



CASE STUDY

Borders Group, Inc.

Borders Group, Inc. is a publicly held company with 2009 consolidated sales of \$2.8 billion. Borders Group operates Borders.com; over 506 Borders superstores in the U.S.; three stores in Puerto Rico; and approximately 168 stores in the Waldenbooks Specialty Retail segment, including Waldenbooks, Borders Express and Borders airport stores. In addition, virtually all Borders stores feature Seattle's Best Coffee cafés. Borders is finding new ways to help their customers create richer and more satisfying lives through knowledge and entertainment with a rich shopping experience, providing them with the books, music, movies, and other entertainment items.



Company Profile

Name:
Borders Group, Inc.

Industry:
Retail

Headquarters:
Ann Arbor, MI

URL:
<http://www.borders.com>

Product:
PlanetJ's WOW Enterprise 6.5.4

The Challenge

Borders Group, Inc. needed browser-based applications that could be accessed both locally by corporate users and remotely by stores and field sales representatives. These applications also needed to be incorporated with proprietary database information and business processes from multiple servers, blended with elements from third party web sites.

The Solution

PlanetJ's Web Object Wizard (WOW) met their immediate needs and addressed Borders Group's concerns right out of the box. Traditional coding methods were too limiting in capability, were largely green-screen and lacked the efficiency of graphic presentation. Web developer resources at Borders Group were dedicated to their e-commerce site, and developers that were available did not have much depth of experience (if any) with web development. Their existing in-house tools were unable to seamlessly integrate with the 3rd party web applications. WOW solved all of these problems.

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“PlanetJ’s Web Object Wizard (WOW) met our immediate need and addressed our concerns right out of the box.”

*Mark Webb
Borders Group, IT*

Development Process and Experiences

Borders Group developers had the skills for working with WOW: SQL, RPGLE for stored procedures, some HTML and CSS training, basic Java programmer training (formal in some cases, others used teach yourself books), and all had the drive to learn new things. As Mark Webb, IT at Borders Group stated, “WOW’s tutorials enabled us to establish a development environment based on an Apache Tomcat web server and iSeries database server. We then sent a developer and technical lead through basic training and this enabled us to present a working draft of our first application within just a couple of weeks, including the design time spent with the user. The basic training is well organized, well paced, and did not overwhelm us with training on features we wouldn’t use.” Their production implementation used an IBM WebSphere web server in order to standardize with their organization’s technical support expertise. This, plus placing procedures to their change control process to be SOX compliant, took them about a month (no fault of WOW but information worth noting).

After implementing a couple of applications and becoming more proficient using WOW, Borders Group recognized the need to be able to get deeper into WOW’s capabilities to meet more complex and customized processing requirements. They proceeded through the WOW Advanced training course. This proved to be well worth their time and was very well suited to their level of experience. They now continue to deliver a broader set of features and functions to their users.

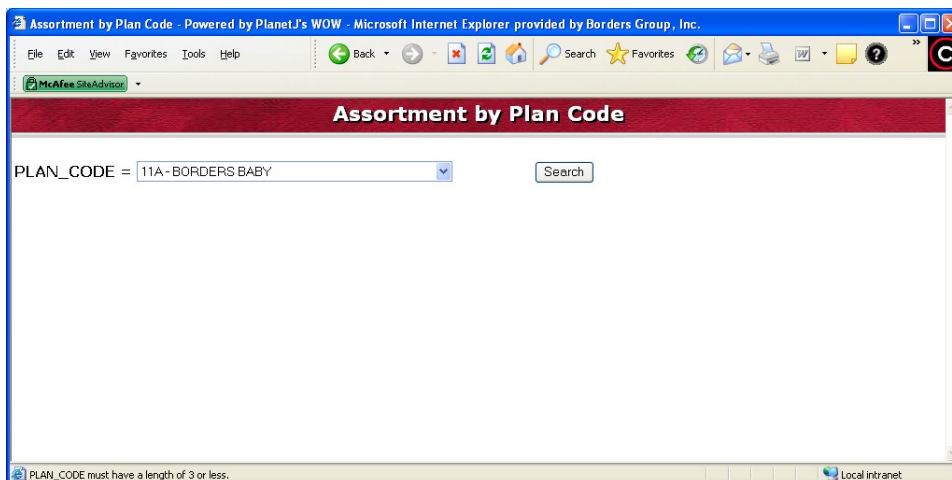
Solutions

Three applications are described:

1. Assortment by Plan Code
2. Store Tools
3. DART—DC Assortment Replenishment Tool

Assortment by Plan Code—application is an inquiry with 2 displays providing summary data for use by merchandisers for managing product assortment via a link to a 3rd party tool.

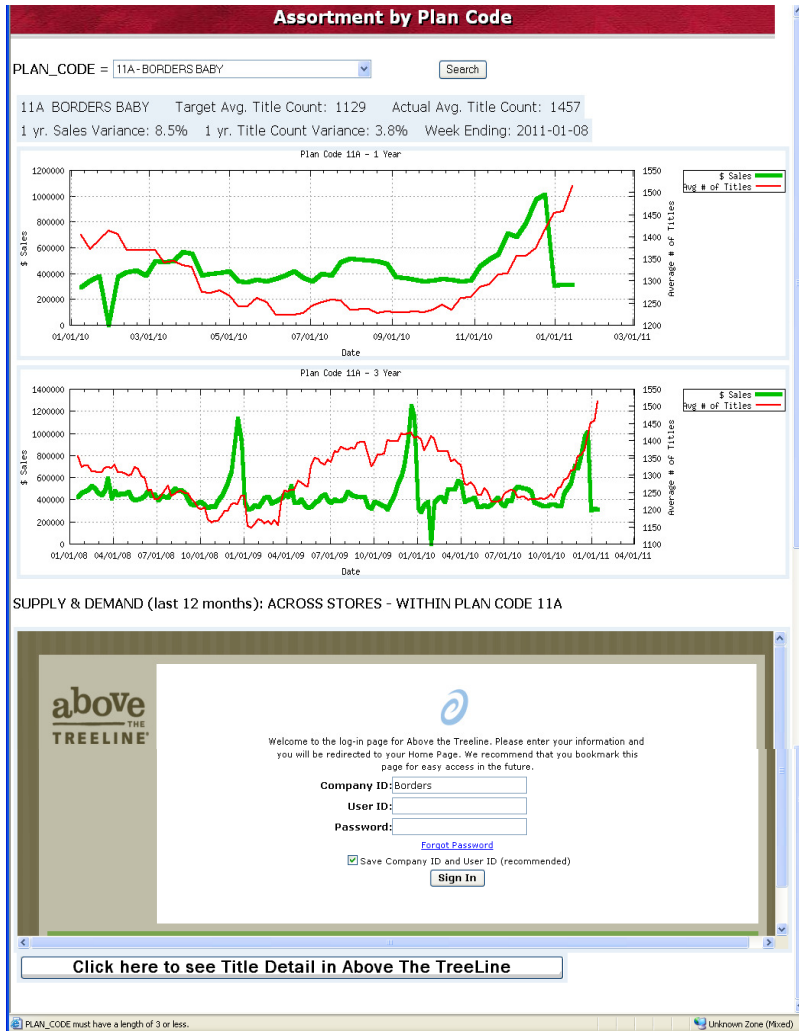
Display 1 is a dropdown selection list of merchandise groups



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Following shows summary data for the selected group and includes the selection prompt for another group as well as a hyperlink to a 3rd party application.

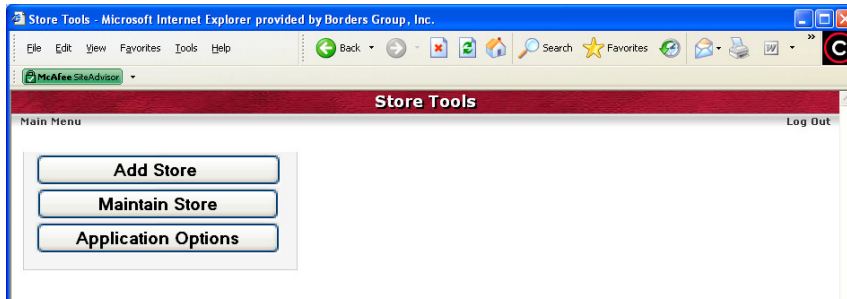


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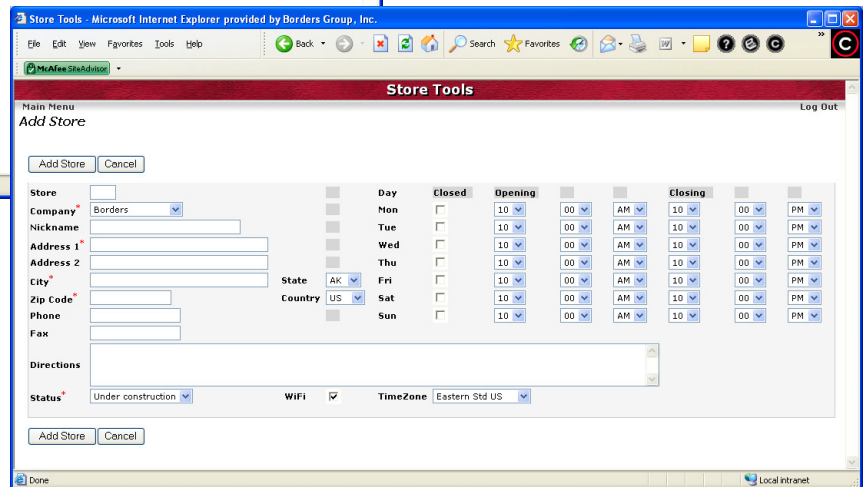
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Store Tools application below shows six displays for maintaining store information.

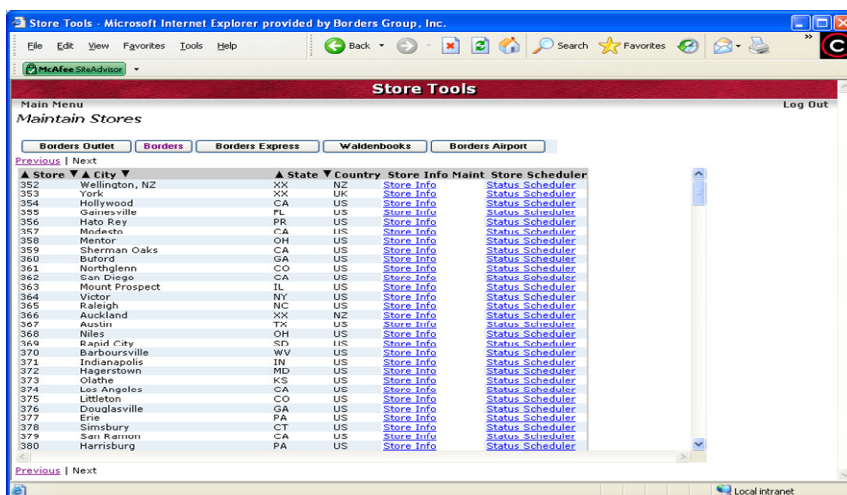
Display 1 appears after the OS sign-on and is the main menu with large, easy-to-read buttons.



Display 2 is the Add Store option. →



Display 3 is the Maintain Store list, loading 350 entries at a time in a scrollable list with previous/next option, and buttons that select on store type and reload the list. From here, there are links to the store info maintenance display and the store status scheduler display.



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Display 4 is store Info maintenance →

Store Tools - Microsoft Internet Explorer provided by Borders Group, Inc.

McAfee SiteAdvisor

Store Tools Log Out

Main Menu
Save Cancel

Store: Borders - 354
Company: Borders
Nickname: Hollywood
Address 1: 1501 Vine St.
Address 2:
City: Hollywood
Zip Code: 90028
Phone: 323.463.8519
Fax: 323.466.0623
State: CA
Country: US

Day	Closed	Opening	Closing
Mon	<input type="checkbox"/>	10:00 AM	10:00 PM
Tue	<input type="checkbox"/>	10:00 AM	10:00 PM
Wed	<input type="checkbox"/>	10:00 AM	10:00 PM
Thu	<input type="checkbox"/>	10:00 AM	10:00 PM
Fri	<input type="checkbox"/>	10:00 AM	10:00 PM
Sat	<input type="checkbox"/>	10:00 AM	10:00 PM
Sun	<input type="checkbox"/>	10:00 AM	07:00 PM

Directions: on the northwest corner of Sunset Blvd. and Vine St.

Status: Open
WIFI:
TimeZone: Pacific Std US

Store Tools - Microsoft Internet Explorer provided by Borders Group, Inc.

McAfee SiteAdvisor

Store Tools Log Out

Main Menu
Add/Save Cancel

Store	Company	Nickname	State
354	Borders	Hollywood	CA

Status	Date scheduled	Remove
new	12/06/2010	<input type="checkbox"/>

Add/Save Cancel

← Display 5 is the Store Status Scheduler

Display 6 is the Application Options from the Main Menu, a scrollable list with next/previous option, store type selection buttons, and buttons to set the option to enabled or disabled for all stores in the list. →

Store Tools - Microsoft Internet Explorer provided by Borders Group, Inc.

McAfee SiteAdvisor

Store Tools Log Out

Main Menu

Application Options

Set stores enabled Set stores disabled

Borders Outlet Borders Borders Express Waldenbooks Borders Airport

Previous | Next

Store	City	State	Country	WiFi
352	Wellington, NZ	XX	NZ	<input type="checkbox"/>
353	York	XX	UK	<input type="checkbox"/>
354	Hollywood	CA	US	<input checked="" type="checkbox"/>
355	Gainesville	FL	US	<input checked="" type="checkbox"/>
356	Hato Rey	PR	US	<input type="checkbox"/>
357	Modesto	CA	US	<input checked="" type="checkbox"/>
358	Mentor	OH	US	<input checked="" type="checkbox"/>
359	Sherman Oaks	CA	US	<input checked="" type="checkbox"/>
360	Buford	GA	US	<input checked="" type="checkbox"/>
361	Northglenn	CO	US	<input checked="" type="checkbox"/>
362	San Diego	CA	US	<input checked="" type="checkbox"/>
363	Mount Prospect	IL	US	<input checked="" type="checkbox"/>
364	Victor	NY	US	<input checked="" type="checkbox"/>
365	Raleigh	NC	US	<input checked="" type="checkbox"/>
366	Auckland	XX	NZ	<input type="checkbox"/>
367	Austin	TX	US	<input checked="" type="checkbox"/>
368	Niles	OH	US	<input checked="" type="checkbox"/>
369	Rapid City	SD	US	<input checked="" type="checkbox"/>
370	Barboursville	WV	US	<input checked="" type="checkbox"/>

Save

Previous | Next

(continued)

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DART—DC Assortment Replenishment Tool application allows buyers to replenish DC (distribution centers) quantities, and update an items replenishment control settings via a link on item number or name. Display 1 is pre-set with filter options based on the users operating system log-in ID that also produces a list of items based on the filter with replenishment info. A daily batch process generates orders from the items and quantity data set here. ↓

The screenshot shows the DART application interface. At the top, there are filter options for RA user (MDAVIS2), Plan Code (Any), Classifier (Any), and NBW Sales GE (0). Below these are buttons for 'Apply Filter and set mass maint.', 'Clear SOQ', 'Reset SOQ', 'Recalc SOQ', 'Approve', 'Unapprove', 'Mass maint.', 'Apply SOQ%', and 'Apply Safety Stk. Pref'. A summary line indicates 'Selected RA:MDAVIS2 Vendor:Any PlanCode:Any Status:Any NR:Any Deals:Any Classifier:Any SOQ>=0 Vol%=>0 NextBw=>0 Items:44 Retail:\$41399 SOQ:2685 CAD TNDC NEDC SL:2685 OH:97366 DD:0 LBW-Sales:130119 NBW-Sales:85226 Avg.Vol.%:69 Costs:12540'. Below this is a table of items with columns for Item, Name, Low, New, SOQ, CADC, TNDC, NEDC, SLDC, OH, OO, Store_OH, Deal, and Marketing.

Display 2 provides item detail information and item specific replenishment control settings →

The screenshot shows the DART application interface for item 9885606. It includes sections for 'Item Information', 'DC Information', 'Order Information', and 'ES Predicted Sales'. The 'Item Information' section shows details like Name (UMBRELLA MINI MANUAL DOT), Author (COELHO PAULO), and Vendor (HARPERCOLLINS PUBLISHERS). The 'DC Information' section shows a table with columns for DC, In Stock, Demand, Demand, Deal, Demand, Safety, Stock, Total, Demand, Onhand, OnOrder, SOQ, Orig, Calc, SOQ, Volatility, and Lead-Time. The 'Order Information' section shows 'Infl Date' (01/16/2011) and 'Safety Stock Days' (4.06). The 'ES Predicted Sales' section shows a table with columns for Start Dt, 2011-01-15, 2011-01-29, 2011-02-12, 2011-02-26, 2011-03-12, 2011-03-26, 2011-04-09, and 2011-04-23.

Hardware and Software Overview

HARDWARE: IBM iSeries 870 with i5/OS version 5.4 in a 7 processor partition with 44 GB RAM
IBM P570 with AIX OS version 5.3 in a 4 processor partition with 1 GB RAM

DB SERVER: DB2 on i5/OS

SOFTWARE: WOW 6.5.4 Enterprise

IBM WebSphere version 6 on AIX

DEVELOPER CLIENT: Dell Latitude D620 GHz, 2 GB RAM

Eclipse 2008 version 3.4.1

JDK 1.5

Apache Tomcat 6.0

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Summary

Borders Group, Inc. used PlanetJ's WOW product to build numerous applications right out of the box. While leveraging PlanetJ's support, they started projects small, built their skills and are now using WOW as the base for many in-house applications.

Webb further comments; "The benefits to us (in using WOW) have been:

- °Customer satisfaction – our users are pleased with results that in-turn save them time and effort.
- °The browser based solutions that WOW enables provide a significant leap forward in information presentation and decision making that is a huge advantage over green screen – data entry and displayed results that would span multiple green screens and often gets rather cryptic can be done legibly and intuitively all at once.
- °Developer satisfaction – having WOW as a web application development tool simplifies that effort while allowing us more time to focus on database design and processing accuracy, resulting in an overall better quality business process.
- °We realized a 70% to 80% saving in effort in the web application portion of development projects."

References

<http://www.planetjavainc.com>

<http://www.borders.com>

*Additional case studies can be found at: www.planetjavainc.com/casestudies/
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In North America, call 760-432-0600. Elsewhere, call +1-760-432-0600.*