MDX Queries

- ✓ The queries, with orange back color, are queries mapped for MDX brought the SSB. The queries, with lilac back color, were created from orange queries, in order to increase the variability of visions, but maintaining selectivity of their respective orange queries.
- ✓ Query Q3.2 was discarded, because it is associated with the same view of query Q3.3, and also, would it not be possible modify it without changing the selectivity.

1 Dimension for Query(8)			
MDX	**Used Levels**	**Filters**	**Selectivity**
1. SELECT [Measures].[Lo Revenue] ON 0, [PART.PART COLOR].[P COLOR].[white] ON 1 FROM [LINEORDER]	[PART. PART COLOR].[P COLOR]	*p_color = 'white'*	1.08e-2
2. SELECT [Measures].[Lo Revenue] ON 0, [PART].[P BRAND1].[MFGR#111] ON 1 FROM [LINEORDER]	[PART].[P BRAND1]	*p_brand1 = 'MFGR#111'*	1.0e-3
3. SELECT [Measures].[Lo Revenue] ON 0, [PART.PART CONTAINER].[P CONTAINER].[MED CAN]ON 1 FROM [LINEORDER]	[PART. PART CONTAINER].[P CONTAINER]	*p_container = 'MED CAN'*	2.5e-2
4. SELECT [Measures].[Lo Revenue] ON 0, [SUPPLIER].[S CITY].[BRAZIL 4]. Children ON 1 FROM [LINEORDER]	[SUPPLIER].[S NAME]	*s_city = 'BRAZIL 4'*	4.0e-3
5. SELECT [Measures].[Lo Revenue] ON 0, [CUSTOMER].[C CITY].[CHINA 5].Children ON 1 FROM [LINEORDER]	[CUSTOMER].[C NAME]	*c_city = 'CHINA 5'*	4.0e-3
6. SELECT [Measures].[Lo Revenue] ON 0, [COMMITDATE.SEASON MONTH].[D SEASON].[Winter].[January] ON 1 FROM [LINEORDER]	[COMMITDATE.SEASON MONTH].[D MONTH]	*d_sellingseason = 'Winter' and d_month = 'January'*	1.67e-2
7. SELECT [Measures].[Lo Revenue] ON 0, [DATE.SEASON MONTH].[D SEASON].[Winter].[January] ON 1 FROM [LINEORDER]	[DATE.SEASON MONTH].[D MONTH]	*d_sellingseason = 'Winter' and d_month = 'January'*	1.67e-2
8. SELECT [Measures].[Lo Revenue] ON 0, { [DATE.DATE WEEKNUMINYEAR].[D Year].[1994].[6]} ON 1 FROM [LINEORDER]	[DATE.DATE WEEKNUMINYEAR].[D WEEKNUMINYEAR]	*d_*weeknuminyear = 6 and *d_year = '1994'*	2.6e-3

2 Dimensions for Query(8)			
MDX	**Used Levels**	**Filters**	**Selectivity**
1. SELECT [Measures].[Lo Revenue] ON 0, {[PART].[P MFGR].[MFGR#3]. Children}* {[SUPPLIER].[S NATION].[BRAZIL]. Children } ON 1 FROM [LINEORDER]	• [PART].[P CATEGORY] • [SUPPLIER].[S CITY]	*p_mfgr = 'MFGR#3' and s_nation = 'BRAZIL'*	8.0e-3
2. SELECT [Measures].[Lo Revenue] ON 0, {[PART].[P CATEGORY].[MFGR#11]. Children} * {[SUPPLIER].[S CITY].[BRAZIL 4]. Children} ON 1 FROM [LINEORDER]	• [PART].[P BRAND1] • [SUPPLIER].[S NAME]	*p_category = 'MFGR#11' and s_city = 'BRAZIL 4'*	1.6e-4
3. SELECT [Measures].[Lo Revenue] ON 0, {[SUPPLIER].[S NATION].[BRAZIL]. Children}*{ [CUSTOMER].[C CITY].[CHINA 5].Children } ON 1 FROM [LINEORDER]	• [CUSTOMER].[C NAME] • [SUPPLIER].[S CITY]	*s_nation = 'BRAZIL' and c_city = 'CHINA 5'*	1.6e-4
4. SELECT [Measures].[Lo Revenue] ON 0, {[SUPPLIER].[S CITY].[BRAZIL 4]. Children}*{[CUSTOMER].[C NATION].[CHINA].Children} ON 1 FROM [LINEORDER]	• [CUSTOMER].[C CITY] • [SUPPLIER].[S NAME]	*s_city = 'BRAZIL 4' and c_nation = 'CHINA'*	1.6e-4
5. SELECT [Measures].[Lo Revenue] ON 0,{ [CUSTOMER].[C NATION].[CHINA].Children} * {[DATE.DATE YEARMONTHNUM].[D YEARMONTHNUM].[199401] } ON 1 FROM [LINEORDER]	• [CUSTOMER].[C CITY] • [DATE.DATE YEARMONTHNUM].[D YEARMONTHNUM]	*c_nation = 'CHINA' and d_*yearmonthnum = '199401'	4.76e-4
6. SELECT [Measures].[Lo Revenue] ON 0, {[CUSTOMER].[C CITY].[CHINA 5].Children} * { [DATE.DATE WEEKNUMINYEAR].[D Year].[1994].[6] } ON 1 FROM [LINEORDER]	• [CUSTOMER].[C NAME] • [DATE.DATE WEEKNUMINYEAR].[D WEEKNUMINYEAR]	*c_city = 'CHINA 5' and d_*weeknuminyear = 6 and *d_year = '1994'*	1.05e-5
7. SELECT [Measures].[Lo Revenue] ON 0, {[COMMITDATE.SEASON MONTH].[D SEASON].[Winter].Children} * { [PART].[P CATEGORY].[MFGR#11]. Children } ON 1 FROM [LINEORDER]	• [PART].[P BRAND1] • COMMITDATE.SEASON MONTH].[D MONTH]	*d_sellingseason = 'Winter' and p_category = 'MFGR#11'*	8.0e-3

8. SELECT [Measures].[Lo Revenue] ON 0, {[DATE].[D YEAR].[1993].Children} * { [COMMITDATE.SEASON MONTH].[D SEASON].[Winter].Children } ON 1 FROM [LINEORDER]	• [DATE].[D YEARMONTH] • [COMMITDATE.SEASON MONTH].[D MONTH]	*d_year = '1993' AND d_sellingseason = 'Winter'*	2.85e-2

3 Dimensions for Query(8)			
MDX	**Used Levels**	**Filters**	**Selectivity**
1. SELECT NON EMPTY { { {[Measures].[Lo Revenue]} } } ON COLUMNS, NON EMPTY { Order (Order ({ {[CUSTOMER].[C City].[UNITED KI1],[CUSTOMER].[C City].[UNITED KI5] } * {[SUPPLIER].[S City].[UNITED KI1],[SUPPLIER].[S City].[UNITED KI5] } * {[DATE].[D Yearmonth].[Dec1997]}} , [Measures].[Lo Revenue] , BDESC) , [DATE].CurrentMember.Name , BASC) } ON ROWS FROM [LINEORDER]	• [CUSTOMER].[C CITY] • [SUPPLIER].[S CITY] • [DATE].[D YEARMONTH]	*and (c_city='UNITED KI1' or c_city='UNITED KI5')* *and (s_city='UNITED KI1' or s_city='UNITED KI5')* *and d_yearmonth = 'Dec1997'*	**Q3.4** = 7.6e-7
2. SELECT NON EMPTY { { {[Measures].[Lo Revenue]} } } ON COLUMNS, NON EMPTY { {[CUSTOMER].[C REGION].Members } * { [PART].[P Category].[MFGR#12].Children } } ON ROWS FROM [LINEORDER] WHERE [SUPPLIER].[S Region].[AMERICA]	• [PART].[P BRAND1] • [SUPPLIER].[S City] • [CUSTOMER].[C REGION]	*and p_category = 'MFGR#12'* *and s_region = 'AMERICA'*	**MQ2.1** = 8.0e-3
3. SELECT NON EMPTY { { {[Measures].[Lo Revenue]} } } ON COLUMNS, NON EMPTY { Order (Order ({ {[CUSTOMER].[C Region].[ASIA].Children} * {[SUPPLIER].[S Region].[ASIA].Children} * {[DATE].[D Year].[1992]:[DATE].[D Year].[1997]}} , [Measures].[Lo Revenue] , BDESC) , [DATE].CurrentMember.Name , BASC) } ON ROWS FROM [LINEORDER]	• [CUSTOMER].[C NATION] • [SUPPLIER].[S NATION] • [DATE].[D YEAR]	*and c_region = 'ASIA' and s_region = 'ASIA'* *and d_year >= 1992 and d_year <= 1997*	**Q3.1** = 3.4e-2
4. SELECT NON EMPTY { { {[Measures].[Lo Revenue]} } } ON COLUMNS, NON EMPTY { Order (Order ({ {[CUSTOMER].[C City].[UNITED KI1],[CUSTOMER].[C City].[UNITED KI5] } * {[SUPPLIER].[S City].[UNITED KI1],[SUPPLIER].[S City].[UNITED KI5] } * {[DATE].[D Year].[1992]:[DATE].[D Year].[1997]}} ,	• [CUSTOMER].[C CITY] • [SUPPLIER].[S CITY] • [DATE].[D YEAR]	*and (c_city='UNITED KI1' or c_city='UNITED KI5')* *and (s_city='UNITED KI1' or s_city='UNITED KI5')* *and d_year >= 1992 and d_year <= 1997*	**Q3.3** = 5.5e-5

	[Measures].[Lo Revenue] , BDESC) , [DATE].CurrentMember.Name , BASC) } ON ROWS FROM [LINEORDER]			
5.	SELECT NON EMPTY { { {[Measures].[Lo Revenue]} } } ON COLUMNS, NON EMPTY { {[COMMITDATE.SEASON MONTH].[D SEASON].Members } * { [PART].[P Brand1].[MFGR#2221]:[PART].[P Brand1].[MFGR#2228] } } ON ROWS FROM [LINEORDER] WHERE [SUPPLIER].[S Region].[ASIA]	• [PART].[BRAND1] • [SUPPLIER].[S REGION] • [COMMITDATE.SEASON MONTH].[D SEASON]	*and p_brand1 between 'MFGR#2221' and 'MFGR#2228' and s_region = 'ASIA'*	**MQ2.2** = 1.6e-3
6.	SELECT NON EMPTY { { {[Measures].[Lo Revenue]} } } ON COLUMNS, NON EMPTY { {[COMMITDATE].[D Year].Members} * { [PART].[P Category].[MFGR#12].Children } } ON ROWS FROM [LINEORDER] WHERE [SUPPLIER].[S Region].[AMERICA]	• [PART].[P BRAND1] • [SUPPLIER].[S City] • [COMMITDATE].[D Year]	*and p_category = 'MFGR#12' and s_region = 'AMERICA'*	**MQ2.1** = 8.0e-3
7.	WITH MEMBER [Measures].[Profit] AS '[Measures].[Lo Revenue] - [Measures].[Lo Supplycost]' SELECT NON EMPTY { { {[Measures].[Profit]} } } ON COLUMNS, NON EMPTY { {[DATE].[D Year].[1997], [DATE].[D Year].[1998]} * {[SUPPLIER].[S Nation].[UNITED STATES].Children} * {[PART].[P Category].[MFGR#14].Children} } ON ROWS FROM [LINEORDER]	• [PART].[P BRAND1] • [SUPPLIER].[S City] • [DATE].[D Year]	*and c_region = 'AMERICA' and s_nation = 'UNITED STATES' and (d_year = 1997 or d_year = 1998) and p_category = 'MFGR#14'*	**Q4.3** = 9.1e-5
8.	SELECT NON EMPTY { { {[Measures].[Lo Revenue]} } } ON COLUMNS, NON EMPTY { {[DATE].[D Year].Members} * { [PART].[P Brand1].[MFGR#2239]} } ON ROWS FROM [LINEORDER] WHERE [SUPPLIER].[S Region].[EUROPE]	• [PART].[BRAND1] • [SUPPLIER].[S REGION] • [DATE].[D YEAR]	*and p_brand1 = 'MFGR#2221' and s_region = 'EUROPE'*	**Q2.3** = 2.0e-4

4 Dimensions for Query(8)			
MDX	**Used Levels**	**Filters**	**Selectivity**
1. SELECT [Measures].[Lo Revenue] ON 0, {[PART].[P	• [PART].[P CATEGORY]	*p_mfgr = 'MFGR#3' and s_nation =*	2.2e-4

	MFGR].[MFGR#3]. Children}* {[SUPPLIER].[S NATION].[BRAZIL]. Children } *{[DATE].[D YEAR].[1994].Children } * {[COMMITDATE.SEASON MONTH].[D SEASON].[Winter].Children} ON 1 FROM [LINEORDER]	• [SUPPLIER].[S CITY] • [DATE].[D YEARMONTH] • COMMITDATE.SEASON MONTH].[D MONTH]	*'BRAZIL' AND d_year = '1994' AND d_sellingseason = 'Winter'*	
2.	SELECT [Measures].[Lo Revenue] ON 0, {[PART].[P CATEGORY].[MFGR#11]. Children} * {[SUPPLIER].[S CITY].[BRAZIL 4]. Children} * {[DATE].[D YEAR].[1994].Children } * {[COMMITDATE.SEASON MONTH].[D SEASON].[Winter].Children} ON 1 FROM [LINEORDER]	• [PART].[P BRAND1] • [SUPPLIER].[S NAME] • [DATE].[D YEARMONTH] • [COMMITDATE.SEASON MONTH].[D MONTH]	*p_category = 'MFGR#11' and s_city = 'BRAZIL 4' AND d_year = '1994' AND d_sellingseason = 'Winter'*	4.5e-6
3.	SELECT [Measures].[Lo Revenue] ON 0, {[SUPPLIER].[S NATION].[BRAZIL]. Children}*{ [CUSTOMER].[C CITY].[CHINA 5].Children } *{[DATE].[D YEAR].[1994].Children} * {[COMMITDATE.SEASON MONTH].[D SEASON].[Winter].Children} ON 1 FROM [LINEORDER]	• [CUSTOMER].[C NAME] • [SUPPLIER].[S CITY] • [DATE].[D YEARMONTH] • [COMMITDATE.SEASON MONTH].[D MONTH]	*s_nation = 'BRAZIL' and c_city = 'CHINA 5' AND d_year = '1994' and d_sellingseason = 'Winter'*	4.5e-6
4.	SELECT [Measures].[Lo Revenue] ON 0, {[SUPPLIER].[S CITY].[BRAZIL 4]. Children}*{[CUSTOMER].[C NATION].[CHINA].Children} *{[DATE].[D YEAR].[1994].Children } * {[COMMITDATE.SEASON MONTH].[D SEASON].[Winter].Children} ON 1 FROM [LINEORDER]	• [CUSTOMER].[C CITY] • [SUPPLIER].[S NAME] • [DATE].[D YEARMONTH] • [COMMITDATE.SEASON MONTH].[D MONTH]	*s_city = 'BRAZIL 4' and c_nation = 'CHINA' AND d_year = '1994' and d_sellingseason = 'Winter'*	4.5e-6
5.	WITH MEMBER [Measures].[Profit] AS ' Sum ({ [PART].[P Mfgr].[MFGR#1] , [PART].[P Mfgr].[MFGR#2] } , [Measures].[Lo Revenue] - [Measures].[Lo Supplycost]) ' SELECT NON EMPTY { [Measures].[Profit] } ON COLUMNS, NON EMPTY { { {[COMMITDATE.SEASON MONTH].[D SEASON].Members} * {[CUSTOMER].[C Region].[AMERICA].Children} } } ON ROWS FROM [LINEORDER] WHERE [SUPPLIER].[S Region].[AMERICA]	[PART].[P Mfgr] [CUSTOMER].[S Nation] [SUPPLIER].[S Region] [COMMITDATE.SEASON MONTH].[D SEASON]	*and c_region = 'AMERICA' and s_region = 'AMERICA' and (p_mfgr = 'MFGR#1' or p_mfgr = 'MFGR#2')*	**MQ4.1** = 1.6e-2
6.	SELECT [Measures].[Lo Revenue] ON 0, {[CUSTOMER].[C REGION].[EUROPE].Children} * { [DATE.DATE WEEKNUMINYEAR].[D Year].[1994].[6] }	• [PART].[P CATEGORY] • [CUSTOMER].[C NATION] • [SUPPLIER].[S CITY]	*c_region = 'EUROPE' and d_*weeknuminyear = 6 and *d_year = '1994'*	4,31e-6

	*{[PART].[P MFGR].[MFGR#3]. Children} * { [SUPPLIER].[S NATION].[BRAZIL]. Children } ON 1 FROM [LINEORDER]	• [DATE.DATE WEEKNUMINYEAR].[D WEEKNUMINYEAR]	and *p_mfgr = 'MFGR#3'* and *s_nation = 'BRAZIL'*	
7.	WITH MEMBER [Measures].[Profit] AS ' Sum ({ [PART].[P Mfgr].[MFGR#1] , [PART].[P Mfgr].[MFGR#2] } , [Measures].[Lo Revenue] - [Measures].[Lo Supplycost]) ' SELECT NON EMPTY { [Measures].[Profit] } ON COLUMNS, NON EMPTY { { {[DATE].[D Year].Members} * {[CUSTOMER].[C Region].[AMERICA].Children} } } ON ROWS FROM [LINEORDER] WHERE [SUPPLIER].[S Region].[AMERICA]	[PART].[P Mfgr] [CUSTOMER].[S Nation] [SUPPLIER].[S Region] [DATE].[D Year]	*and c_region = 'AMERICA' and s_region = 'AMERICA' and (p_mfgr = 'MFGR#1' or p_mfgr = 'MFGR#2')*	**Q4.1** = 1.6e-2
8.	WITH MEMBER [Measures].[Profit] AS '[Measures].[Lo Revenue] - [Measures].[Lo Supplycost]' SELECT NON EMPTY { { {[Measures].[Profit]} } } ON COLUMNS, NON EMPTY { {[DATE].[D Year].[1997], [DATE].[D Year].[1998]} * {[SUPPLIER].[S Region].[AMERICA].Children} * {[PART].[P Mfgr].[MFGR#1].Children,[PART].[P Mfgr].[MFGR#2].Children } } ON ROWS FROM [LINEORDER] WHERE [CUSTOMER].[C Region].[AMERICA]	[PART].[P Category] [SUPPLIER].[S Nation] [CUSTOMER].[S Region] [DATE].[D Year]	*and c_region = 'AMERICA'* *and s_region = 'AMERICA'* *and (d_year = 1997 or d_year = 1998)* *and (p_mfgr = 'MFGR#1'* *or p_mfgr = 'MFGR#2')*	**Q4.2** = 4.6e-3