



## STORE CONCEPT STORE

### 2005 COMPUTERWORLD HONORS CASE STUDY

#### BUSINESS & RELATED SERVICES

THE WORLD'S LARGEST HOME IMPROVEMENT RETAILER OPENED ITS FIRST STORES IN MANHATTAN, NYC IN 2004, INTRODUCING A COMPLETELY NEW URBAN STORE FORMAT TAILORED TO FIT BOTH THE CUSTOMER AND PHYSICAL LANDSCAPE, AND FEATURING AN ENHANCED USE OF TECHNOLOGY BUILT ON YEARS OF INFORMATION TECHNOLOGY ADVANCEMENTS. [20055396]

*A Search for New Stores*



#### SUMMARY

The Home Depot, the world's largest home improvement retailer, opened its first stores in Manhattan, NYC in 2004. The retailer created a new urban store format tailored to fit both the customer and physical landscape that features enhanced use of technology that is built on several years of information technology (IT) advancements.

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#### APPLICATION

The Home Depot opened its first stores in Manhattan in September and November 2004. The stores cater to this new customer base consisting of a high percentage of renters and small living spaces.

The store on 59th Street houses the nation's first "virtual apartment" in the lobby, a 1,400 square-foot, 3-D space exhibiting project-based creations in a mock one-bedroom apartment.

The company's ability to expand into new markets and reach new customers would not be possible without significant investments in technology, store modernization, and new store construction. The Home Depot's first stores in Manhattan are the culmination of work conducted by the company over the past several years. Since 2001, the company has invested nearly \$14 billion in these areas, including more than \$1 billion in information technology upgrades. These efforts made by chairman, president & CEO Bob Nardelli and CIO Bob DeRodes, have transformed the company from a pen-and-paper giant to a sophisticated retailer where bits and bytes are now as common as paint and lighting.

The company has made significant advancements in existing and new technology in order to increase customer satisfaction. The new drivers sought to replace fragmented work with a cohesive, end-to-end solution, improve economies of scale, and enhance customer experience via technology.

#### Recent IT Solution Upgrades at The Home Depot:

- ? Store Systems: Since 2003, 40 to 50 PCs and mobile devices have been installed in each of the retailer's stores. Prior to the rollout, the only PC in the store was at the store manager's desk. Now, PCs are available at the store's service desks, return desks, pro desks, paint centers, décor areas, receiving docks, and self-training rooms. The PCs allowed for the rollout of an electronic workbench for store managers.
- ? Updated POS System: The Home Depot installed 360Commerce POS, a Windows-based system used to overhaul the retailer's point-of-sale (POS) system. The application runs on new NCR servers in the U.S. and Canada and on IBM servers in Canada. To improve the customer experience at the checkout, The Home Depot needed to add new capabilities that the old hardware couldn't handle. The legacy POS platform was largely based on a homegrown application that was built in the early 1990s and the retailer had hit a dead-end with it. In the end, it was more cost-effective to replace both the software and hardware. In addition, the retailer replaced 830 of its staffed registers with NCR self-checkout units resulting in shorter lines at the checkout.
- ? Online Receipt Look Up: A new system allows customers who paid for merchandise with credit card, debit card, or check to return an item even if they've lost or forgotten the receipt. The application searches 90 days of transactions using the customer's credit card or checking account number.
- ? Updated LANs: To support the massive upgrades in the store system, the stores' networking infrastructure is also being upgraded. The retailer is currently beefing up its in-store LANs with larger data switches and more than 5,000 miles of fiber optic and coaxial cable.
- ? New Data Warehouse: A 60-terabyte, IBM- and Unix-based data warehouse was installed last year. The data warehouse provides a newer, more robust repository for the richer transaction data Depot is collecting, thanks to the POS upgrade.
- ? Markdown Management Solution: Assortment planning and planogramming packages by ProfitLogic and

MarketMax were started in 2003. More recently the retailer went live with a human resources solution from PeopleSoft and a finance package from SAP. Implementation of a Siebel supplier management solution is in the works.

- ? “Scan Receiving”: Depot’s trading accuracy will be improved with a homegrown “scan receiving” application being piloted in 20 stores. Currently, Depot receiving personnel at the stores manually key in invoice information. The same technology is being used to scan the merchandise the stores return to the vendors. Additional wireless applications are being implemented to track vendors and manage inventory.
- ? Electronic Trading Model: In an effort to further drive efficiency, the retailer is shifting to an entirely electronic trading model. By the end of 2005, The Home Depot will rely exclusively on digital means like Electronic Data Interchange (EDI) for transfer of purchase orders, invoices, and other trading documents. Last year, the retailer launched an online portal that enables smaller vendors to electronically trade with Depot through a common Web interface. Suppliers must meet the data compliance with UCCnet standards by late 2005. UCCnet links retailers and suppliers through a global product data registry to ensure they trade with identical, current product information.
- ? New Technology Center: Scheduled to open in Austin, Texas in late 2005, the center will employ 500 people including engineers, programmers, system and network operators, security administrators, and help desk personnel.

New Technology Debuted in Manhattan Stores:

- ? Improved “How-To” clinics with a dedicated staging area complete with plasma screens allow more customers to view the clinics. The seminars can be rebroadcast throughout the day when a “live” clinic is not in session.
- ? “Know-How” kiosks with touch-activated screens are located throughout the stores. Customers can search through hundreds of do-it-yourself projects and download and print step-by-step instructions and shopping lists.
- ? Wireless “PC tablets” can be used by store associates and managers to assist customers with special orders or material lists. The device connects to the company’s Intranet.

## **BENEFITS**

Benefits of Recent IT Solution Upgrades at The Home Depot:

- ? Store Systems: The application, now accessible throughout the store, enables store managers to immediately execute functions that would have previously required them to be in their office. The remote capabilities include workforce scheduling, promotions management, employee training, and security monitoring.
  - ? Updated POS System: The impact of the new POS to the customer is already apparent. Each unit is equipped with a two-way wireless scan gun that enables cashiers to scan items without removing them from the shopping cart – a plus for a retailer that sells bulky, heavy items. The application will save 23 seconds of customer wait time per product over the previous manual application when researching price checks for unmarked items. Also, the new POS system has decreased the average customer checkout time at staffed registers from 6.7 minutes to 4.9 minutes and the system will help identify individual cashiers who are unusually slow in order to provide additional training on the register.
  - ? Online Receipt Lookup: The new system will cut down on fraudulent returns that cost the retail industry millions each year.
  - ? Updated LANs: Enhancements to the LAN provide increased reliability and greater wireless access to store associates.
  - ? New Data Warehouse: The data warehouse project was launched, initially, to support the retailer’s human resources efforts by helping managers develop a better understanding of employee turnover and skill sets. But the company kept an eye toward expanding the data warehouse into other areas of the business, like merchandising and inventory. The capacity now supports a new competitive analysis, a homegrown solution that compares Home Depot’s prices to its competitors.
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- ? “Scan Receiving”: The process will be streamlined and will minimize the potential for human error by equipping the employees with wireless handheld scanners so the shipments can be scanned into the system rather than keyed in.
  - ? Electronic Trading Model: Depot hopes to avoid the costly shipping and ordering errors that arise when trading partners work from different sets of data.
  - ? New Technology Center: The new center will support the company’s existing data center at its headquarters in Atlanta.

Benefits of New Technology Debuted in Manhattan Stores:

- ? Improved “How-To” clinics provides more consumers with access to The Home Depot’s “know-how” via the live clinics and the rebroadcasts of sessions.
- ? “Know-How” kiosks supplement the “know-how” of The Home Depot associates by allowing consumers to

access project directions and supplies at their convenience.

? Wireless “PC tablets” allow store managers and associates to keep their “office” with them on the retail floor while assisting customers.

## **IMPORTANCE**

Information technology upgrades contributed greatly to The Home Depot’s store modernization plan. The company was in a position where its systems had become antiquated and the infrastructure wholly inadequate. It was clear that the previous systems would not sustain the company for its projected growth.

From the front-end to the back-end of its stores, The Home Depot is enhancing the shopping experience, streamlining operations, and driving business efficiency as never before with unprecedented investments in technology.

? Updated POS System: The updated POS system, and specifically the self-checkout stations, have improved customer service via shorter lines and wait times at the checkout and moving employees who would otherwise be working registers onto the sales floor. One person can effectively clear four lanes of self-checkout stations much more efficiently than the standard staffed checkout station. The self-checkout stations have reduced wait time by one-third across The Home Depot stores.

## **ORIGINALITY**

At the top of the home improvement industry, The Home Depot has been a leader in deploying technology to streamline operations, drive sales, and enhance the customer experience. Examples include the innovative and unique virtual apartment within the New York City store and the extensive e-learning programs for associates. Technology is also enabling The Home Depot to customize the format and product mix of individual stores throughout the country to reflect the local needs of customers.

## **SUCCESS**

? Electronic Training Model: Since 2003, the company has provided over 23 million hours of Web-based training to its 299,000 employees. The training covers modules on basic sales and customer service skills to specialized product and brand knowledge. "Associate know-how is the most valuable asset we provide The Home Depot customers. Through innovative e-learning programs and stringent curriculum standards, we're raising the bar on customer service," explained Steve Jansen, vice president of merchandising, gardening for The Home Depot. Recently, the company launched an online e-learning nursery certification program, which has more than tripled the number of Certified Nursery Consultants in stores nationwide.

? Self-Check Out: The Home Depot is consistently looking for ways to remove or simplify certain tasks that associates are performing and put those hours back on the sales floor. This provides customers with the assistance they need and want and drives sales. The deployment of self-checkout stations in more than 1,020 stores has allowed the retailer to reinvest 40 plus hours per store back onto the sales floor to help customers.

## **DIFFICULTY**

? New Data Warehouse: The preparation and migration work of populating the data warehouse with three years of POS data, among other tasks, was far more challenging than expected. Getting the data cleaned and loaded properly was a difficult task, but worth the effort because it created the support for a raft of powerful new tools to be implemented. Depot had the basic components of the data warehouse up and running in less than a year; no small feat for a repository of such massive size.