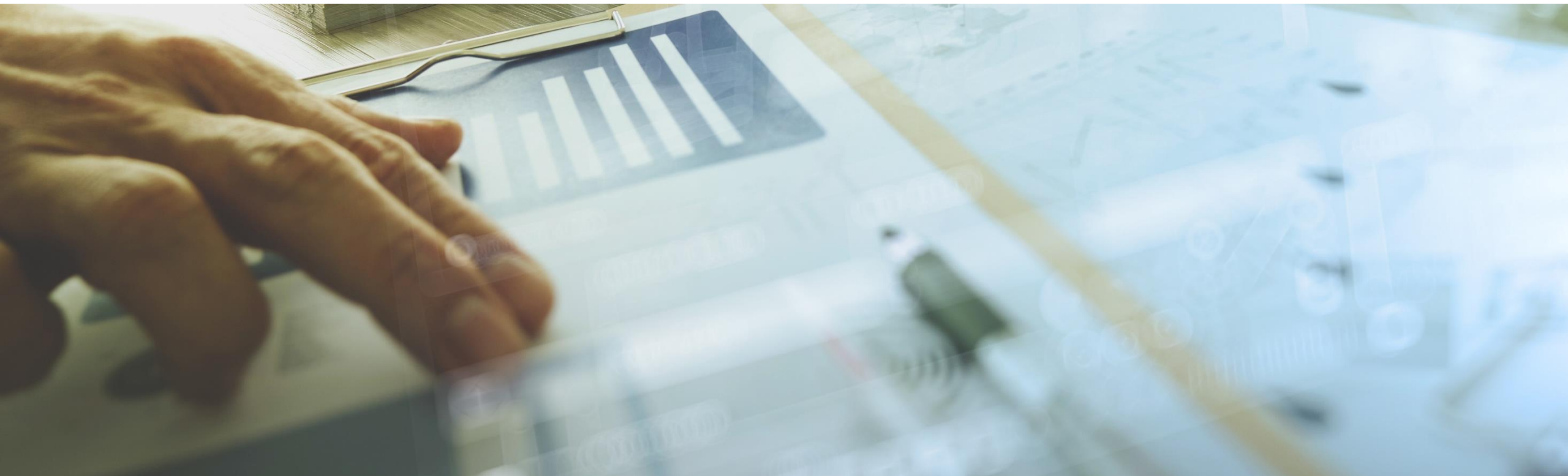


# Dynamic Insights

Armanino – Microsoft Dynamics 365 Practice



# Dynamic *Insights* – Solution Example



# Dynamic *Insights* – Solution Example



## Profit & Loss (vs budget)

Profit & Loss Actual vs Budget

	Current			
	Actual	Budget	Variance	Variance %
499900 TOTAL REVENUE	2,148,646	1,138,782	1,009,863	88.7%
539900 TOTAL COST OF GOODS SOLD	(1,072,284)	(621,311)	(450,973)	72.6%
549900 TOTAL PROJECT COST OF GOODS SOLD	(16,278)	(8,097)	(7,181)	88.7%
599900 GROSS PROFIT	1,061,084	509,374	551,709	108.3%
600900 TOTAL MANUFACTURING EXPENSES	64,703	34,293	30,411	88.7%
601900 TOTAL SELLING & AD EXPENSES	1,459	773	686	88.7%
603990 TOTAL PROJECT PAYROLL ALLOCATION	17,710	9,386	8,324	88.7%
605900 TOTAL BUILDING & MAINT. EXPENSES	(2,997)	(1,588)	(1,409)	88.7%
606900 TOTAL ADMINISTRATIVE EXPENSES	(10,163)	(5,388)	(4,777)	88.7%
607900 TOTAL DEPRECIATION EXPENSE	(101,272)	(13,713)	(87,559)	638.5%
619900 TOTAL OTHER EXPENSES	(0)	(0)	0	0.0%
699900 TOTAL OPERATING EXPENSES	(30,660)	23,764	(54,324)	-228.6%
699990 NET OPERATING INCOME	1,030,524	533,139	497,385	93.3%

YTD			
Actual	Budget	Variance	Variance %
6,245,554	3,310,143	2,935,410	88.7%
(4,222,644)	(2,292,857)	(1,929,788)	84.2%
(77,646)	(41,162)	(36,484)	88.7%
1,945,263	976,135	969,129	99.3%
602,245	425,190	577,055	88.7%
9,360	4,961	4,399	88.7%
69,650	47,514	42,135	88.7%
(13,870)	(7,351)	(6,519)	88.7%
(83,700)	(44,361)	(39,339)	88.7%
(483,876)	(67,496)	(416,380)	616.9%
0	(0)	0	-100.0%
319,808	358,457	(38,649)	-10.8%
2,265,072	1,534,591	930,480	69.7%

## Profit & Loss (vs last year)

Company: Contoso Retail USA  
 Measures: Amount  
 Transaction Date/Accounting Period: Period 3 2012  
 Period Code: Normal

Profit & Loss vs Last Year

	Current			
	Current	Last Year	Variance LY	Variance LY%
401999 TOTAL EXTERNAL SALES	546,995	569,428	(22,433)	-4.1%
500599 TOTAL COGS	(274,149)	(280,036)	5,888	-2.1%
510999 TOTAL VARIANCE ADJUSTMENTS	(29,096)	(27,459)	(1,638)	5.6%
600999 TOTAL MANUFACTURING EXPENSES	0	(5)	5	
601999 TOTAL SELLING & AD EXPENSES	(13,638)	(11,486)	(2,153)	15.8%
602999 TOTAL PERSONNEL EXPENSES	(63,177)	(65,000)	1,823	-2.9%
800999 TOTAL INTEREST EXPENSES	(4,091)	(3,446)	(646)	15.8%
Profit & Loss	162,844	181,996	(19,153)	-11.8%

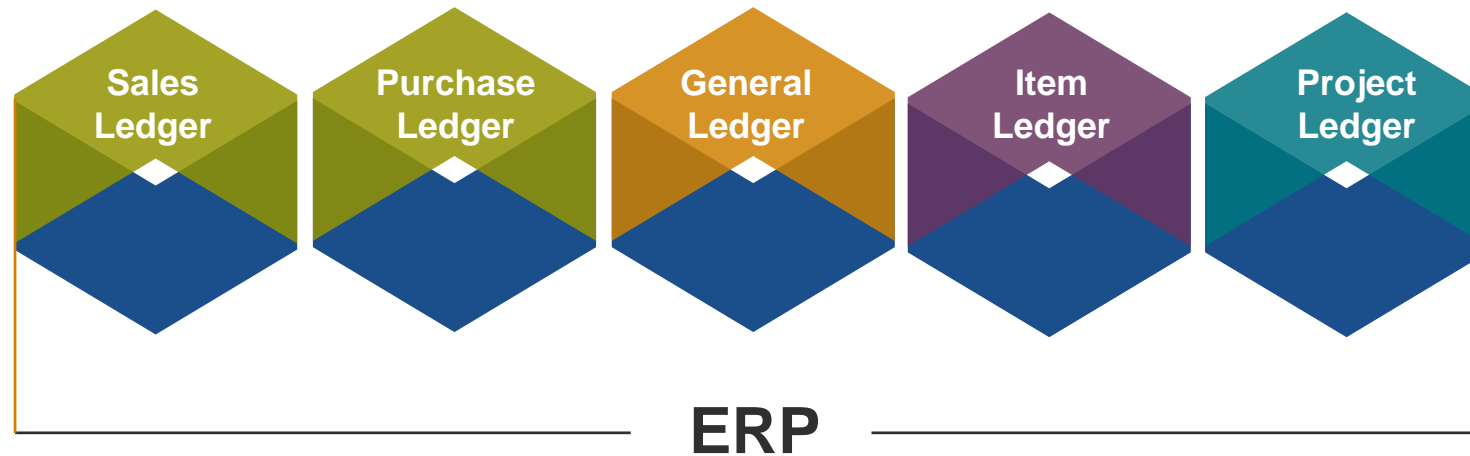
YTD			
Current	Last Year	Variance LY	Variance LY%
1,700,914	2,324,910	(623,996)	-36.7%
(843,681)	(1,121,882)	278,200	-33.0%
(78,620)	(1,268,558)	1,189,938	-1513.5%
0	(27,846,992)	27,846,992	
(41,052)	(36,576)	(4,476)	10.9%
(189,867)	(195,000)	5,133	-2.7%
(12,316)	(10,973)	(1,343)	10.9%
535,378	(28,155,070)	28,690,448	5358.9%

# Common Complaints



- Can't get data out; can't get data to load data warehouse
- Where's my GP SmartList?
- Management Reporter is clumsy and lacks detail
- I can't see detail that makes up my G/L
- Reports don't reconcile to the ledger (G/L)
- Don't have access to legacy data
- Don't have data from multiple systems in one place

# ERP is Designed for Processing, Not Reporting



# Typical Financial Statement



## Financial View

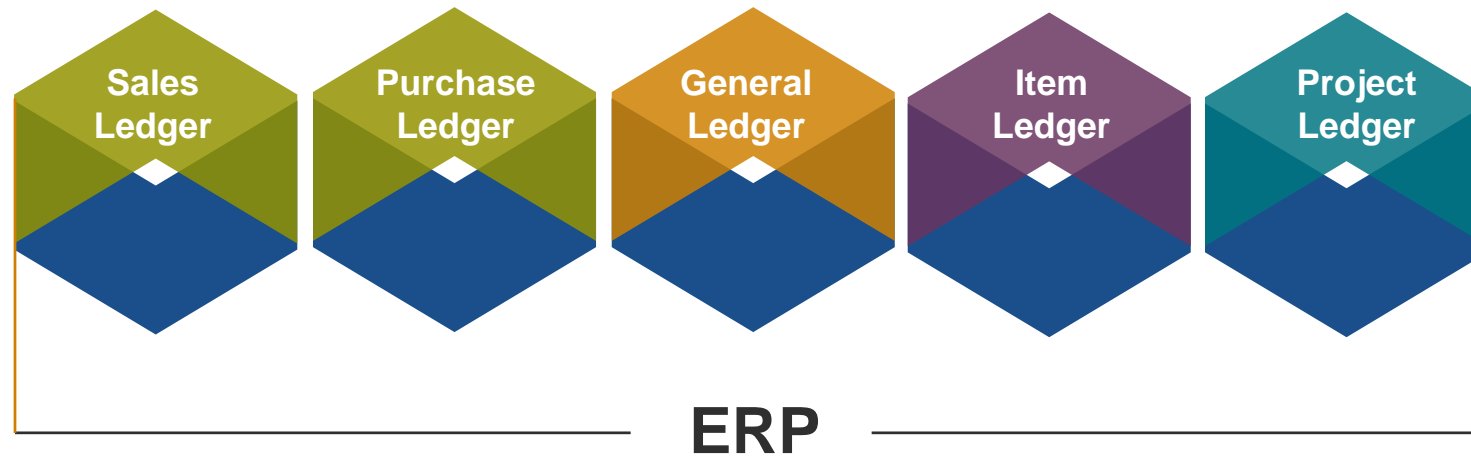
### Income Statement

	Month				YTD			
	Current	Previous Year	vs Last Yr.	vs Last Yr. %	Current	Previous Year	vs Last Yr.	vs Last Yr. %
<b>TOTAL REVENUE</b>	2,148,646	1,752,078	396,568	22.6%	6,245,554	5,524,099	721,454	13.1%
<b>TOTAL COST OF GOODS SOLD</b>	(1,072,284)	(494,333)	(577,951)	116.9%	(4,222,644)	14,152,339	(18,374,984)	-129.8%
<b>TOTAL PROJECT COST OF GOODS SOLD</b>	(15,278)	(12,339)	(2,939)	23.8%	(77,646)	(58,788)	(18,858)	32.1%
<b>GROSS PROFIT</b>	<b>1,061,084</b>	<b>1,245,406</b>	<b>(184,322)</b>	<b>-14.8%</b>	<b>1,945,263</b>	<b>19,617,650</b>	<b>(17,672,387)</b>	<b>-90.1%</b>

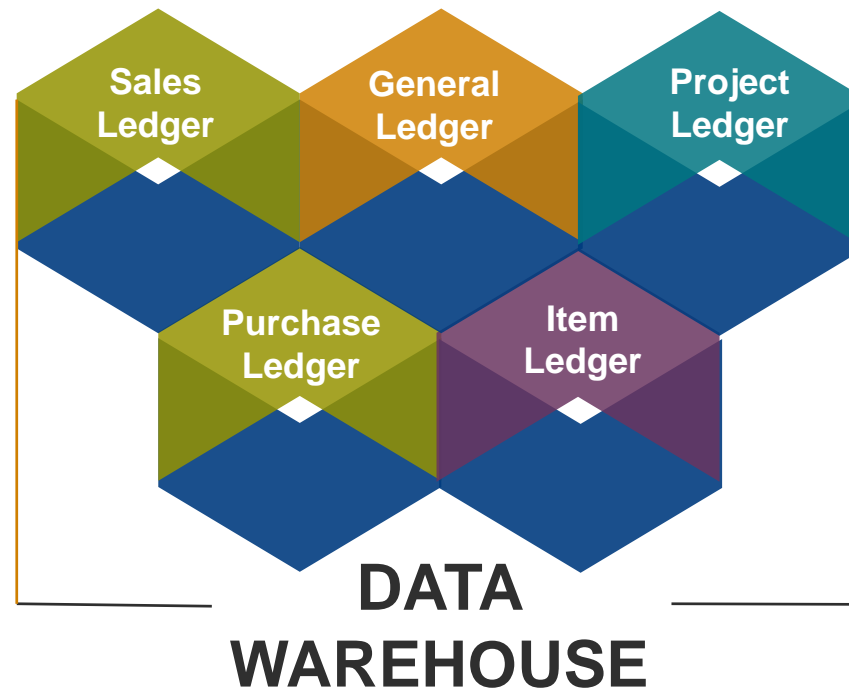
## Operational View

	Car Audio	DVR	DVD Player	Home Theater	Projectors	Receivers	Speakers	Televisions	Total
<b>Customer</b>	<b>5,936</b>	<b>301,170</b>	<b>74,000</b>	<b>243,313</b>	<b>51,944</b>	<b>6,368</b>	<b>862,080</b>	<b>578,590</b>	<b>2,123,400</b>
<b>Intercompany</b>				34,576			205,451		240,028
<b>Internet</b>	947			22,176		1,313	143,864		168,299
<b>Major</b>		64,500		11,266	51,944	5,055	479,309		612,073
<b>Retail</b>	4,989	236,670	74,000				33,456		349,115
<b>Wholesale</b>				175,294				578,590	753,884

# Data Warehouse is Designed for Integrated Reporting



# Data Warehouse is Designed for Integrated Reporting










# Company Perspective - Finance and Operations in Harmony

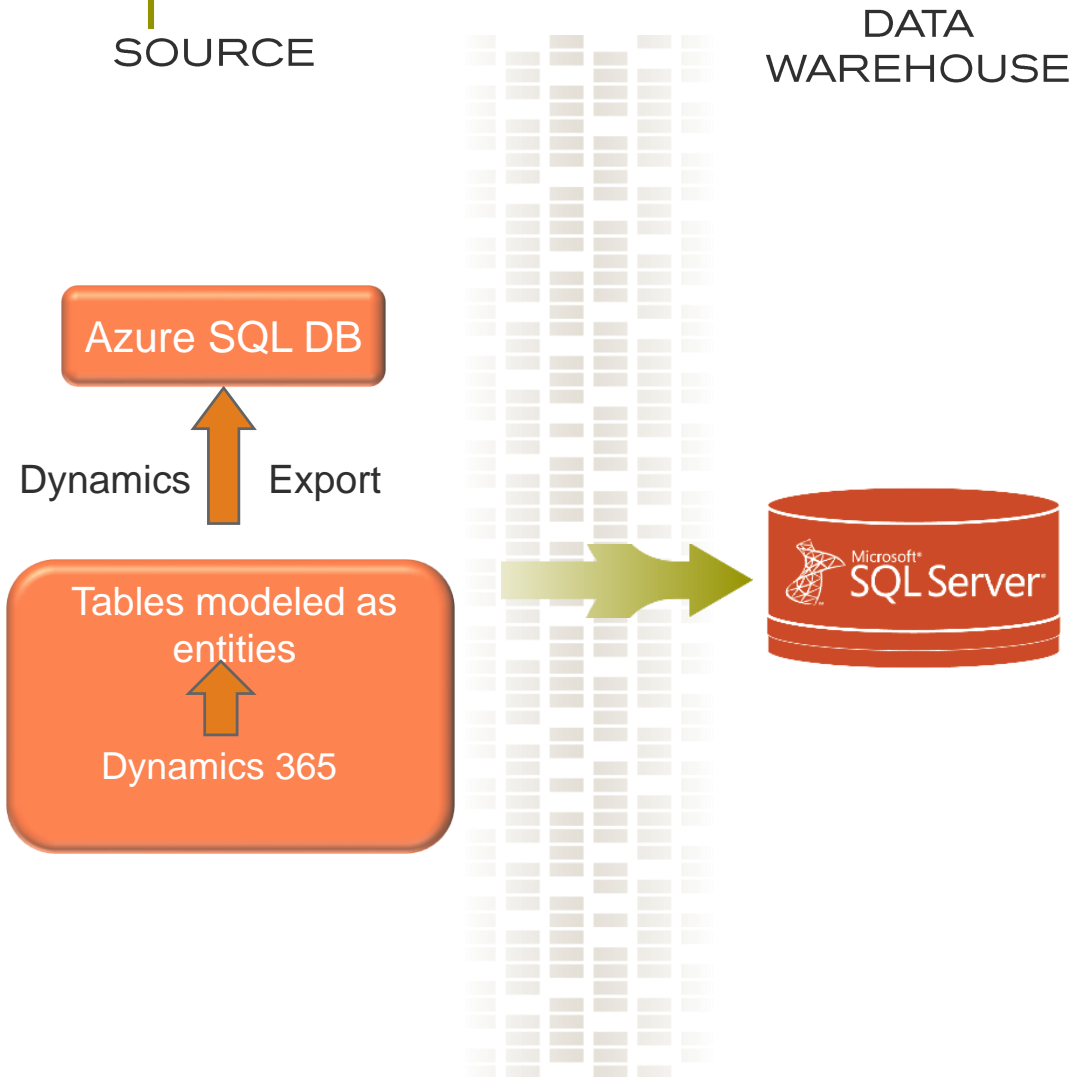


	Non Product	Car Audio	PVR	DVD Player	Home Theater	Projectors	Receivers	Speakers	Televisions	Total
Customer	5,160	5,936	301,170	74,000	243,313	51,944	6,368	862,080	578,590	2,128,560
Intercompany Customers					34,576			205,451		240,028
Internet Customers		947			22,176		1,313	143,864		168,299
Major Customers	4,640		64,500		11,266	51,944	5,055	479,309		616,713
Retail Customers	510	4,989	236,670	74,000				33,456		349,625
Wholesale Customers	10				175,294				578,590	753,894
Other	18,216									18,216
Vendor	1,870									1,870
Other	100									100
Video Vendors	1,770									1,770
All	25,246	5,936	301,170	74,000	243,313	51,944	6,368	862,080	578,590	2,148,646

 customers
 general ledger journal
 vendor
 inventory
 projects



# Dynamic Insights Solution Architecture



# Data Warehouse – What is included?



## The GL: Limited Analytical Content

TRANSTYP	VOUCHER	ACCO	TXT	DIM	AMOUNT	MTST	QTY
2	SIV-100720	401130	Sales invoice 100720	030	(11,266.00)	0	
	SIV-100721	401150	Sales invoice 100721	030	(515.35)	0	
	SIV-100722	401120	Sales invoice 100722	030	(18,000.00)	0	
	SIV-100723	401140	Sales invoice 100723	030	(21,367.32)	0	
	SIV-100724	401160	Sales invoice 100724	030	(64,728.00)	0	
	SIV-100725	401150	Sales invoice 100725	030	(850.77)	0	
	SIV-100726	401160	Sales invoice 100726	030	(39,120.00)	0	
	SIV-100727	401160	Sales invoice 100727	030	(84,328.00)	0	
2 Total					(241,720.19)	0	
14	VPY-10080	403160	Discount 200711	010	(100.00)	0	
14 Total					(100.00)	0	
6	PJHV_00000169	420200	Service Hours	030	(130.00)	2	
6 Total					(130.00)	2	
Grand Total					(241,950.19)	2	

## vs. Data Warehouse: Full Analytical Content

Trans Type	Document	GL Code	Line Description	Depart	Customer Vendor	CV County	Sales Person	Item	Item	Amount	GP	Qty
Sales Ledger	SIV-100720	401130	Sales order SO-100691	Sales	Rainbow Hotel	HAMPDEN	Nancy Anderson	1205	Home Theater System 2.1 Channel Model 05	(11,266.00)	4,995.18	43
	SIV-100721	401150	Sales order SO-100692	Sales	Grape Conference Center	SUFFOLK	Nancy Anderson	1305	Receiver 5.1 Channel Model 01	(515.35)	195.70	3
	SIV-100722	401120	Sales order SO-100693	Sales	Triangle East Training Center	QUEENS	Nancy Anderson	1604	Standard Digital Video Recorder Model 04	(18,000.00)	5,454.00	72
		401140	Sales order SO-100693	Sales	Triangle East Training Center	QUEENS	Nancy Anderson	1509	LCD Video Projector with Batch Registration	(1,200.00)	532.62	3
								1551	Extension Cord for Projector	(18.08)	8.16	1
								1552	Installation Manual for Projectors	(0.00)	(6.85)	20
	SIV-100723	401140	Sales order SO-100694	Sales	Mountain University	BENTON	Nancy Anderson	1502	LCD Video Projector Model 02	(13,600.00)	5,860.26	17
								1508	Lamp for LCD Video Projector Model 02	(7,695.00)	4,056.27	19
								1551	Extension Cord for Projector	(72.32)	32.63	4
								1552	Installation Manual for Projectors	(0.00)	(6.85)	20
	SIV-100724	401160	Sales order SO-100695	Sales	Jaguar Concert Hall	ADA	Nancy Anderson	1107	High End Speaker - mahogany/12 inches	(64,728.00)	15,176.82	72
	SIV-100725	401150	Sales order SO-100696	Sales	Tulip Shopping Mall	IDA	Nancy Anderson	1303	Receiver 2.1 Channel Model 03	(300.18)	121.98	2
		401160	Sales order SO-100696	Sales	Tulip Shopping Mall	IDA	Nancy Anderson	1307	Receiver 5.1 Channel Model 03	(550.59)	201.54	3
								1173	Subwoofer Model 03	(316.67)	105.81	5
	SIV-100726	401160	Sales order SO-100697	Sales	Hockey Stadium	GREENE	Nancy Anderson	1102	High End Speaker - ash/14 inches	(39,120.00)	9,822.27	40
	SIV-100727	401160	Sales order SO-100698	Sales	Borrego Springs Airport	SAN DIEGO	Nancy Anderson	1109	High End Speaker - mahogany/16 inches	(84,328.00)	32,643.99	83
Sales Ledger Total										(241,720.19)	79,198.67	392
Purchase	VPY-10080	403160	Discount 200711	Admin	ESW Electronics	ADA	Erik Vanden	1120	Cable Extension 30"	(100.00)	-	20
Purchase Ledger Total										(100.00)	-	20
Projects	PJHV_00000169	420200	Service Hours	Sales	Contoso Intercompany	NYC	{Not Applicable}	AS12	Frank Collinson	(130.00)	-	2
Projects Total										(130.00)	-	2
Grand Total										(241,950.19)	9,198.67	414

- Summary is replaced with detail...

# Data Warehouse – What is included?



ALL COMPANIES

Trans Type	Document	GL Code	Line Description	Department	Customer/Vendor	CV County	Sales Person	Item	Item	Amount	GP	Qty
Sales Ledger	SIV-100720	401130	Sales order SO-100691	Sales	Rainbow Hotel	HAMPDEN	Nancy Anderson	1205	Home Theater System 2.1 Channel Model 05	(11,266.00)	4,995.18	43
	SIV-100721	401150	Sales order SO-100692	Sales	Grape Conference Center	SUFFOLK	Nancy Anderson	1305	Receiver 5.1 Channel Model 01	(515.35)	195.70	3
	SIV-100722	401120	Sales order SO-100693	Sales	Triangle East Training Center	QUEENS	Nancy Anderson	1604	Standard Digital Video Recorder Model 04	(18,000.00)	5,454.00	72
		401140	Sales order SO-100693	Sales	Triangle East Training Center	QUEENS	Nancy Anderson	1509	LCD Video Projector with Batch Registration	(1,200.00)	532.62	3
								1551	Extension Cord for Projector	(18.08)	8.16	1
								1552	Installation Manual for Projectors	(0.00)	(1.71)	5
	SIV-100723	401140	Sales order SO-100694	Sales	Mountain University	BENTON	Nancy Anderson	1502	LCD Video Projector Model 02	(13,600.00)	5,860.26	17
								1508	Lamp for LCD Video Projector Model 02	(7,695.00)	4,056.27	19
								1551	Extension Cord for Projector	(72.32)	32.63	4
								1552	Installation Manual for Projectors	(0.00)	(6.85)	20
		403150	Mountain University	Sales	Mountain University	BENTON	Nancy Anderson	1120	Cable Extension 30"	(10.00)	-	-
SIV-100724	401160	Sales order SO-100695	Sales	Jaguar Concert Hall	ADA	Nancy Anderson	1107	High End Speaker - mahogany/12 inches	(64,728.00)	15,176.82	72	
SIV-100725	401150	Sales order SO-100696	Sales	Tulip Shopping Mall	IDA	Nancy Anderson	1303	Receiver 2.1 Channel Model 03	(300.18)	121.98	2	
		401160	Sales order SO-100696	Sales	Tulip Shopping Mall	IDA	Nancy Anderson	1307	Receiver 5.1 Channel Model 03	(550.59)	201.54	3
SIV-100726	401160	Sales order SO-100697	Sales	Hockey Stadium	GREENE	Nancy Anderson	1173	Subwoofer Model 03	(316.67)	105.81	5	
SIV-100727	401160	Sales order SO-100698	Sales	Borrego Springs Airport	SAN DIEGO	Nancy Anderson	1102	High End Speaker - ash/14 inches	(39,120.00)	9,822.27	40	
							1109	High End Speaker - mahogany/16 inches	(84,328.00)	32,643.99	83	
Sales Ledger Total										(241,720.19)	79,198.67	392
Purchase	VPY-10080	403160	Discount 200711	Admin	ESW Electronics	ADA	Erik Vanden	1120	Cable Extension 30"	(100.00)	-	20
Purchase Ledger Total										(100.00)	-	20
Projects	PJHV_00000169	420200	Service Hours	Sales	Contoso Intercompany	NYC	{Not Applicable}	AS12	Frank Collinson	(130.00)	-	2
Projects Total										(130.00)	-	2
Open Orders (and other non-posted)												
Budget & Forecasts												
Grand Total										(241,950.19)	79,198.67	414



currency

ALL DIMENSIONS



customer  
detail



vendor  
detail



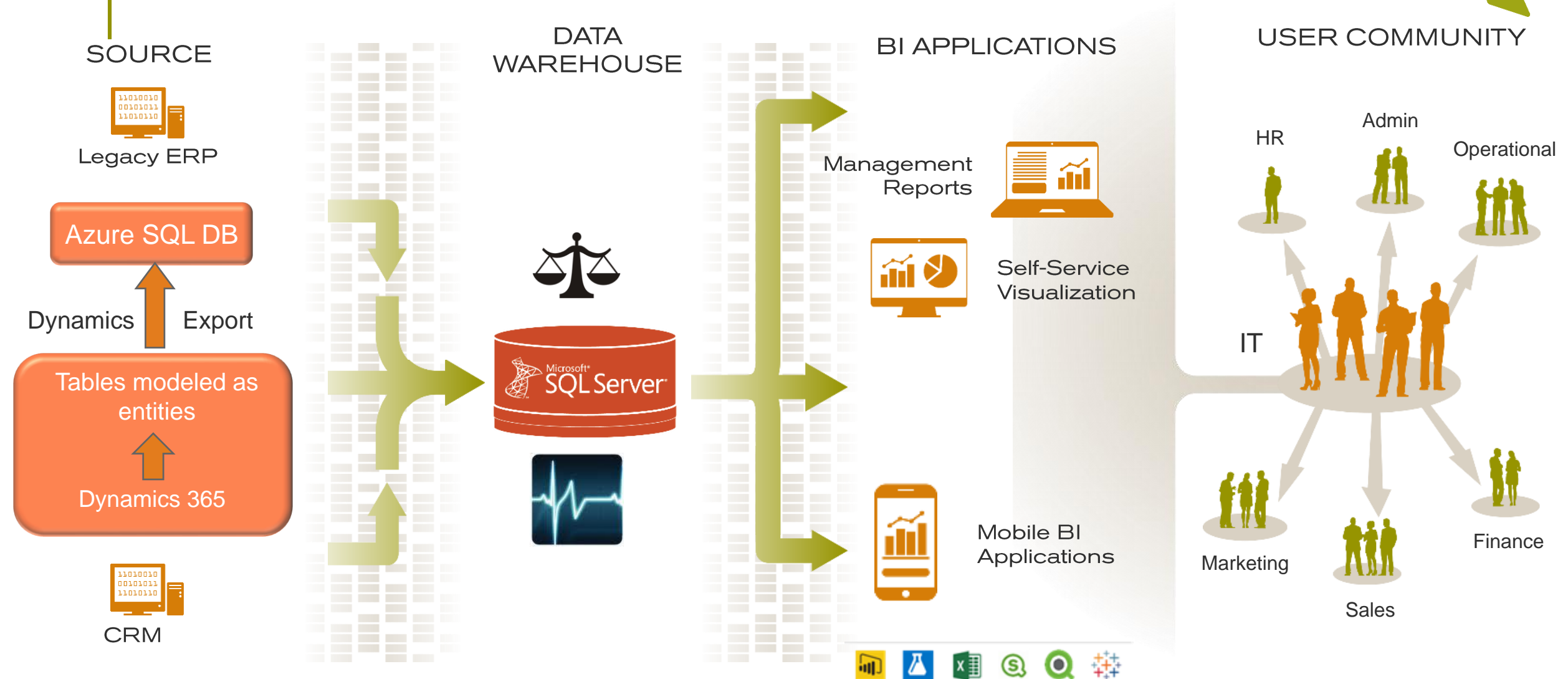
inventory  
details



project  
detail

All History	External Drivers	KPIs	Time Period Analysis	Alternative Hierarchies	Purchasing	Profitability
AR/AP Aging	Cash	Resources	Assets & Liabilities	Supply Chain	Expenditure	Consolidation

# Dynamic Insights Solution Architecture





# The “Software” – ALL IN MICROSOFT S/W

- Data Export
  - D365 F&O Package of 300+ data entities for export to Azure SQL DB
  - Maintained by Armanino for updates to D365 F&O
  - Extendable by client or Armanino
- Data Integration
  - Leverages native SQL Server
  - Integration logic of g/l to sub-ledger
  - Maintained for D365 F&O changes
  - Monitored and supported to ensure data and integration accuracy
  - Extendable by client or Armanino
  - SQL Analysis Services tabular model (client modifiable)



# Buy and Build (not Buy vs Build)

- 30 day implementation of out of the box solution (years of effort)
- Standard Microsoft tools (SQL procedures & SSIS)
- Templates available for client to extend the environment on its own
- Integrate other systems (CRM, legacy, and operational)
- Best of both worlds:
  - Rapid implementation
  - BI project risk avoidance
  - Ability to extend and add by Armanino or client