

SAP Sourcing RFX Pricing Formulas

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Topics

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- **Basic Steps to Creating and Using Formulas**
- **Unit Price Formulas Versus Line Item Formulas**
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RFX Price Structures Overview

RFX Price Structures Overview

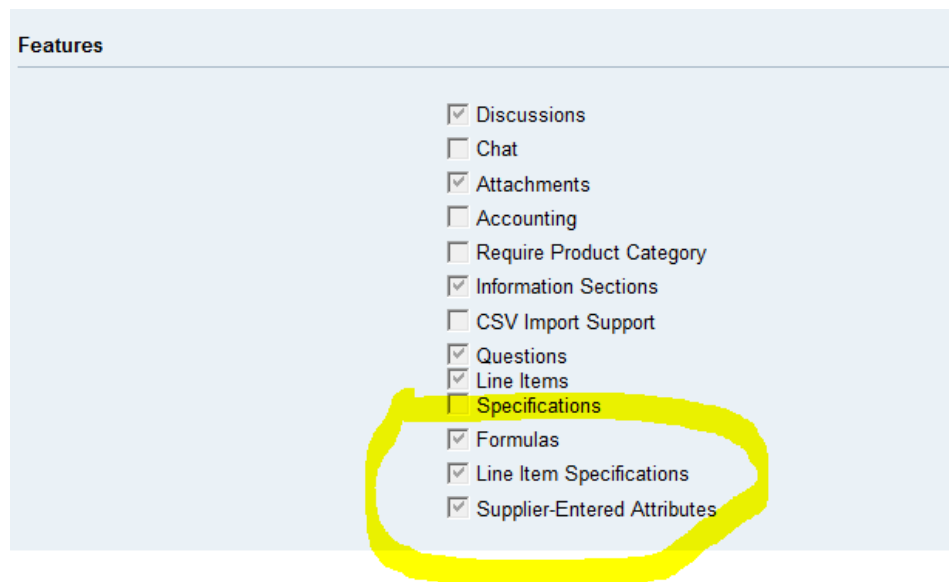
- Pricing Structures are used to collect pricing information from suppliers during an RFX process in order to evaluate supplier proposals and make award decisions that will provide the best value
- The following Price Structures are available in SAP Sourcing:
 - Unit Price (Simple)
 - Unit Price (Formula-Based)
 - Unit Price Components
 - Tiered Pricing
 - Price Conditions

RFX Price Structures Overview

Pricing Structure	Description
Unit Price (Simple)	Simple Unit Price is used when the intent is to collect a single price quote per unit.
Unit Price (Formula-Based)	Formula-Based Unit Price is used when the intent is to collect individual price components which are used to calculate the Unit Price. Formula-Based pricing can include all mathematical operations such as division, multiplication, or subtraction as well as addition.
Unit Price Components	Unit Price Components is used when the intent is to collect individual price components which are simply added together to calculate the Unit Price.
Tiered Pricing	Tiered Pricing is used when the intent is to collect pricing information for various ranges of quantities.
Price Conditions	Price Conditions are used to collect individual price components and used as part of a formula to calculate the Unit Price and can be leveraged especially when SAP integration is used.

Price Structures in SAP Sourcing

- To enable Formula-Based pricing, the RFX Document Type must have “Formulas” enabled
- In addition, Line Item Specifications and Supplier-Entered Attributes must also be enabled since these are key components which will be used to create formulas



Key Components of Price Formulas

Key Components of Price Formulas

- In the Pricing Model tab of Document Setup, the Pricing Structure should be set to Unit Price
- Groups of Line Item Specifications and Supplier-Entered Attributes can be created to be used in creating your formula
 - From a Pricing perspective, Line Item Specifications are typically used when you want to include information in the price formula that is not entered by the suppliers – this information may or may not be shared with the suppliers
 - Supplier-Entered Attributes are used to collect the various pieces of information required from the suppliers in order to calculate the price
- Assignment of Formulas to specific Groups of Line Items
 - You can create different formulas for different groups of line items

Basic Steps to Creating and Using Formulas

Basic Steps to Creating and Using Formulas

- The following provides a step by step approach to creating and using formulas:
 - Understand the formula that you want to create in the system – what are the components of the formula and how to they interact with each other to calculate the price
 - In Document > Setup, create Line Item Specifications, if applicable, for all pricing components that you will include in the formula
 - In Document > Setup, create Supplier-Entered Attributes for all pricing components of the formula that you expect the suppliers to quote
 - In the Line Items tab, using the “Add Formula” function, create the Formula which will calculate the Unit Price and using the “Validate” function, validate that the formula is properly setup
 - In the Line Items tab, create the Groups and Line Items that the suppliers will be quoting
 - In the Line Items tab, use the “Line Item Config” function to get to the “Line Item Assignment” tab to assign formulas to the Line Item Groups to which they pertain and then validate the assignments made

Basic Steps to Creating and Using Formulas (continued)

Create Supplier-Entered Attributes in Document > Setup







Editing: Document Setup: Supplier Entered Attributes

Done Save Cancel Undo

General Scoring Pricing Model Delivery Info Line Item Specifications **Supplier Entered Attributes** Groups Notifications

Supplier Entered Attributes

Add Spec Add Group Import Reorder List Delete Selected

#	Specification Name	Type	Attribute ID	Description	Default Value
▼ 1.0 LIST LESS DISCOUNT					
<input type="checkbox"/>   1.1 	List Price	Price	ATTR00001	<input type="text"/> 0 of 1000 characters	<input type="text"/> USD
<input type="checkbox"/>   1.2 	Discount	Amount	ATTR00002	<input type="text"/> 0 of 1000 characters	<input type="text"/> %

Basic Steps to Creating and Using Formulas (continued)

Create Your Formula in the Line Items Tab using the Function “Add Formula”

Project Management Enterprise Sourcing Contract Management Contract Dashboard Supplier Management Reports Contract Review User Defined

RFx > RFx: RFX Pricing Formulas Example > Document Setup: Setup > LIST LESS DISCOUNT FORMULA

Editing: New RFX Formula in RFX RFX-00033: RFX Pricing Formulas Example : LIST LESS DISCOUNT FORMULA

OK Cancel

Header

* Formula Name: LIST LESS DISCOUNT FORMULA

Formula ID: FORM00001

Unit Price Formula

Description:

0 of 1000 characters

Formula

Use Details View:

Select an item from one of the Dropdown fields below to add it to the Formula field

Standard Fields: Quantity Add to Formula

Logical Operations: == Add to Formula

Supplier Entered Attributes: List Price Add to Formula

* Formula: ATTR00001-(ATTR00001*ATTR00002)

31 of 1000 characters

0 + - / * Validate

Basic Steps to Creating and Using Formulas (continued)

Once You Have Created Your Formula, Use the “Validate” Function to Validate that the Formula is Setup Correctly

Editing: New RFX Formula in RFX RFX-00033: RFX Pricing Formulas Example : LIST LESS DISCOUNT FORMULA

OK Cancel

Header

* Formula Name: LIST LESS DISCOUNT FORMULA

Formula ID: FORM00001

Unit Price Formula

Description:

0 of 1000 characters

Message from webpage

Validation successfully passed.

OK

Formula

Use Details View:

Select an item from one of the Dropdown fields below to add it to the Formula field

Standard Fields: Quantity Add to Formula

Logical Operations: == Add to Formula

Supplier Entered Attributes: List Price Add to Formula

* Formula: ATTR00001-(ATTR00001*ATTR00002)

31 of 1000 characters

0 + - / *

Validate

Basic Steps to Creating and Using Formulas (continued)

Once You Have Created and Validated Your Formula, on the Line Item Assignment tab, Assign the Formula to the Group of Line Items to which It Applies

The screenshot displays the 'Line Item Assignment' tab in SAP. It features three main sections: 'Buyer Specification Assignment', 'Supplier Entered Attribute Assignment', and 'Formula Assignment'. Each section includes a 'Validate Assignments' button and a 'Default Line Item Group' dropdown. The 'Formula Assignment' section is highlighted with a yellow circle, showing the 'LIST LESS DISCOUNT FORMULA' selected with a checkmark.

Section	Assignment Group	Default Line Item Group	Selected
Buyer Specification Assignment	Buyer Specification Groups	Default Line Item Group	
Supplier Entered Attribute Assignment	Supplier Entered Attribute Groups	Default Line Item Group	LIST LESS DISCOUNT <input checked="" type="checkbox"/>
Formula Assignment	Event Formulas	Default Line Item Group	LIST LESS DISCOUNT FORMULA <input checked="" type="checkbox"/>

Unit Price Formulas Versus Line Item Formulas

Unit Price Formulas Versus Line Item Formulas

- There are two basic types of formulas that can be used:
 - Unit Price formulas are used to calculate the Unit Price
 - Line Item Formulas are used to calculate additional pricing information for each Line Item

Examples of Use Cases

Examples of Use Cases

- The following are some common examples for using formulas in actual practice to calculate Unit Prices:
 - List Price Less Discounts
 - Labor Rate Multiplied By Markup Rate
 - Index Price Multiplied By Discount Or Markup
- Common examples for using formulas to calculate additional line item prices are:
 - You may have different quantities that you want to calculate the total price on such as historical usage and forecasted quantities
 - You may want to do additional calculations comparing total cost for historical usage and forecasted usage

Some Recommendations

Some Recommendations

- Start with a simple formula to ensure that you understand how it all comes together
- It's generally very helpful to create your formula on paper or in Excel – this is particularly true when creating complex formulas
- Once you understand what you want the formula to do, it's also generally helpful to create your formula in the system along with a line item and then export it to Excel to create all other line items – this gives you the format for all other line items and, if you are using Line Item Specifications, makes it easy to fill in all of the specification details
- Leverage the Help documentation - it is very helpful for this topic
- Read the Blogs that are available on this topic – you can find them easily by doing a Google search

Some Recommendations (continued)

Leverage the Help Documentation Available within the Applications

RFX Formula

Editing: RFX Formula Page
On the *Editing: RFX Formula* screen, you can enter specific formula information to be used to track specific metrics for line items.

Features

Field Help for Editing: RFX Formula Page

Function	Description
Formula Name	Enter a name for the formula. The name must not be more than 40 characters. This field is required.
Formula ID	Indicates the programmatically generated unique ID for this formula.
Description	Enter a description for the formula. The description must not be more than 1000 characters.
Hidden from Supplier	Select to hide this formula from suppliers in the <i>Formula View</i> of line items.
Apply Supplier Weighting to Formula Results	Select to apply supplier weighting factors to the formula result.
Calculate Totals	Select to use the formula result in the total value calculation for all line items.
Formula	Enter the formula expression manually or by selecting links in the <i>Components and Operands</i> table. The formula must not be more than 1000 symbols. This field is required.
Validate	Select to ensure that the formula expression has no syntactical or logical errors. Errors are displayed below the <i>Formula</i> field.
Components and Operands	This table contains all available operands, operators, and functions. Selecting a link adds it to the <i>Formula</i> field.
Unit Price Formula	This flag indicates that formulas can be used for the calculation of the unit price.
Use Details View	Select this option if you want to see descriptions of formula elements while you are creating a formula.

Some Recommendations (continued)

Leverage the Blogs that are Available

- “Complex Pricing using Formula Based Pricing in RFx or Auction in SAP Sourcing” by Mahesh Jeswani
- “How to configure Price Conditions in SAP Sourcing” by Markus Frieske
- “Using Price Conditions in SAP Sourcing” also by Markus Frieske

Thank You!

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