



**e-business case studies**

# Rediff.com:

India's preeminent Web portal



***Putting e-business to Work***



## **CONTENTS**

---

<b>Overview</b>	<b>2</b>
<b>Rediff's Key Success Factors</b>	<b>3</b>
<b>Adoption Strategy and Timetable</b>	<b>4</b>
<b>Return on Investment</b>	<b>6</b>
<b>Future Plans</b>	<b>8</b>

## **LIST OF FIGURES**

---

<b>Figure 1. Implementation Timetable for Rediff.com</b>	<b>4</b>
<b>Figure 2. Basic System Architecture of the Rediff.com e-business Solution</b>	<b>5</b>
<b>Figure 3. Benefits of the Rediff.com e-business Solution</b>	<b>7</b>

## Rediff.com

### The Company

- India's number one online brand
- Targeted at people of Indian origin worldwide

### The Web Site

www.rediff.com

- Over 70 million hits and over one million users per month
- Voted best site for Indian content by CNN Interactive
- Online store
- Hotel and movie reservations
- News and information services

### The Benefits

- 40% revenue from online sales, expected to double in two years
- 50% increase in online sales
- 100% ROI in two years
- Real-time customer service

### The Technology

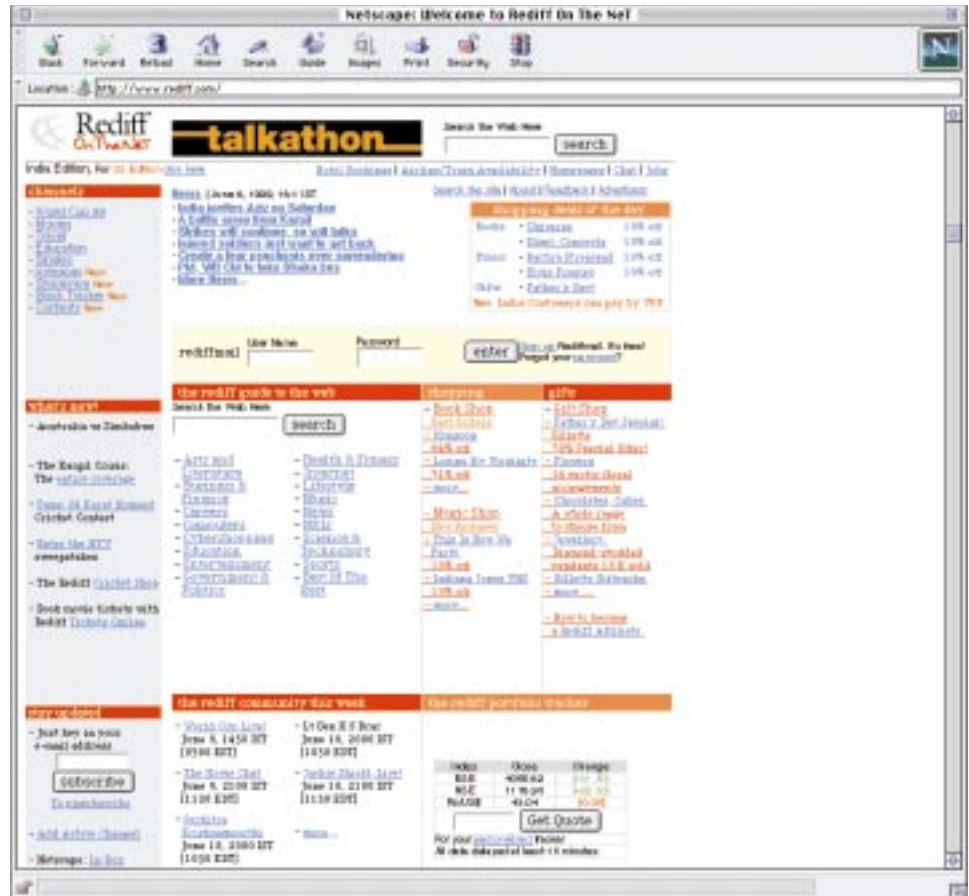
- IBM Net.Commerce
- IBM DB2® Universal Database
- IBM Net.Data®
- IBM Netfinity®

## OVERVIEW

### e-business case studies: Rediff.com

Rediff.com ([www.rediff.com](http://www.rediff.com)) is India's preeminent provider of online services and represents India's top online brand. Its influence extends far beyond India's borders, reaching millions of Internet users of Indian origin worldwide. With over 70 million hits and over one million users per month, Rediff's Web site has grown rapidly on the strength of its high-quality content and rich array of services.

This case study examines Rediff's use of IBM Net.Commerce as the backbone of its electronic commerce strategy. As Rediff continues to ramp up the utilization of its platform, it does so confident that Net.Commerce and Net.Data will provide the stability, scalability and flexibility needed to ensure success.



Rediff.com provides services to over 1 million users per month.

## REDIFF'S KEY SUCCESS FACTORS

Rediff, having established itself as an Internet pioneer in India, aims to establish itself as a world-class content and service provider. According to Rediff.com CEO Ajit Balakrishnan, much of Rediff's success can be traced to its bedrock strategy of providing high-quality, relevant, and engaging content. "Most other portals have focused on aggregation [of content] as their strategy," says Balakrishnan. "As a media entity, we believe what matters most is engaging content. This is even important in the area of books and music sales. Here, our reviews are always original."

In addition to quality content, Rediff has also delivered a rich array of transactional services that dovetail well with its strategy of high-quality content. These include:

- *Rediff e-Shopping* – An online service that enables the use of rupee-denominated credit cards, issued by Indian financial institutions, to purchase music (45,000 titles), books (100,000 titles), gifts and to make hotel reservations.
- *Movie Ticket Reservations* – Positioned as a time-saver for moviegoers, this service was introduced in Bombay in October 1998 and has been extremely successful.

Rediff has also solidified its offering with personal home pages, free e-mail services and a chat function that attracts users from around the world. Rediff's most recent development is a set of new channels designed to appeal to specific groups of users. The first such channel is targeted to students.

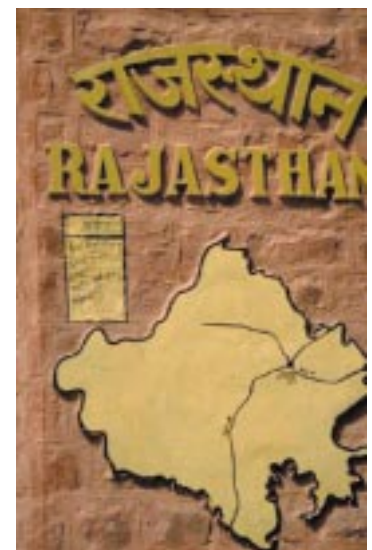
While quality content and services have helped Rediff.com build its site into a heavily-trafficked Internet powerhouse, it has also taken steps to bolster its business and financial footing – often the weak point for companies built around the Web. According to CEO Balakrishnan, speed to market has been the most important key to its success. "Being early in the market has had the benefit of providing lots of publicity, and this has saved us significant amounts of money." By reducing its need to invest in branding campaigns, Rediff has already established a positive cash flow – less than one year after launching its e-commerce initiatives.

Balakrishnan also points out that the success of the Rediff.com site is due in large part to Rediff's ability to create a unique experience, unhindered by technology limitations. Balakrishnan explains how Rediff's choice of IBM's Net.Commerce, Net.Data and DB2 was key to implementing its commerce vision: "What I've always liked about the Net.Commerce offering is the fact that it gives you a set of tools that allow you to build pretty much any kind of site that you want."

Balakrishnan cites its movie ticket sales platform as a prime example of Net.Commerce's customization strengths. "While Net.Commerce allows you to create standard shops, we wanted to do something unique for the selling of movie tickets, which are special because there are only a limited number of seats, and other special considerations. The benefit here was that you could easily program Net.Data to perform these functions using the macros. That's a great flexibility." This also underscores one of Net.Commerce's greatest assets: the ability to start simple and grow a solution quickly.

**"What I've always liked about the Net.Commerce offering is the fact that it gives you a set of tools that allow you to build pretty much any kind of site that you want."**

— Ajit Balakrishnan, CEO of Rediff.com



## Featured IBM Technology

### Net.Commerce

IBM Net.Commerce has the features you need to grow your business online. It's scalable, flexible and lets you leverage your current technology investments while offering your customers a dynamic shopping experience. [www.ibm.com/software/commerce/net.commerce](http://www.ibm.com/software/commerce/net.commerce)

### Net.Data

Net.Data enables Internet and intranet access to relational data on a variety of platforms. It provides high performance Web applications with robust application development function, giving you full support for Java. [www.ibm.com/software/data/net.data](http://www.ibm.com/software/data/net.data)

### DB2 Universal Database

IBM's DB2 family of relational database products offers open, industrial-strength database management for data warehousing, business intelligence, decision support, transaction processing and an extensive range of e-business applications. [www.ibm.com/software/data/db2](http://www.ibm.com/software/data/db2)

### Netfinity Servers

Netfinity servers are enriched with tools and solutions to help you control your environment more precisely, with less effort than ever before. Designed to meet your changing business needs, Netfinity servers offer solutions for small and medium businesses, e-business, business intelligence (data warehousing, data mining) and large enterprises. [www.ibm.com/pc/us/netfinity](http://www.ibm.com/pc/us/netfinity)

## ADOPTION STRATEGY AND TIMETABLE

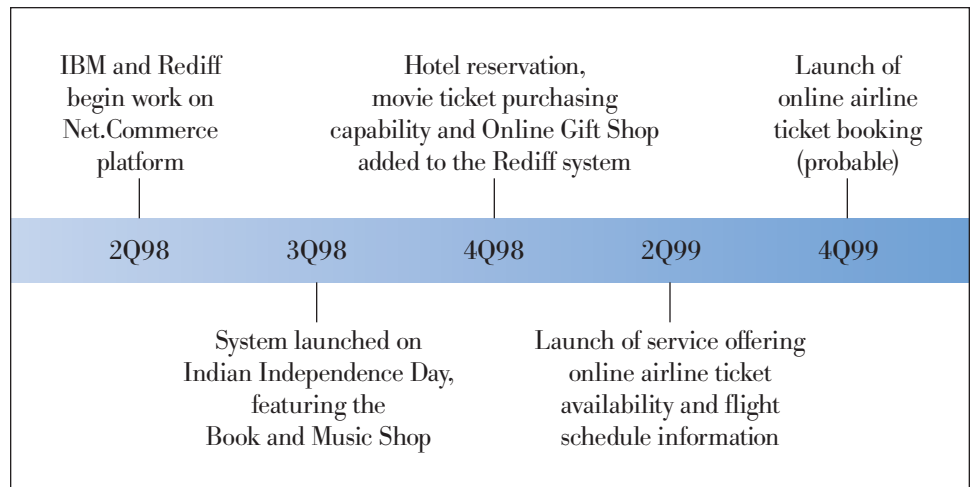
Rediff's Net.Commerce implementation resulted from the close collaboration of IBM and Rediff.com staff. IBM's main role in the implementation was to consult on the design and implementation of the Net.Commerce site, as well as to assist in training Rediff staff on the Net.Commerce solution. One of Rediff's key deployment goals was to have the system up and running by August 15, 1998 – the date which marks India's independence from Great Britain. According to Balakrishnan, the choice of August 15 was not a gimmick, but part of a well-planned marketing strategy designed to leverage the coincident dates. "The tagline [for the campaign] read 'on Aug. 15, Rediff will liberate you from the traditional way of commerce.' So it was, of course, very important for us to meet that date."

Rediff met the August 15 deadline, in large part due to the concentrated efforts of IBM staff operating out of the Bombay office. "We received a tremendous amount of assistance from IBM," says Balakrishnan. "IBM's people in Bombay really have hearts of gold. They worked with us day and night because it was important for us to launch it on time. I got the impression that the people from IBM were honestly concerned about our business."

Rediff's platform is primarily built around IBM technology, including a Microsoft Windows NT-based IBM Netfinity 5500 server, IBM Net.Commerce, IBM DB2 Universal Database and IBM HTTP Server. Rediff self-hosts its commerce applications using a public server at its Internet service provider as well as its own server located at its own facility; both servers run IBM DB2. The database residing on the public server contains product information (books, music, etc.), while the Rediff-owned server contains a mirror of the public database as well as sensitive corporate data accessible via an intranet protected by a firewall. The two servers are linked by a high-speed leased line.

In evaluating vendors for its planned platform, Rediff operated with discrete sets of criteria for software, hardware and services. Rediff's criteria for commerce software included:

- Performance and response to users
- Speed of search tools
- Ease of coding and implementation
- Security



Source: Rediff.com, 1999

Figure 1. Implementation Timetable for Rediff.com

Rediff's criteria for hardware included:

- Reliability
- Scalability
- Performance

Rediff's criteria for services included:

- The quality of upfront support and training provided by the service organization
- The ability to work with the Rediff team on solution design and implementation
- The service organization's ability to provide troubleshooting, optimization, and maintenance support once the platform had been implemented

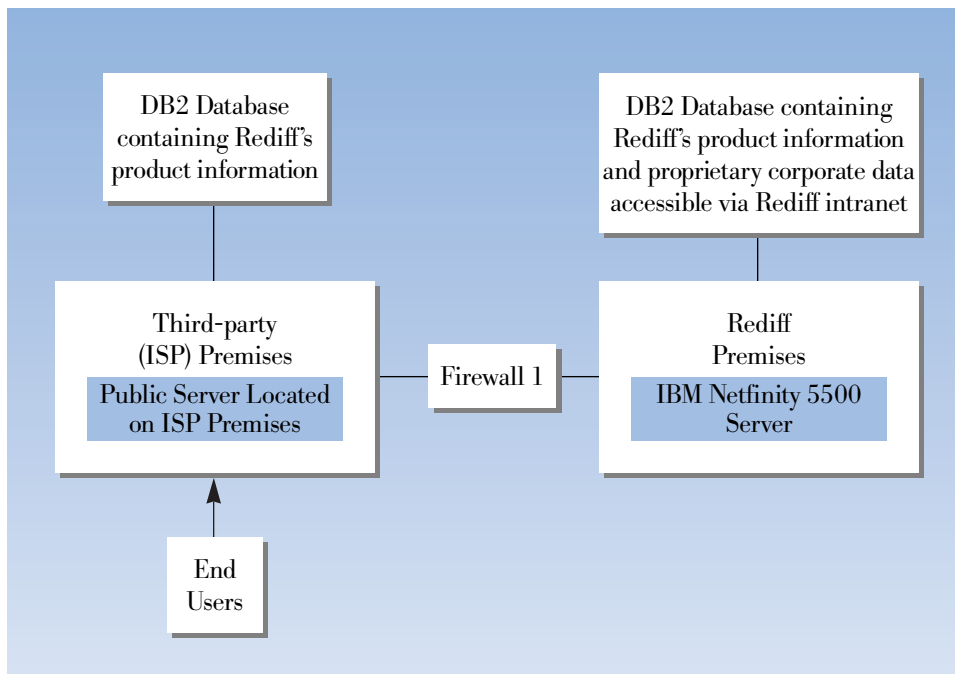
When Rediff.com was first rolled out as a commerce-ready site on August 15, 1998, its Book and Music Shops were the first areas to go live (see Figure 1). Rediff introduced its hotel reservation system in October, 1998, followed soon after by its Gift Shop (December, 1998). As a prelude to offering online airline ticket booking, Rediff also recently began publishing airline ticket availability and flight schedule information at its site. Rediff expects to expand the offering to include online ticket booking if usage of the existing service signals demand for more advanced services.

Other major Rediff initiatives using IBM technology include:

- Vendor intranet, implemented in September, 1998, that employs a DB2 database that allows vendors to view their pending orders for the day
- Customer information system, implemented in November, 1998, that allows customer service personnel to quickly answer customer queries on order status
- Web-based order tracking system, implemented in January, 1999

**“We received a tremendous amount of assistance from IBM. IBM’s people in Bombay really have hearts of gold. They worked with us day and night because it was important for us to launch it on time. I got the impression that the people from IBM were honestly concerned about our business.”**

— Ajit Balakrishnan



Source: Rediff.com, 1999

Figure 2. Basic System Architecture of the Rediff.com e-business Solution

## RETURN ON INVESTMENT

**“For any new site, the most important thing is the ability to ramp up volume... I’m very sure that DB2 and Net.Commerce will scale up to any level that we want.”**

— Ajit Balakrishnan

Rediff expects to recoup its e-commerce investments within two to three years. “The business is already generating a positive cash flow in less than a year of operation,” says Balakrishnan, who attributes Rediff’s strong performance to solid execution of strategy and vigorous volume on its e-commerce platform. Underlying Balakrishnan’s optimistic projection is the expectation that Rediff’s volume, which now stands at approximately 1.2 million users per month, will continue to grow rapidly. “We expect traffic on our Web site to more than double to three million visitors a month over the next two years, yielding a 100 percent growth in revenue from online sales,” he says. Over this same period, Balakrishnan expects revenue derived from online trading presently to rise from the current 40 percent of total revenue (with the remainder generated through banner ads) to 80 percent of revenues.

While Balakrishnan is confident about the prospect of double-digit growth, he acknowledges the challenges that a rapid ramp-up can present to an Internet-based commerce company. “Often, this is where major problems develop because you are successful beyond what you imagine you will be,” says Balakrishnan. “For any new site, the most important thing is the ability to ramp up volume. Having DB2, which is a proven platform that has been tested over the years, is important to me because at some time in the future all of the hardware behind this system is probably going to have to change. However, one cannot afford to change the applications. Even in the one year that [the commerce-enabled platform] has been in operation, we have invested a lot of time and money in application development, and it is important for us to preserve this. I’m very sure that DB2 and Net.Commerce will scale up to any level that we want. For me, the most important source of ROI is the knowledge that we will not have to rewrite that application as we grow the base of users. That’s a great thing.”

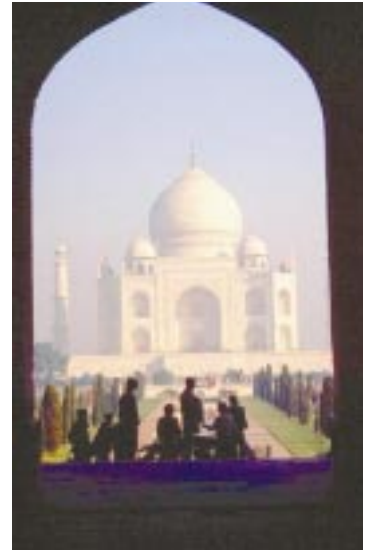
Balakrishnan points out that another major benefit of using the Net.Commerce platform – also related to its inherent scalability – is the ability to better leverage strategic marketing initiatives like branding. “By allowing us to capture more of the market, and scale as the market grows, we will be getting a better payoff for all the investments we have made in marketing and brand development,” says Balakrishnan. “When a customer seeking to access the site is turned back due to network function or any other reason, the costs are enormous.”

On a more basic level, Balakrishnan also lauds Net.Commerce and DB2 for their simplicity and flexibility, which have enabled Rediff.com to steadily improve its platform with the use of moderate resources. A good example of this is seen in Rediff’s deployment of a customer tracking function using DB2. Balakrishnan explains: “When you’re conducting e-commerce, it’s important to track customers so that you know them and can serve them better. We have written customer tracking applications with DB2, and the ease with which this has been done has been a major advantage for us.”





Balakrishnan further notes the ease of administration and content management provided by the Net.Commerce platform. “The Mass Import feature simplifies updates to the e-commerce database, while the administrative interface provides for fast file updates and allows content to be uploaded in a smooth and efficient manner. The update facilities and the mass import facility also provide an easy to use interface to quickly add new products and update existing data so that new shops can be set up for specific events with ease.”



Overall ROI Benefits	
Function	Benefit
Deployment	Ease and speed of initial deployment Ease and speed of writing new applications
Store design	Increased flexibility in storefront design and merchandising
Capacity	Increased protection of application development investments as site volume increases
Commerce Volume	50% increase in online sales; 40% total revenue derived from online sales, expected to double (to 80%) in two years
Administration and Content Management	Simplified database updating and importing
Sales and Marketing	Ability to better leverage strategic marketing initiatives such as branding campaigns

Source: Rediff.com, 1999

Figure 3. Benefits of the Rediff.com e-business Solution

## FUTURE PLANS

**“There’s no question that our choice of IBM technology will help us to overcome our challenges and to thrive.”**

— Ajit Balakrishnan

Rediff’s most immediate future plans include the addition of online airline ticket booking, which it expects to introduce in the near term. Other enhancements to the Rediff.com commerce platform include the addition of online payment authorization and a single shopping cart for all shops. Balakrishnan expects that these changes will result in an enhanced shopping experience and, ultimately, a substantial increase in site traffic and commerce volume. Rediff also plans to upgrade its e-commerce systems on the back end, by migrating from a manual system for updating its online inventory to an automated system, linked electronically to suppliers. “In time, we hope to install the PC version of DB2 at the suppliers’ sites so that we can use its replication features to automatically synchronize inventory,” says Balakrishnan.

For 1999, the main challenge for Rediff.com will be to both *generate* and *support* increasingly larger volumes of users. Balakrishnan, confident of his company’s ability to rise to the challenge, sees it as a question of sustained quality of service. “At this moment, 40 percent of Internet users [in India] visit our site. We want to keep that number at 40 percent, or perhaps grow it somewhat to about 50 percent. As the number of users in India grows from half a million users to five million users, our challenge will be to attract the same share of Internet users. But the most important thing is that as we grow our share, that we keep customer service high-quality.”

Rediff’s quest for higher user volumes will clearly benefit from its planned thrust into the U.S. market when it launches a special edition aimed at persons of Indian origin living in the United States. Scheduled for later in the year, the launch will coincide with the opening of a fulfillment center in New Jersey that, Balakrishnan expects, will significantly reduce overseas shipment costs, further strengthening Rediff’s e-commerce market development efforts. “It’s important that the logistics [of the U.S. venture] work well. For this reason, the system will also be running on an IBM system.”

Balakrishnan views his choice of IBM as a commerce vendor as ideal, given the challenges of growth looming before him. “There’s no question that our choice of IBM technology will help us to overcome our challenges and to thrive. I don’t need to worry about whether the system will grow with me. I know it will. IBM is a great company to be partners with. They really worry about you as a business. They don’t just discuss technology. They care about your business.”



Information Entertainment Online



**For more information,  
please contact your  
IBM marketing representative or  
IBM Business Partner.**

Visit us at:  
*www.ibm.com/e-business*

For information on  
Rediff.com, visit:  
*www.rediff.com*



©International Business Machines Corporation 1999

IBM Corporation  
Internet Division  
Route 100  
Somers, New York 10589

7-99  
All rights reserved

Microsoft, Windows and Windows NT, are trademarks of Microsoft Corporation in the United States, other countries, or both.

Java and all Java-based trademarks are trademarks of Sun Microsystems Inc. in the United States, other countries or both.

DB2 Universal Database, the e-business logo, IBM, Net.Data and Netfinity are trademarks of International Business Machines Corporation in the United States, other countries or both.

Other company, product, and service names may be trademarks or service marks of others.

This brochure illustrates how one customer uses IBM's products. Many factors have contributed to the results and benefits described. IBM does not guarantee comparable results. All information contained herein was provided by the featured customer and IBM Business Partners. IBM does not attest to its accuracy.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.



Printed in the United States of America on recycled paper containing 10% recovered post-consumer fiber.



G325-1383-00