



e-business case studies

Recreational Equipment, Inc.:

An Internet
retailing innovator



Putting e-business to Work

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OVERVIEW

e-business case studies: Recreational Equipment, Inc.

With 1998 revenues of \$587 million, Recreational Equipment, Inc. (www.rei.com) is America's largest consumer cooperative. Specializing in outdoor gear and clothing, REI operates 53 retail stores in 22 states, REI Online, a domestic and international mail order business and REI Adventures (a full-service travel company). As Dennis Madsen, REI Chief Operating Officer puts it: "We're in the business of helping people get out and enjoy life... perpetuating an outdoor lifestyle... selling fun, enjoyment, recreation, vacation."

This case study profiles REI's adoption of IBM's Net.Commerce and DB2 Universal Database to power REI.com (the Internet's largest store for outdoor gear and clothing), REI-Outlet.com, and Japan.REI.com, its heavily trafficked and rapidly growing online stores. While its sites have always run on IBM RS/6000 servers, the shift to Net.Commerce and DB2 Universal Database has dramatically improved its ability to creatively merchandise its products, a cornerstone of its strategy.



Recreational Equipment, Inc.

The Company

- America's largest consumer cooperative
- 53 retail stores in 22 states
- REI Online
- Domestic and international mail order business
- REI Adventures travel company
- \$587M 1998 revenues
- Headquarters: Seattle, WA

The Web Sites

www.rei.com
www.rei-outlet.com
www.japan.rei.com

- Rated highest in its category by BizRate
- Four-fold increase in revenue from 1997 to 1998
- Online sales volume equals that of largest retail store

Business Benefits

- Increased revenue
- Increased customer satisfaction
- Increased customer loyalty
- Significant internal productivity benefits

IBM Products

- Net.Commerce
- DB2® Universal Database™
- RS/6000®
- AS/400®

BUSINESS DRIVERS

“From day one, we looked at the Internet as a profit center and a business opportunity. This vision has been our focus, and it continues to drive us today.”

— Matt Hyde, Vice President of Online Sales, REI

To REI, the magnitude of opportunity to sell over the Web became clear as early as 1995, when “successful” commerce sites were few and far between. According to Matt Hyde, REI’s Vice President of Online Sales, they considered selling over the Internet as a viable opportunity – even in the face of widespread skepticism – because REI believed it could provide a distinct advantage to customers over traditional physical retailing or catalog retailing. According to Hyde, Web-based selling is the perfect way to deliver on the promise in REI’s unofficial credo: “To deliver *any product, any time, any place* and to answer *any question*.” More than just a tag line, REI has translated this credo into practice:

- *Any product* signifies that for product selection, REI is not confined by brick and mortar or the pages of a catalog. Today REI provides its broadest selection over the Web, with more products available online than are stocked in its 100,000 square-foot flagship store in Seattle. And that selection continues to grow.
- *Any time* signifies the convenience of a Web-based business, enabling customers to purchase products 24 hours a day, seven days a week.
- *Any place*, while also signifying convenience, has increasingly come to represent the ability to serve international customers, which continues to be an important and growing market for REI.
- *Any question* refers to the rich product information available to users of REI’s three Web sites, which is far less feasible to provide in a catalog. “We sell a technical product,” says Hyde, “and for providing rich content, the Web presents a distinct advantage over catalog retail, where you’re confined by the pages of a catalog. You can’t put the sort of technical information in [a catalog] that you can on the Internet and still allow people to slice and dice that information.”

REI demands rigorous business performance from REI Online. “From day one, we looked at the Internet as a profit center and a business opportunity,” says Hyde. “This vision has been our focus, and it continues to drive us today. It’s an opportunity to serve our customers better through multiple channels, as well as an opportunity to find new customers.”

Hyde notes that as REI's online sales have soared, it has become increasingly apparent that the "average" online REI shopper is the same as the "average" REI customer overall – implying that Web purchasing is taking place across a wide swath of existing customers. Indeed, Hyde believes that REI's strategic focus on the Web as yet another sales channel is borne out by the number of customers who routinely use the Internet. "We are finding a lot of multi-channel customers," says Hyde. "These are people who go to the store for one reason and shop online for another reason. They might pick up a catalog during the holiday season, flip through it and buy a couple of items over the phone. And that's great, because what we're trying to do is to let customers shop with us in any way that they choose." REI has installed network computer-based kiosks in each of their stores so customers – and employees – have easy access to the more than 10,000 items available through the Online sites. REI has integrated their customer channels – direct, catalog, online and kiosk – so that their customers have a single, seamless view of REI, and REI has a single, integrated view of their customers.

"The bar has been raised in all areas, from breadth of product to the sophistication and usability of the interface to navigation."

— Matt Hyde



REI partners with IBM to advance its e-business to the next generation.

ADOPTION STRATEGY

“We’re finding a lot of multi-channel customers. These are people who go to the store for one reason and shop online for another reason.... That’s great because what we’re trying to do is to let customers shop with us any way that they choose.”

— Matt Hyde

Since introducing its online store in late 1995, REI has tracked an increase in performance demands among its users. Hyde believes that overall, consumers now expect more service, an easier interface and fewer technical glitches when buying over the Web. “Our 1995 site had glitches, and it was the best available,” says Hyde. “Now, you can’t launch a site like that and get any attention. The bar has been raised in all areas, from breadth of product to the sophistication and usability of the interface to navigation.”

REI adopted Web commerce technology when it first established an online store using Netscape’s Merchant Server software. While Hyde voices no regrets about REI’s choice of Netscape software to run its commerce site, he concedes that the constant upward spiral in technical demands made it increasingly hard to achieve the kind of functionality that REI required. “In the Internet world, you’re under constant development; it never stops,” says Hyde. “Throughout the past few years, we’ve done a tremendous amount of custom coding and enhancements, but what ended up happening with the old system is that it didn’t keep up with demand of what customers were driving us to build. On the surface, e-commerce sounds relatively easy. It’s not until you have experience trying to integrate a high volume, high functionality Web site into existing business processes and applications that you realize that it’s a lot harder than it seems. It’s like an iceberg – the view from the browser is only 10% of what it takes to build a successful and profitable Web site.” When REI began looking at adopting Net.Commerce it was important that their significant investments were not disrupted. IBM’s commitment to open multi-vendor standards, embodied in the IBM Application Framework for e-business, enabled REI to leverage those investments in an entirely new way making their solutions more effective and allowing them to integrate with their back end systems.

What’s more, the increasing amount of custom programming had begun to detract Hyde and his group from their core mission. “As a philosophy, I always remind the online store organization that we are not software developers. We’re retailers,” notes Hyde. “What we want to do is focus on what we do best, and that’s selling equipment.”



REI’s flagship store in Seattle, Washington serves as a mecca for outdoor enthusiasts.

Adoption Timetable

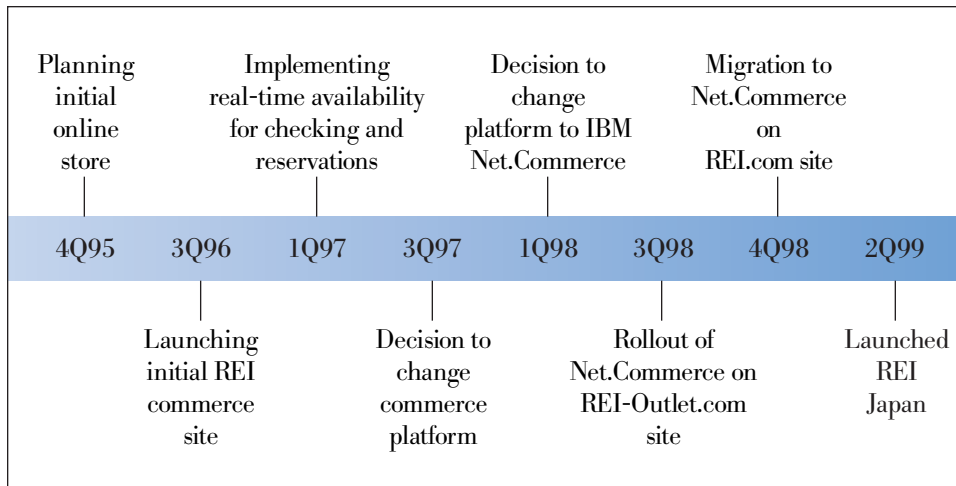
REI first conceived its Web-based retail strategy in late 1995, then launched it in September 1996. The next major milestone was implementing real-time availability for checking and reservations, which was completed in February 1997. Some six months after this implementation, in mid-to late-1997, REI decided to change its commerce platform and announced its decision to adopt IBM Net.Commerce in early 1998.

REI executed its migration to IBM Net.Commerce in conjunction with launching its second online store, REI-Outlet.com, in August 1998. In fact, REI-Outlet.com, an entirely separate operation from REI.com, represents the first instance where the company used IBM Net.Commerce. Once REI-Outlet.com was successfully launched, REI then focused their attention on migrating the REI.com store to the Net.Commerce platform, completing the move in October 1998. Figure 1 represents the implementation timetable for REI's three Internet sites.

Recently, REI launched their third web site – Japan.REI.com (*www.japan.rei.com*), a new Web site specifically for Japanese outdoor enthusiasts. REI Japan provides fully translated product information and detailed product information on all gear and clothing, including specifications. The site is Japan's largest online outdoor store and is designed to better serve REI's large Japanese customer base of approximately 86,000 customers. Of REI's international Internet sales, Japan accounts for about half the orders. REI's online site preludes REI's first physical store in Japan, a 30,000 square foot retail store currently being constructed in the Tokyo suburb of Minami-Machida. The store will feature an indoor climbing pinnacle and outdoor mountain bike trail, along with many other special interactive features including Internet kiosks.

“When you change commerce packages, there’s a huge learning curve. I was going to make this change once, but I wasn’t going to do it again, so I wanted to pick the right package... for the next several years.”

— Matt Hyde



Source: Recreational Equipment, Inc., 1999

Figure 1. Implementation Timetable for REI Online

Featured IBM Products

Net.Commerce

IBM Net.Commerce is an integrated software solution for businesses to sell goods and services over the Internet. It is flexible and integrates seamlessly with a company's existing business system while offering customers a dynamic shopping experience. Net.Commerce is ideal for both business-to-business and business-to-consumer applications.
www.software.ibm.com/net.commerce

DB2 Universal Database

DB2 Universal Database is a relational database management system that is fully Web-enabled, scalable, and features multimedia capabilities with image, audio, video, text and other advanced object relational support. DB2 Universal Database delivers more Web enablement with built-in Java support, client/server functions, and more support for open industry standards.
www.software.ibm.com/db2/

RS/6000

The RS/6000 family combines the benefits of UNIX computing with IBM's leading-edge RISC technology. RS/6000 systems handle demanding scientific and technical computing, business intelligence and Web serving tasks. The platform provides the power to create change and the flexibility to manage it.
www.rs6000.ibm.com

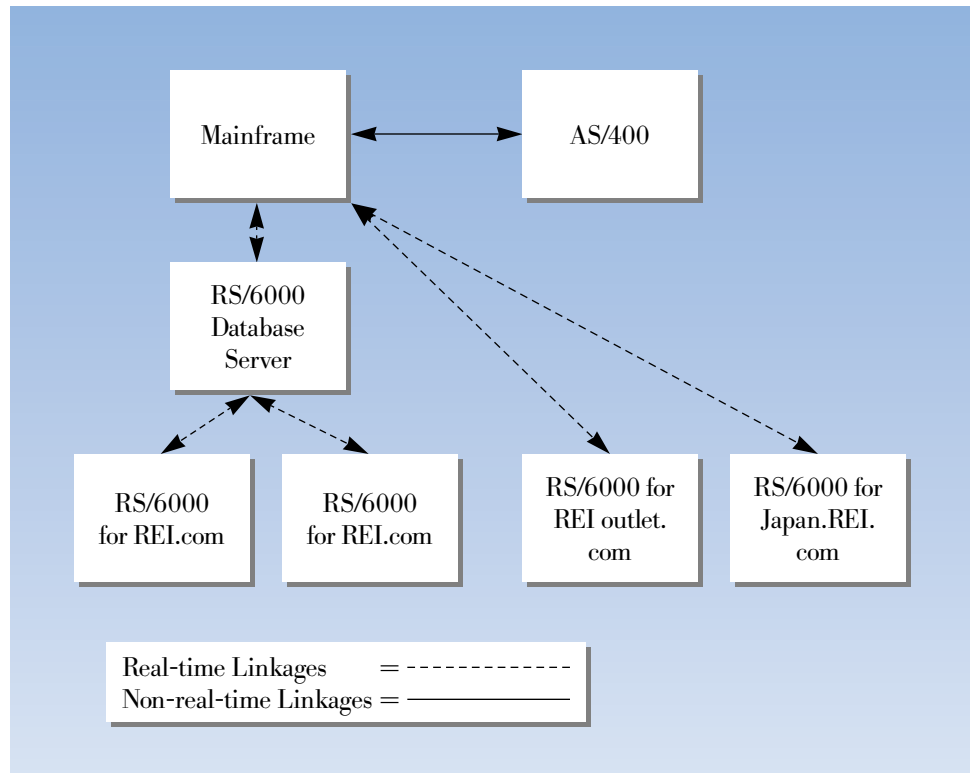
AS/400

By integrating hardware, software, middleware and the operating system, AS/400 provides power and flexibility to your business. The latest hardware enhancements and newest version of the AS/400 operating system, provide you with the performance and tools needed to get a quicker return on your investment.
www.as400.ibm.com

Architecture

REI's transaction platform comprises five IBM RS/6000 web servers and one IBM AS/400 back-end server. The main commerce site runs on four RS/6000 servers: two running Net.Commerce for REI.com, one running Net.Commerce for REI-Outlet.com, one running Net.Commerce for Japan.REI.com, and a fifth functioning as a data server for REI.com. These platforms are integrated throughout the organization with data stored on REI's mainframe as well as on IBM AS/400s and IBM RS/6000s. All told, REI Online is linked with six major databases, including the mail order system, pricing data, hierarchy product information and SKU databases. While the linkages related to product availability and reservations are real-time to an RS/6000 in its warehouse, most linkages (such as pricing databases) are performed using batch processing. Figure 2 illustrates the flow of REI's systems.

As mentioned above, REI's growing pains had little to do with hardware and everything to do with its core transaction software, which wasn't keeping pace with the demands of online retailing. In looking for a long-term solution, REI examined all the leading systems on the market, including offerings from Netscape, Microsoft, Open Market and Broadvision. According to Hyde, REI's decision to adopt IBM Net.Commerce is rooted in both the merits of the product and IBM's clear commitment to supporting e-commerce. Hyde says that the main deciding factor was flexibility. "Net.Commerce is more than just a stand-alone system. It's also a very strong development platform. It allows incredible flexibility," says Hyde. "How we use our store – and the interfaces we use – are a competitive advantage. We didn't want our hands tied on the way we merchandise our store, and Net.Commerce didn't tie our hands."



Source: Recreational Equipment, Inc., 1998

Figure 2. Basic System Architecture: REI e-Commerce Platform

Notwithstanding his enthusiasm for Net.Commerce's core functionality, Hyde sees IBM's commitment to electronic commerce as a "big issue" in selecting them as an e-business partner. In Hyde's opinion, this commitment is evidenced by the frequency with which IBM has upgraded Net.Commerce. Hyde, reiterating his disdain for getting into the software business, comments: "We want our *business partner* to be the software company, and IBM made a commitment to do that."

REI does not take the subject of platform changes lightly. Its choice of IBM as an e-business partner speaks volumes about REI's expectations regarding the long-term durability of the Net.Commerce platform. "When you change commerce packages, there's a huge learning curve," says Hyde. "I was going to make this change once, but I wasn't going to do it again, so I wanted to pick the right package...for the next several years." In addition to providing for its future needs, REI also wanted to preserve its legacy investments, principally the custom code that had been written over the past two years to connect its online store to its legacy systems. "I had hundreds of thousands, if not millions of dollars tied up in this [system], and we didn't want to throw it away. And since [Net.Commerce] has also lessened the need to do custom coding in the future, it's a two-fold benefit."



Two of REI's more than 5 million members scale a mountainside with their REI gear.

"Net.Commerce is more than just a stand-alone system. It's also a very strong development platform. It allows incredible flexibility. We didn't want our hands tied on the way we merchandise our store, and Net.Commerce didn't tie our hands."

— Matt Hyde

RETURN ON INVESTMENT

“E-mails from frustrated users have basically stopped, and we now implement the search box on the top of every page. Before, we didn’t do this because it was not a feature we were very proud of.”

— Matt Hyde

REI looks at the return of its e-business investments on two levels: benefits accruing to REI from doing business over the Internet in general, and benefits from doing business over the Internet *using IBM technology*. Clearly, the most important benefit to REI has been the added revenue and profit attributable to its Web channel. While Hyde declines to name specific sales figures, he notes online revenues have grown significantly, with a nearly four-fold increase between 1997 and 1998, and more than a million visitors per month. At present, Hyde says REI’s online sales volume equals that of its largest retail store. A less tangible, but perhaps more important benefit of REI’s Web initiatives has been an increase in customer satisfaction, which in turn drives loyalty and repeat business. “We’re able to provide better customer service to all of our members and customers. As a retailer, I don’t get to choose how my customer shops. The loyalty that people feel, and the repeat shopping that we see on the Internet is really amazing, 30% of our sales happen between 10 pm and 7 am when no store is open in the nation,” according to Hyde. REI is rated highest in its category by BizRate®, a third-party customer service measurement firm, for such factors as usability, functionality, selection, price and customer loyalty. Figure 3 outlines the benefits of REI’s e-commerce platform.

REI’s return on its investment in the IBM Net.Commerce platform has already become clear (see Figure 4). According to Hyde, the benefits of Net.Commerce fall into four categories:

- *Improved merchandising capability* – “Net.Commerce provides the ability to merchandise in unique and meaningful ways to our customers because of the inherent flexibility of the technology. This improved merchandising will in turn drive conversion, the percentage of visitors to the site who actually complete a transaction.” REI has relied extensively on Net.Data to customize its customer interface. “We were able to do a tremendous amount of merchandising through Net.Data, giving it the look and feel that we wanted, which is extremely important in any online retail business.”
- *Reduced IT resource burden* – “Within a week after launching REI-Outlet.com (REI’s first deployment of Net.Commerce), it became evident that the stability of the platform was going to free up IT resources to work on more meaningful projects.”

Overall ROI Benefits	
Function	Benefit
Sales and Marketing	Increased revenues overall Increased conversion of site visits to sales Increased customer loyalty
Customer Service	Increased customer satisfaction Ability to provide broader and deeper technical product information Broader product availability
REI Employees	Improved productivity for retail employees More efficient allocation of IT resources

Source: Recreational Equipment, Inc., 1998

Figure 3. Benefits of REI’s e-Commerce Platform



Net.Commerce ROI Benefits	
Benefit	Result
Improved merchandising capability	Drives percentage of visitors who complete a transaction (conversion rates)
Reduced IT resource burden	Platform stability allows IT resources to be redeployed
Improved customer search capability	Improved conversion rates Increased customer satisfaction
Enhanced employee search capability	Improved employee productivity

Source: Recreational Equipment, Inc., 1998

Figure 4. Benefits of REI's Adoption of Net.Commerce

- *Improved customer search capability* – Net.Commerce offers sophisticated ways of helping customers find products, including advanced text extensions to DB2 which allow proximity, boolean, fuzzy and synonym searching, and parametric, sales assistance and product comparisons using Net.Commerce Product Advisor. “Before we went with Net.Commerce, our number one complaint was search capability, which we really couldn’t change on our old platform. With Net.Commerce, we were able to go in and customize the search function by product category, making it far more accurate.” Hyde believes that this “tremendous” increase in accuracy will benefit REI’s conversion rates, while increasing customer satisfaction. “E-mails from frustrated users have basically stopped,” says Hyde, “and we now implement the search box on the top of every page. Before, we didn’t do this because it was not a feature we were very proud of.”
- *Enhanced Employee Search Capability* – REI has also been able to leverage the intelligent search capabilities of Net.Commerce to increase employee productivity in its 53 retail stores. “We’re now rolling out the online store as a kiosk in all of our stores,” says Hyde. “By doing some customization of the search box, store employees can search for products by SKU [number] and many other factors that are meaningful to REI employees.”

FUTURE PLANS

“When we made the move to Net.Commerce, we made a commitment.... There simply aren’t any vendors out there that have a platform that is going to do the trick for us like IBM does.”

— Matt Hyde

In Hyde’s view, a successful online retailing strategy has four parts:

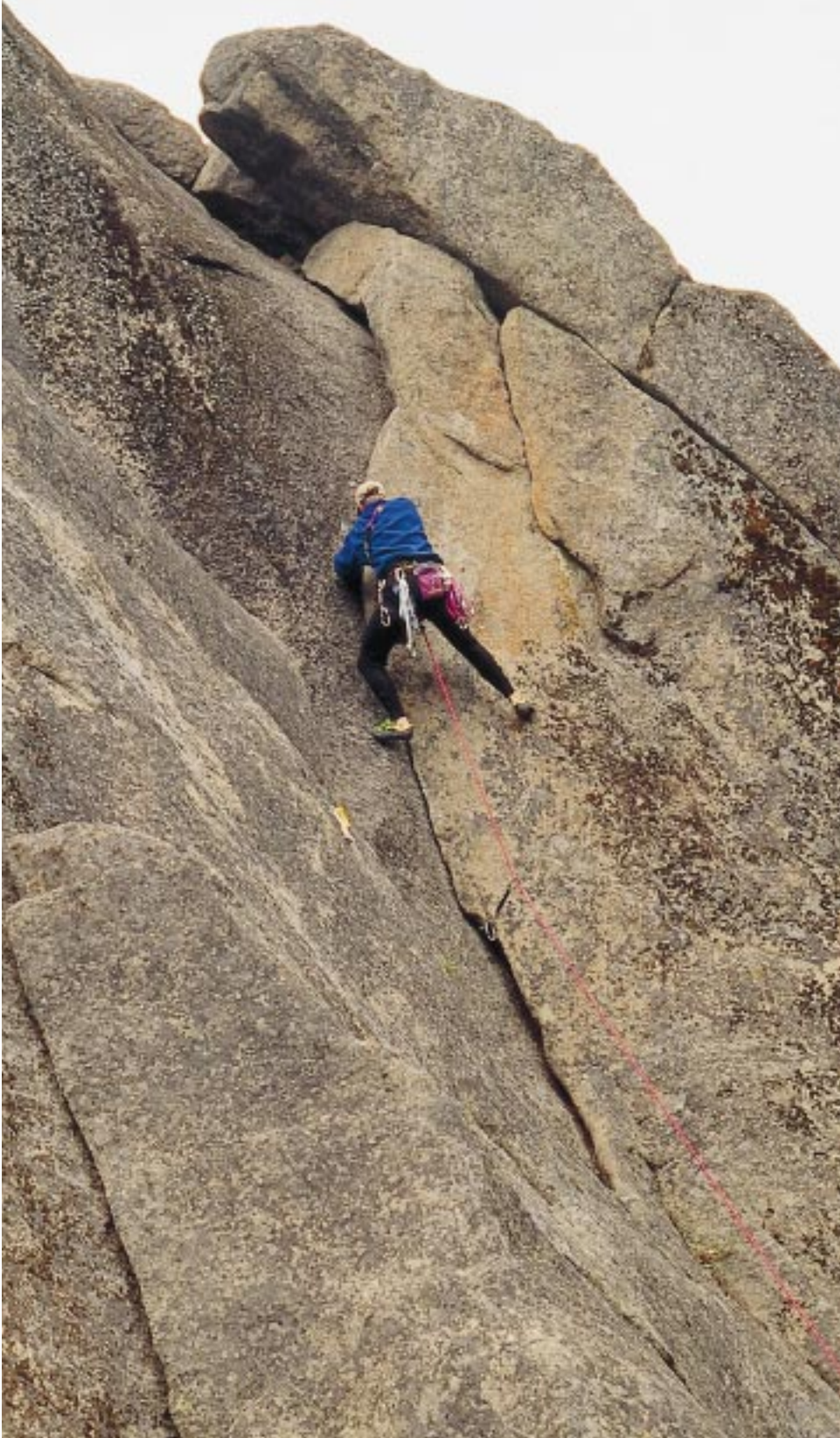
- Content (e.g., product information)
- Merchandising (e.g., presentation, “look and feel,” navigation)
- IT architecture
- Site operation

Going forward, Hyde will continue to refine all aspects of REI’s operation, while maintaining balance between these four factors. “The rapid pace of the evolution of our site isn’t going to slow down at all,” says Hyde. “We have a tight schedule for the next year that looks a lot like what has happened in the last year.” One of the next developments that REI plans is the introduction of Net.Commerce’s “Sales Assistance” function, which helps online buyers through the product purchasing decision tree by presenting a question-and-answer selection process to narrow down the range of product choices for each customer. As its plans unfold, REI intends to maintain a close partnership with IBM. “When we made the move to Net.Commerce, we made a commitment because we can’t afford the money and time required to switch vendors, and there simply aren’t any vendors out there that have a platform that is going to do the trick for us like IBM does. Actually, IBM undersold the capabilities of Net.Commerce. We’ve found it to be a much better product than we thought when we made the decision to switch,” says Hyde.

REI sees IBM as more than a technology provider, and has found far greater value in the partnership than just great hardware and software. According to Matt Hyde, “IBM is a huge global company with incredible assets that we never knew existed. The more they understand about our business goals, the more solutions and ideas they bring forward to help us be a leading online retailer.”

“The Internet has changed the way we are working as a retailer – there’s no question about that,” says Hyde. “It’s multi-faceted and it spans everything we do. I believe very strongly that you have to pick your niche and you have to do it better than anybody else. My niche is outdoor retailing. My job is to do it better than anybody else.”





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