

Market Basket Price Calculation in Retail



Applies to:

SAP IS Retail 6.0 (release number, SP, etc.) to which this article or code sample applies. For more information, visit the [Business Process Expert homepage](#).

Summary

This document depicts about the process of Market Basket price calculation in IS Retail Environment. Market Basket Pricing is the process of fixing the price for an article by considering the target gross revenue which a retailer wants to achieve during a particular period by selling particular kind of merchandise

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Table of Contents

Introduction	3
Case Study	3
Assumptions	3
Market Basket Price calculation	3
Process Flow	4
Define Market Basket Pricing Type.....	4
Market Basket Price calculation	6
Conclusion	9
Related Content.....	10
Disclaimer and Liability Notice.....	11

Introduction

In Retail, pricing is the main component which affects the business in a major way. Appropriate pricing strategy need to follow to attract and retain target customers. Always, retailers wants to liquidate the stock or hold little inventory by making a fair amount of profit.

Here we will try to explain the process of Market basket price calculation where the retailer will adjust his sales price/margin in considering expected sales quantity, gross revenue and Net Purchase Price.

Case Study

R300-Great Group Retail Inc is an US based company, pioneer in Retail business of Food&Grocery, Garments & Electronics.

Retailer wants to make gross revenue of USD 5, 00,000 by selling ladies blouse linen (Generic Item-R100018) at store R315 & R316 during Christmas season (07.12.2010 to 31.12.2010).

Assumptions

Company code, Company, Sales organization and other logistics master data are already defined and assigned in the system.

Chart of Accounts, Fiscal year definition and other finance related master data are already defined and assigned in the system.

Various numbering systems for the article or Site and Competitor Mater & other master data are already available in the system.

Screen shots / other diagrams are depicted only to understand the process flow.

We are considering Store R315, R316, article R100018 and its variants.

Market Basket Price calculation

Market Basket Pricing is the process of fixing the price for an article by considering the target gross revenue which a retailer wants to achieve during a particular period by selling particular kind of merchandise.

The gross revenue target can be for a Merchandise category/generic article/variant level.

In this process the retailer will arrive at the sales price of an article by forecasting the sales at different price elasticity and analyzing the gross revenue achievable in comparison with the target gross revenue.

If the retailer plans the target gross revenue at merchandise category level he will have a bouquet of products which he can manipulate the sales prices by considering the forecast/past sales trend of articles.

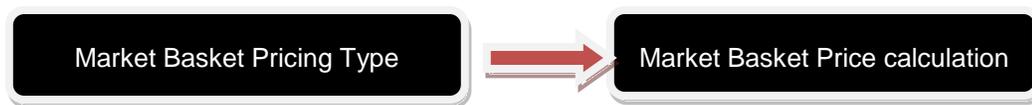
In this process retailer will also consider the purchase price/net purchase price to monitor the Mark up margin in arriving the sales price.

If the basket is for a merchandise category, sometimes retailers will go for a negative mark up for certain kind of produce to attract the customers and gain the loss in some other products of same merchandise category. Overall the retailer will see that he will achieve the target gross revenue of particular merchandise category.

In the above particular case of negative mark up for certain produce, the retailer will assume that it will increase the footfalls for the store and have the chance of exposing other products to the customers and increase the ticket value.

Further steps we will discuss about the process in IS Retail in configuring& calculating market basket price calculation.

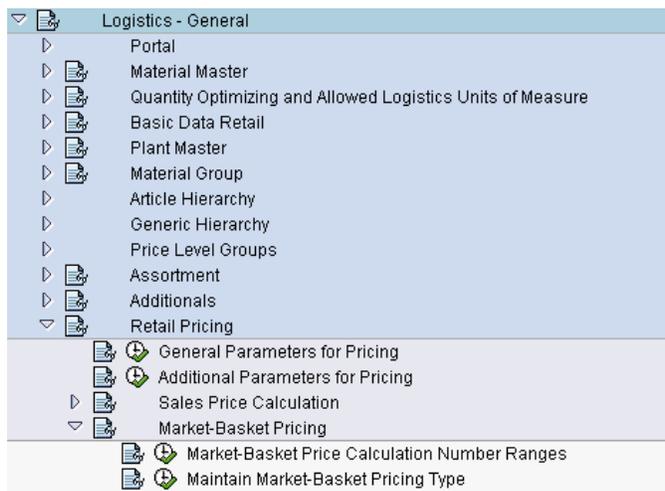
Process Flow



Define Market Basket Pricing Type

Market Basket pricing type can be customized from the following path.

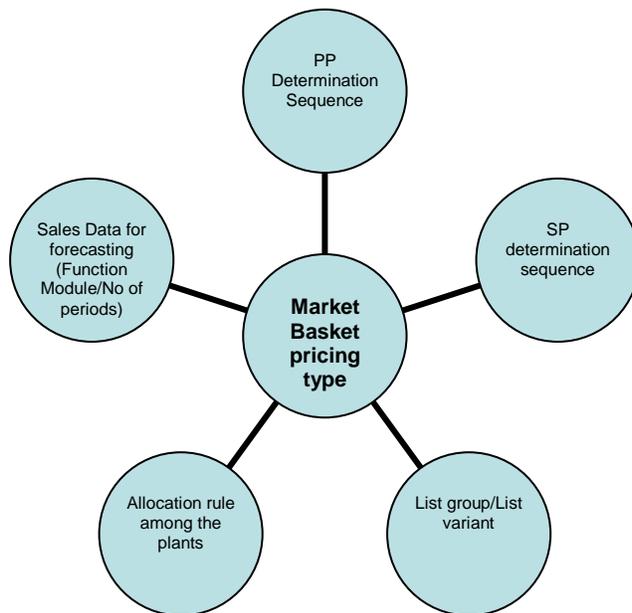
IMG: Logistics-General→Retail Pricing→Market Basket Pricing→Maintain market basket pricing type.



Copy the standard pricing type 0001 and save as MBAS-Market basket Pricing.

Key		
MB pricing type	MBAS	Market Basket pring
Control		
PP determ. sequence	01	Standard with price determination
SP determin. seq.	01	Calculate SP from planned markup
Display crncy	USD	American Dollar
Allocation Rule	01	Equal apportionment
Exch. Rate Type	M	Standard translation at average rate
List group	A	Org. levels: coll. price calc. for articles
List variant	01	Standard retail list variant
Number range, int. assgmt	01	
Number range, ext. assgmt	AA	
Name of selection variant	01	
Number of periods	1	
Function module	WV_EXAMPLE_MBC_01	

Here we will be defining the controls for the pricing type.



In pricing type we will assign the PP determination sequence, SP determination sequence, List group & list variant which generally choose during normal price calculation. We will not discuss much about these as these are the main components in normal price calculation in IS Retail.

Apart from the above, we have allocation rule which helps in changing the corrected sales quantity among the plants.

Alloc. rule MB ca..	Short Descript.
01	Equal apportionment
02	Ratio apportionment

Function module helps to determine the expected sales qty for the basket.

No of periods define how many past periods are considered in arriving sales data.

Market Basket Price calculation

T Code: WKK1

By running WKK1 T Code, we will calculate Market Basket price calculation.

Create Market-Basket Price Calculation: Initial Screen

Market-basket price calc.			
Effectivity	07.12.2010	to	31.12.2010
Market-basket pricing type	MBAS	Market Basket pring	
<input checked="" type="checkbox"/> Sales price calculation			
<input checked="" type="checkbox"/> Sales quantity determination			
Template			
Ref. market-basket price calc.			
<input type="checkbox"/> Copy reference site relationships			
Article selection			
Article	R100018	to	
Merchandise Category		to	
Vendor (Internal Procurement)			
Vendor (External Procurement)			
Vendor Subrange			
Season			
Season year			
Site Selection			
Sales Organization		to	
Distribution Channel		to	
Site Group		to	
Site	R315	to	R316

We will choose the created market basket pricing type.

We will run for generic article R100018 and for sites R315 and R316.

Create market-basket price calculation: Basic List

Price calculation		Basic list		Site details		Activate	
MBPrDocNo.		Status	D				
Valid from	07.12.2010	To	31.12.2010	Display crncy	USD	US Dollar	
Price activat.	02	Site level		Total sales	956,89		
Period Ind.	M			Ttl gr. revenue	571,89		
Basic Articles List							
Article	Description	Sales...	Purch.net/net	DP	PurchValSt		
R100018	Ladies' blouse, linen	PC	35,00	<input type="checkbox"/>		3	
R100018001	Ladies' blouse, linen, 36, red	PC	17,50	<input type="checkbox"/>			
R100018002	Ladies' blouse, linen, 36 green	PC	35,00	<input type="checkbox"/>			
R100018003	Ladies' blouse, linen, 38 green	PC	35,00	<input type="checkbox"/>			
R100018004	Ladies' blouse, linen, 38, yellow	PC	35,00	<input type="checkbox"/>			
R100018005	Ladies' blouse, linen, 40 yellow	PC	35,00	<input type="checkbox"/>			
R100018006	Ladies' blouse, linen, 40, blue	PC	35,00	<input type="checkbox"/>			
			192,50	<input type="checkbox"/>		3	

Basic Articles List													
Article	D	S	Sugges	DS	Plnd p	DP	Final	DF	Net SP	Bus. vol.	Gross rev.	Margin nt	Curr.Fir
R100018	Lac	PC	32,72	<input checked="" type="checkbox"/>	86,99	<input type="checkbox"/>	86,99	<input type="checkbox"/>	86,99	956,89	571,89	59,765	
R10001800	Lac	PC	0,00	<input type="checkbox"/>	43,50	<input type="checkbox"/>	43,50	<input type="checkbox"/>	43,50	86,99	51,99	59,765	
R10001800	Lac	PC	36,00	<input checked="" type="checkbox"/>	86,99	<input type="checkbox"/>	86,99	<input type="checkbox"/>	86,99	173,98	103,98	59,765	
R10001800	Lac	PC	36,00	<input checked="" type="checkbox"/>	86,99	<input type="checkbox"/>	86,99	<input type="checkbox"/>	86,99	173,98	103,98	59,765	
R10001800	Lac	PC	36,00	<input checked="" type="checkbox"/>	86,99	<input type="checkbox"/>	86,99	<input type="checkbox"/>	86,99	173,98	103,98	59,765	
R10001800	Lac	PC	36,00	<input checked="" type="checkbox"/>	86,99	<input type="checkbox"/>	86,99	<input type="checkbox"/>	86,99	173,98	103,98	59,765	
R10001800	Lac	PC	36,00	<input checked="" type="checkbox"/>	86,99	<input type="checkbox"/>	86,99	<input type="checkbox"/>	86,99	173,98	103,98	59,765	
Σ			216,00	<input type="checkbox"/>	478,45	<input type="checkbox"/>	478,45	<input type="checkbox"/>	478,45	956,89	571,89	59,765	

Basic Articles List												
Article	D	S	Margi	Curr.Fi	DF	Curr.	CurrSal	Curr.	Chg. in	Pct. cha	PercChngRe	
R100018	Lac	PC	59,765	64,09	<input checked="" type="checkbox"/>	64,09	705,00	320,00	251,89	35,73	78,72	
R10001800	Lac	PC	59,765	21,25	<input type="checkbox"/>	21,25	42,50	7,50	44,49	104,68	593,20	
R10001800	Lac	PC	59,765	66,25	<input checked="" type="checkbox"/>	66,25	132,50	62,50	41,48	31,31	66,37	
R10001800	Lac	PC	59,765	66,25	<input checked="" type="checkbox"/>	66,25	132,50	62,50	41,48	31,31	66,37	
R10001800	Lac	PC	59,765	66,25	<input checked="" type="checkbox"/>	66,25	132,50	62,50	41,48	31,31	66,37	
R10001800	Lac	PC	59,765	66,25	<input checked="" type="checkbox"/>	66,25	132,50	62,50	41,48	31,31	66,37	
R10001800	Lac	PC	59,765	66,25	<input checked="" type="checkbox"/>	66,25	132,50	62,50	41,48	31,31	66,37	
Σ			59,765	418,75	<input type="checkbox"/>	418,75	705,00	320,00	251,89	35,73	78,72	

Here we can notice that on the header total sales and Total gross revenue details are available.

In this screen we will do different calculations based on available date and will arrive at the sales price in considering the target gross revenue.

Expected sales qty is showing as 0 as we don't have past sales record for the article.

We notice following key fields

1. Net purchase price which is calculated from PP determination sequence
2. Suggested price based on competition.
3. DS-if marked, it suggests that different suggested prices are available for different sites.
4. Planned price-planned sales price for calculation.
5. Final Price-corrected/changes sales price.
6. Net sales price- final net SP.
7. DP-If marked, it suggests that different purchase price exists for different sites.
8. Current sales price-sales price existing in the system.
9. Business Volume- Expected Sales value.
10. Gross Revenue-Expected revenue
11. Net Margin

Here we will manipulate the Corrected sales qty and Final price to arrive revenue of USD 5, 00,000 during 07.12.2010 to 31.12.2010.

Create market-basket price calculation: Basic List

Price calculation										Basic list		Site details		Activate	
MBPrDocNo.						Status	D								
Valid from	07.12.2010	To	31.12.2010			Display crncy	USD US Dollar								
Price activat.	02 Site level					Total sales	850.000,03								
Period Ind.	M					Ttl gr. revenue	499.950,00								

Basic Articles List											
Article	Description	CorrSalesQty	Purch	D	Sugg	DS	PInd pri	DP	Final price	DF	Net S
R100018	Ladies' blouse, linen	10.000	35,00		30,00	<input checked="" type="checkbox"/>	86,99		35,00		
R100018	Ladies' blouse, linen, 36, red	1.666,665	17,50		0,00	<input type="checkbox"/>	86,99		85,00		
R100018	Ladies' blouse, linen, 36 green	1.666,667	35,00		35,99	<input checked="" type="checkbox"/>	86,99		85,00		
R100018	Ladies' blouse, linen, 38 green	1.666,667	35,00		35,99	<input checked="" type="checkbox"/>	86,99		85,00		
R100018	Ladies' blouse, linen, 38, yellow	1.666,667	35,00		35,99	<input checked="" type="checkbox"/>	86,99		85,00		
R100018	Ladies' blouse, linen, 40 yellow	1.666,667	35,00		35,99	<input checked="" type="checkbox"/>	86,99		85,00		
R100018	Ladies' blouse, linen, 40, blue	1.666,667	35,00		35,99	<input checked="" type="checkbox"/>	86,99		85,00		
			192,50		216,00	<input type="checkbox"/>	521,94		510,00		

We are planning 10,000 units at a sales price of 85 to arrive Total sales of USD 8, 50,000 to arrive gross revenue of USD 4, 99,950.00.

Effective calculated margin is 58.82%.

Note: Here the Expected sales qty and Final Price are taken in to account to explain the procedure. We haven't considered the situation whether these figures are achievable in realistic scenario.

If we want to view at individual site level we can check the same by choosing site details.

Create market-basket price calculation: Detail List for Organizational

Price calculation										Basic list		Site details		Activate	
Article	R100018					Ladies' blouse, linen									
Sales unit	PC					Display crncy	USD US Dollar								
Period Ind.	M					Total sales	850.000,03								
Price activat.	02					Ttl gr. revenue	499.950,00								

Sites by Article								
Site	SOrg.	DChl	Expected sales	CorrSalesQty	Purch.net/net	Final price	Net SP	
R315	R300	R1	0	4.167,665	35,00	85,00	85,00	
R316	R300	R1	0	5.832,335	35,00	85,00	85,00	
			0	10.000	35,00	85,00	85,00	

Here corrected sales qty field can't be changed at generic article level. Whereas it can be changed at variant level. For generic article at site level this will get filled based on the allocation rule available in Market basket pricing type.

We will go back by choosing basic list.

Create market-basket price calculation: Basic List

Price calculation		Basic list		Site details		Activate	
MBPrDocNo.		Status	Activate prices (Shift+)				
Valid from	07.12.2010	To	31.12.2010	Display crncy	USD	US Dollar	
Price activat.	02	Site level	Total sales	850.000,03			
Period Ind.	M	Ttl gr. revenue	499.950,00				

For activating the sales price we will choose activate button. We will get the following message that MB pricing document & conditions created.

 MB pricing doc. (status F)/SP pricing doc. and conditions were created

Through VK13 we will check condition values for condition VKP0.

Display Sales Price Condition (VKP0) : Validity Periods

Variable key							
SOrg	D...	Site	Article	SU	Description		
R300	R1	R315	R100018	PC	piece(s)		
Current condition							
Valid From:	07.12.2010			Valid to	31.12.2010		
Amount	85,00		USD	per	1		PC
Existing validity periods							
Valid From	Valid to	C	Amount	Unit	per	U...	DeletionID
18.11.1998	22.11.2010	C	42,50	USD	1	PC	
23.11.2010	23.11.2010	C	109,99	USD	1	PC	
24.11.2010	25.11.2010	C	86,99	USD	1	PC	
26.11.2010	28.11.2010	C	71,99	USD	1	PC	
29.11.2010	01.12.2010	C	86,99	USD	1	PC	
02.12.2010	04.12.2010	C	64,50	USD	1	PC	
05.12.2010	05.12.2010	C	64,00	USD	1	PC	
06.12.2010	06.12.2010	C	90,00	USD	1	PC	
07.12.2010	31.12.2010	C	85,00	USD	1	PC	
01.01.2011	31.12.9999	C	90,00	USD	1	PC	

New Condition records are created for period 07.12.2010 to 31.12.2010.

Conclusion

In this way we can configure and calculate market basket price calculation. In one place we will view or change sales qty, sales price and control the Expected margin and total gross revenue.

Related Content

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