

ASUG 25

YEARS OF DISRUPTION

How Under Armour Improved Visibility into International Performance Data

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IN THIS SESSION

- Case study of Under Armour's recent SAP Business Planning and Consolidation (BPC) application analytics project
- Understand how Under Armour has gained deeper visibility into the financial performance data of their international business units
- Learn how data from SAP BPC was leveraged to deliver scorecards and analytic solutions using Business Objects reporting tools
- Outlook into how the solution is being further leveraged and deployed across the enterprise for additional business units

SPEAKER INTRODUCTION



**Eric Olsson, Director of BI for International,
Under Armour Inc.**



**Tony Guetersloh, BI Practice Lead, TruQua
Enterprises, LLC**

UNDER ARMOUR COMPANY OVERVIEW

- Worldwide producer and distributor of athletic performance apparel, footwear, and accessories
- Headquartered in Baltimore, MD
 - International division HQ in Panama City, Panama
- \$4B annual revenue, with over 30% YoY quarterly growth in last 12 months
 - 6 years of 20%+ quarterly growth
- Approximately 5,800 full-time employees
- Recent rapid growth in North America, now targeting growing market share in emerging markets
- Running SAP since 2006



UNDER ARMOUR



PROJECT DESCRIPTION

Under Armour was seeking to implement a reporting and analytics solution for their international division to provide:

- A monthly management reporting package for all regions outside of North America that incorporated data from SAP Business Planning and Consolidation (BPC), SAP Business One, and other retail sources
- An analytical model which will support multiple queries, drilldowns, and views of the data
- Multiple calculated measures to account for different currency rates, forecast cycles, prior year comparisons, and other business reporting requirements
- Foreign currency neutral reporting across regions
- A consistent single view of the “truth” to be deployed across all levels and regions of the organization
- Use of Business Objects to leverage their investment in the advanced suite of reporting and front-end tools for generating and publishing consistent financial reports

REQUIREMENTS OVERVIEW

All required financial data resided in SAP BPC 7.5, but the only method to access data was to use Excel-based BPC plug-in and EVDRE/EVGET formulas.

- Existing process to pull data involved multiple manual spreadsheets with variations on how key measures were defined
 - Labor intensive
 - Error prone
 - Inconsistent across regions and business units

REQUIREMENTS OVERVIEW

Solution needed to deliver the following requirements:

- Data reconciles perfectly with SAP BPC
- Various reporting tools can be used to read and analyze the data
- Support for multiple queries, drilldowns, and ad-hoc views of the data
- Reports are consistent for each region and business unit
- Include foreign currency neutral reporting and comparisons across forecast cycles and prior years
- Significantly reduced manual effort and support required

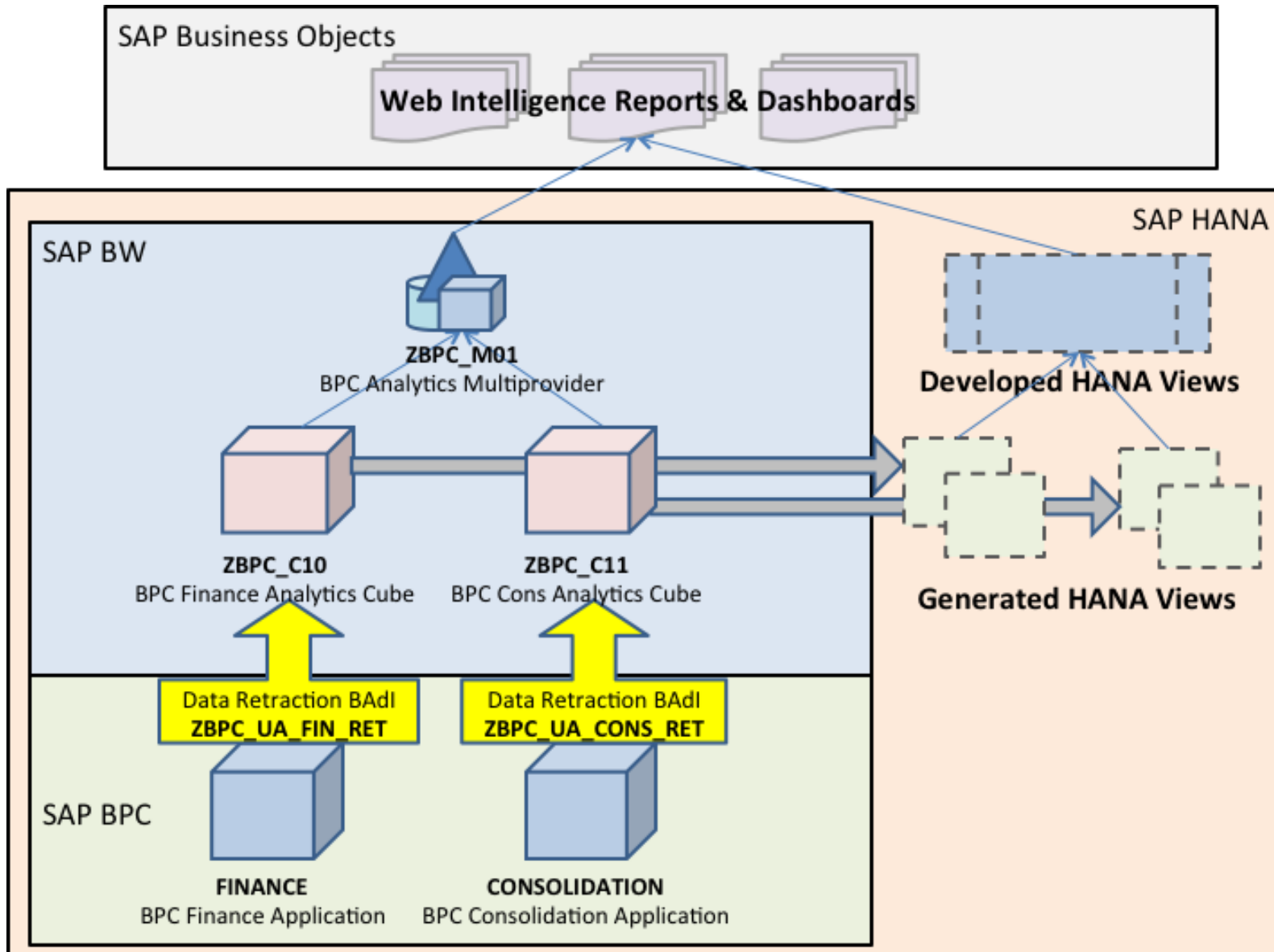


SOLUTION OVERVIEW

Solution was to build new BW standard InfoCubes to support analysis and reporting on the BPC data outside of the BPC interface for MS Excel. Overall design of the model includes:

- New BW InfoObjects created as “reference objects” to the standard BPC (/CPMB/*) generated InfoObjects to maintain real-time links to BPC master-data
- Cubes modeled to reflect the BPC application models
- Data extraction into the cubes using the “data retraction” BAdI to maintain all BPC application and data integrity
- Multiple calculated measures to account for different currency rates, prior year comparisons, and other business reporting requirements
- HANA Views and BEx queries built on the cubes for consumption by Business Objects front-end tools
- Final reports built in BusinessObjects Web Intelligence
- Flexible data model to support additional reporting and analytics beyond the Monthly Performance Overview

SOLUTION ARCHITECTURE



WHY THE RETRACTION BADI?

- Data in BPC Standard is not stored the same as data in standard BW InfoCubes
 - Hierarchy values posted at every node level
 - No sign flips for income vs. expense accounts
 - Currency and UoM conversions
 - Periodic measures vs “Sign Data”
- Standard BW extraction methods will not properly work on BPC cubes
 - Data will be incorrect
 - BPC application logic ignored
- To preserve BPC application logic, custom deployment of BPC retraction BAdI implemented
- Auditability back to BPC and change logs of who/when information was updated

PROJECT RESOURCES

- Project Team:
 - Project Manager – Under Armour
 - BPC / BW Architect – TruQua
 - ABAP / BAdI Developer – TruQua
 - Web Intelligence Report Developer – Under Armour



ISSUES AND CHALLENGES

- BPC Environments did not match between Dev, QA, and Prod
 - Dev and QA restored from backup of Prod to ensure consistent object definitions across landscapes
- Multiple hierarchies in BPC used in single reports
 - BPC reports mixed multiple business unit hierarchies across region, channel, and cost centers
 - BW / BEx only allows one active hierarchy at a time within a report
- Definition of SG&A roll-ups and allocations differed across regions and business units
 - Multiple meetings with financial analysts required to reach consensus and agree on consistent definitions
- Occasional data inconsistencies when retraction ran on very frequent basis
 - Technical issue with how BAdI reads multiple intersecting data packages at once
 - Ongoing open incident message with SAP
 - Drop and reload of affected period corrects the data



PROJECT RESULTS



- Successfully built and deployed solution within defined project timeline
- Use of Retraction BAdI ensured data tied correctly between BPC and BW Analytics cubes
- BEx queries produced to create initial format and calculations for Management Performance Overview reports
- Web Intelligence reports produced to include all required drilldowns by region and business unit

PROJECT RESULTS

- Comparing before and after Performance Overview Reports

Before

- Excel-based; manual

Total Europe in USD (000's)							
MONTH							
	Actuals	Actuals (FXN)	Latest F	F(U) vs. Latest F	LE	F(U) vs. LE	PY
House Sales	26,008	22,872	24,242	1,766	27,081	(1,973.0)	30,225
Preferred pricing	(1,605)	-	-	(1,605)	(1,792)	187.0	(3,948)
Discount %	0.06%	-	-	0%	0%	0.0	(0.13)%
Gross Sales	24,483	22,872	24,242	161	26,189	(1,768.0)	26,277
Freight and other	29	26	26	3	34	(5.0)	19
Sales returns	(303)	(440)	(440)	137	(498)	195.0	(1,051)
Sales allowances	(685)	-	(618)	(67)	(590)	(85.0)	(584)
Discounts / co op	(672)	-	(530)	(142)	(499)	(173.0)	(413)
Markdowns	(95)	-	(63)	18	(95)	31.0	-
Net Sales	22,747	22,872	22,637	110	24,580	(1,833.0)	24,248
Net Revenue	22,747	22,872	22,637	110	24,580	(1,833.0)	26,711
Dilution %	0.8%	0%	-7%	-32%	-6%	3%	2%

After

- Generated in Web Intelligence
- Filtered and published for each Region / BU

Monthly Financial Overview

International in USD (000's) - 03/2016

Financial Account	MONTH							YEAR								
	Actuals	Actuals (FXN)	F1	F(U) vs. Latest F	LE	F(U) vs. LE	PY	% vs. PY	Actuals	Actuals (FXN)	F1	F(U) vs. Latest F	Target	F(U) vs. Target	PY	% vs. PY
House Sales	49,240	46,159	36,254	12,985	46,693	2,556	30,247	62.8%	161,624	150,401	149,014	12,810	149,014	12,810	104,862	54.3%
Preferred pricing	(2,166)	0	(1,135)	(1,031)	(1,010)	(1,156)	(2,023)	6.5%	(9,429)	0	(4,507)	(4,923)	(4,923)	(4,923)	(9,419)	0.1%
Discount %	(4.4%)	0.0%	(3.1%)	(1.3%)	(2.2%)	(2.2%)	(8.7%)	2.3%	(5.8%)	0.0%	(3.0%)	(2.8%)	(3.0%)	(2.8%)	(9.0%)	3.2%
Gross Sales	47,074	46,159	35,120	11,954	45,674	1,400	28,214	66.8%	152,356	150,401	144,507	7,887	144,507	7,887	95,443	59.7%
Freight and other	59	0	29	29	59	(0)	39	51.6%	146	0	81	65	81	65	81	137.5%
Sales returns	(2,278)	0	(1,207)	(1,070)	(935)	(1,343)	(1,045)	117.9%	(4,954)	0	(3,066)	(1,888)	(3,066)	(1,888)	(2,349)	110.9%
Sales allowances	(485)	0	(586)	101	(661)	176	(1,363)	(84.4%)	(1,934)	0	(1,842)	(92)	(1,842)	(92)	(2,422)	(20.2%)
Discount / co op	(936)	0	(692)	(244)	(888)	(48)	(309)	203.0%	(2,828)	0	(2,314)	(514)	(2,314)	(514)	(869)	218.1%
Markdowns	183	0	70	113	191	(8)	0	0.0%	39	0	(16)	55	(16)	55	0	#####
Net Sales	43,617	46,159	32,733	10,884	43,440	177	25,536	70.8%	142,864	150,401	137,351	5,514	137,351	5,514	89,845	59.0%
Dilution %	(7.3%)	0.0%	(6.8%)	(0.5%)	(4.9%)	(2.5%)	(9.5%)	2.1%	(6.3%)	(0.0%)	(5.0%)	(1.3%)	(5.0%)	(1.3%)	(5.9%)	(0.4%)
License revenues	1,739	0	1,391	348	2,010	(272)	1,500	15.9%	6,370	0	6,298	72	6,298	72	6,173	3.2%
Net Revenue	45,355	46,159	34,124	11,232	45,450	(95)	27,036	67.8%	148,234	150,401	143,649	5,585	143,649	5,585	96,018	55.4%
Cost of Product - System	22,920	24,293	19,270	(3,650)	24,519	1,599	14,272	60.6%	81,123	86,230	85,572	4,449	85,572	4,449	49,708	63.2%
Other Cost of Product	1,044	0	848	(198)	809	(235)	692	50.7%	1,827	0	1,529	(298)	1,529	(298)	1,174	55.6%
Cost of Product	23,171	24,291	19,427	(4,744)	24,826	1,655	15,726	47.3%	83,079	86,220	81,902	(1,177)	81,902	(1,177)	52,855	57.2%
House Margin %	52.9%	47.4%	49.2%	3.8%	46.8%	6.1%	48.0%	4.9%	48.7%	42.7%	45.0%	3.6%	45.0%	3.6%	49.8%	(0.9%)
Product Margin %	50.8%	47.4%	47.5%	3.2%	45.6%	5.1%	44.3%	6.5%	45.5%	42.7%	43.3%	2.2%	43.3%	2.2%	44.6%	0.9%
Cost of goods sold	24,293	24,319	19,377	(4,915)	26,413	2,120	16,219	49.8%	86,230	86,250	84,718	(1,512)	84,718	(1,512)	54,342	58.7%
Gross Margin	21,062	21,840	14,746	6,316	19,037	2,025	10,817	94.7%	63,005	64,151	58,931	4,073	58,931	4,073	41,676	51.2%
GM %	46.4%	47.3%	43.2%	3.2%	41.9%	6.0%	40.0%	6.4%	42.2%	42.7%	41.0%	1.2%	41.0%	1.2%	43.4%	(1.2%)
Marketing	5,897	6,007	8,276	2,379	7,044	1,147	5,183	13.8%	14,887	15,100	16,504	3,617	16,504	3,617	12,168	22.3%
Selling	6,147	6,240	6,049	(98)	6,385	219	2,428	153.1%	15,727	16,854	15,359	(368)	15,359	(368)	7,313	115.0%
Supply Chain	539	541	336	(204)	340	(200)	506	6.6%	1,222	1,223	977	(245)	977	(245)	943	29.6%
Distribution House	1,069	1,077	1,032	(37)	1,363	314	705	51.6%	3,122	3,125	3,087	(36)	3,087	(36)	2,208	35.3%
IT	502	503	533	30	498	(14)	510	11.6%	1,171	1,163	1,416	245	1,416	245	1,204	14.3%
Back Office	4,891	4,884	5,570	679	5,364	472	3,553	37.6%	13,249	13,210	15,047	1,798	15,047	1,798	11,647	13.8%
Bad Debt	786	869	71	(715)	77	(709)	1,303	(39.7%)	1,237	1,335	199	(1,038)	199	(1,038)	1,623	(23.8%)

FUTURE OUTLOOK

- Due to success of project for International, other regions and business units seeking the same solution
 - North America deployed in March 2016
- Deploy mobile reports and dashboards in addition to standard WebI reports
- Enable ad-hoc data analysis and exploration to power users through BEx and/or SAP Lumira
- Migrate solution to BPC 10.1 as part of broader SAP FMS (Fashion Mgmt Solution on S/4HANA) deployment project at Under Armour



3 KEY LEARNING POINTS

- Deploying standardized financial reports to all international business units first requires significant buy-in and consensus from Finance Analysts across the enterprise
- Pulling BPC data into standard BW cubes is not as simple as a straight-forward extraction
 - Special programs are required to maintain the application logic and data integrity from BPC
- Building a dedicated analytics model for BPC data opens up many new possibilities for reports, scorecards, dashboards, ad-hoc data exploration, and mobile analytics to free your users from the limits of Excel

RETURN ON INVESTMENT

Upon deployment of the solution, Under Armour has recognized the following benefits:

- Significantly reduced manual effort to produce monthly performance reports
- Consistent financial data provided at all levels of the organization
- Company financial data more widely available for reporting
 - Previously controlled by small cadre of skilled BPC Excel users
 - Now available to anyone who builds reports in our standard environment using our standard tools

BEST PRACTICES

- Maintain current BPC hierarchies in system as enterprise structure changes
 - Do not make local report adjustments otherwise central reporting becomes patchwork and difficult to tie out
- Build as many common calculations and filters into the BW / BEx layer as possible to reduce the amount of custom report elements required in Web Intelligence
- Keep the BPC landscapes in sync across Dev, QA, and Production
 - Do not make BPC model changes directly in Production
- Pick the right partner with the right level of application knowledge and experience to ensure a successful project

Thank you!

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