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Accounting information for changing business needs

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Appendices

Summary

Appendix 1:

How business process instance data are provided in the sample ERP system

In this appendix, it is detailed which data are stored to service information request: *The Production Manager of company 'Wheel Chair Company' raises the request for 300 extra units of product 'chair-frames' to the Purchase Manager.*

The data storage is explored for a sample ERP system. The following two business process instances are used to solve this information request:

- Business Process Instance #1, specific situation of business process 'Periodic Material Requirements Planning';
- Business Process Instance #2, specific situation of business process 'Procure-to-Payment'.

A-1 Definition of the Business Process Instances

Activity Instances of Business Process Instance #1

- March 28th. Request of the Production Manager to the Purchase Manager of Wheel Chair Company for 300 extra chair-frames. This request is defined during the time-phased inventory planning of chair-frames as shortage in the production plan for wheel chairs, needed by May 3rd.

Activity Instances of Business Process Instance #2

- April 2nd. Purchase Department of Wheel Chair Company asks quotation for 300 chair-frames from supplier 'Frame Supplies'.
- April 4th. Purchase Department of Wheel Chair Company buys 300 chair-frames from Frame Supplies at price USD 100. Agreed delivery by May 3rd.
- May 3rd. Consignee of Wheel Chair Company receives 300 chair-frames.
- May 3rd. Accounting Department of Wheel Chair Company receives invoice for 300 chair-frames from supplier Frame Supplies. Invoice amount: USD 30,000.
- May 8th. Accounting Department of Wheel Chair Company processes (books) the purchase invoice of Frame Supplies. The Supplier Administration is automatically updated with the new open invoice.
- May 31st. Treasury Department of Wheel chair Company pays the invoice of Frame Supplies by check. Invoice Amount: USD 30,000.
- June 2nd. Processing (booking) of the payment event by the Accounting Department. The Supplier Administration is automatically updated with the payment of the open invoice.

In this situation, the last activity instance of the business process instance belonging to business process 'Material requirements planning process' is integrated with the first activity instance of the business process instance belonging to business process 'Procure-to-payment'.

A-2 Definition of the Information stored per Information System

A-2.1 Information Stored in the Production Planning Information System

The material requirement planning is calculated in the Production Planning Information System. The Material Requirement Advice Order is generated as output of an MRP (Material Requirements Planning) run and indicates the quantity per material item needed by a certain time.

Material Requirement Advice Order Number 123

Attributes stored: document number: 123, document date: March 28th, subject: request for 300 units 'chair frame', delivery date: May 5th.

The Material Requirement Advice Order is characterized by the following data: the document number, the business transaction (request for products 'chair-frame'), the number of units of product 'chair-frame' required and the expected delivery date.

A-2.2 Information stored in the Purchase Information System

After confirming the Material Requirements Advice Order by the production manager, a quotation is asked to the potential supplier 'Frame Supplies'. When the quotation is received, it is entered in the Purchase Information System.

Purchase Quotation 822

Attributes stored: document number: 822; document date: April 2nd, subject: proposal for purchase of 300 units 'chair frame', proposed delivery date: May 3rd, supplier: 'Frame Supplies', customer: 'Wheel Chair Company'.

The purchase order is characterized by the following data: document number, document date, nature of the business transaction: purchase quotation, number and identification of the proposal: proposal for 300 units chair-frames, proposed price: USD 100 per unit, proposed delivery date, quotation between supplier 'Frame Supplies' and customer 'Wheel Chair Company'.

When the quotation is accepted, a purchase order is created in the Purchase Information System on the basis of the accepted purchase quotation.

Purchase Order Number 456

Attributes stored: document number 456; document date: April 4th, purchase of 300 units 'chair frame', price: USD 100 per 'chair frame', delivery date: May 3rd, supplier 'Frame Supplies', customer: 'Wheel Chair Company', defined on the basis of purchase quotation: 822.

The Purchase Order is characterised by the following data: document number, document date, nature of the business transaction: purchase order, number and identification of units ordered: 300 units 'chair-frames', agreed price per unit chair-frame, agreed delivery date, purchase order between supplier 'Frame Supplies', customer 'Wheel Chair Company' and a reference to the purchase quotation.

At the delivery date, the chair frames arrive and are accepted by the consignee of Wheel Chair Company. The following data are registered.

Delivery Note 152

Attributes stored: Document Number: 152, document date: May 3rd, delivered: 300 units 'chair frame', supplier: 'Frame Supplies', consignee: 'Wheel Chair Company', defined for purchase order: 456.

The delivery note is characterized by the following data: document number, document date, nature of the business transaction: receipt of goods, receipt note between supplier 'Frame Supplies', consignee 'Wheel Chair Company' and a reference to the purchase order.

A-2.3 Information Stored in the Financial Information System

The delivery date of chair-frames is the legal date at which the Purchase Invoice is made up. The purchase invoice is made up on the basis of purchase order.

Purchase Invoice 664

Attributes stored: document number: 664, document date: May 3rd, total invoice amount: USD 30,000; supplier: 'Frame Supplies', customer: 'Wheel Chair Company', terms of payment: by month end, defined for purchase order: 456 and delivery note: 152.

The purchase invoice is characterized by the following data: the document number, the document date, the total invoice amount and the currency in which this amount is expressed, the tax amount (not further detailed in this example) the customer and supplier identification, the terms of payment and a reference to the purchase order.

Posting of the Purchase Invoice in the General Ledger

The Accounting Department posts the invoice into the general ledger. The following transaction lines are generated:

May 8 th : 300 Inventory	USD 30,000		Purchase Invoice 664
May 8 th : @ 400 Supplier		USD 30,000	Purchase Invoice 664

Transaction lines are characterized by the following data: transaction line registration date, the general ledger account (e.g. 300 is the ledger account for Inventory), the amount and the currency in which the amount is expressed and a reference to the purchase invoice.

Update Supplier Administration

The Supplier Administration indicates the open invoices per supplier. It is a subledger administration, which is automatically updated.

Attributes modified: supplier: 'Frame Supplies', invoice number: 664, invoice date: May 3rd, invoice amount: USD 30,000; due date: May 31st, purchase invoice: 664.

The supplier administration contains the following data: the supplier identification, the invoice document number, the invoice date, the invoice amount and currency, the due date and a reference to the purchase invoice.

The supplier invoice is paid at the due date by a Bank Payment Draft.

Bank Check 879

The treasury department of Wheel Chair Company pays the open purchase invoice at the due date via a bank check.

Attributes stored: document number: 879, document date: May 31st, pay to: supplier 'Frame Supplies', sent by: 'Wheel Chair Company', amount to be paid: USD 30,000, subject: payment purchase invoice 664.

The Bank Check is characterized by the following data: the check number, the payment date, the nature of the business transaction: payment, amount and currency and a reference to the purchase invoice.

Posting the Supplier Payment

The posting of the supplier payment has the same characteristics as the posting of the purchase invoice.

Update Supplier Administration

The Supplier Administration is updated with the supplier payment event. The characteristics are the same as the creation of the open entry purchase invoice.

Appendix 2:

UML Notation Conventions

Class:



Association:



Cardinality (Multiple Associations):



Exactly One



Zero or More



One or More



Zero or One

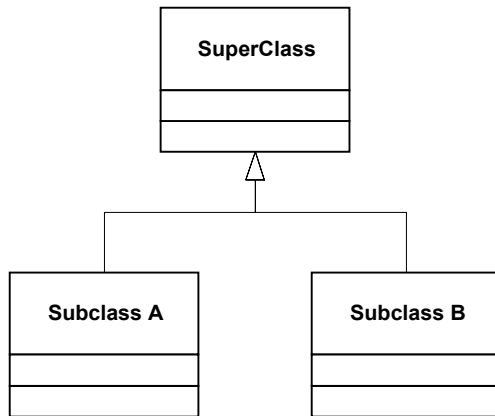
Aggregation:



Composition:



Inheritance:



Appendix 3:

**Contract Clause Model enriched with Treasury Management
Decision Support Data Features**

