monitors the status of every application, service and hardware component. Using Center 7, developers or e-commerce providers will be able to create a complete e-business site by laying out a web pages with a few lines of embedded HTML, C++ or Java code that access C7 services. The client interface will identify the desired service and pass the required parameters. All processing, storage, monitoring and management can be provided by Center 7.

Other services available through Center 7 include trade exchange components such as e-mail applications, mailing lists, directory services, online publications, job postings, project planning, business analysis, human resources, workflow, as well as security services such as firewall, digital certificates and intrusion detection. C7 is also providing services for access to legacy ERP, CRM, accounting and mainframe information with data translators, channel adapters, connectors, etc.

Summary

Organizations of any type that are seeking to quickly and effectively deploy an e-business solution can do so with Center 7. C7's Profit Center services and HotFramework™ technology provide the infrastructure, management, and application capability to power the most sophisticated dotcom or brick & mortar enterprise.

The advantages of using Center 7 e-business services include:

- **Pre-packaged E-commerce Solutions** – Center 7 provides a complete collection of pre-packaged e-commerce solutions from leading vendors such as IBM WebSphere, WebLogic, Evergreen, Oracle, Sun Microsystems and others.
- **Flexible Integration** - Using open standard development tools and communication methods, C7 makes it possible for e-business solutions to seamlessly integrate with other applications such as inventory, ERP, accounting and financials, and link to other supply chain applications and partners.
- **Certified Service Level Agreements** – With pre-testing and C7's unique management services, clients can receive true service license agreements (SLA)--guaranteed levels of service--even for complex and distributed applications. C7 services allow companies to start at any volume of traffic and scale to any level without the need to re-engineer or expand infrastructure. Each C7 service is protected by triple redundancy with fail-over systems, multi-homed sites, redundant power and generator backup.

- **Time to Market** – with Center 7 client interfaces to services and applications, an Internet business can go from idea to full deployment in a matter of weeks instead of months. Company Web developers or C7 staff can create complex solutions with simple ‘Lego-like’ assembly, connecting client interfaces to established, already running, Center 7 services and applications.
- **Lower Costs** – C7's hosted service eliminates the need for initial cash outlays for hardware, software, backup systems, and implementation costs. Companies using C7 services are able to ‘pay as they go’, paying only for the services that they use.

To learn more, please visit www.center7.com