# Purchase Order Payment

**Initial Table**

Date, **ChequeNumber**, ChequeAmount, SupplierNumber, SupplierName, (PurchaseOrderNumber, PurchaseOrderDate)

**1NF**

Date, **ChequeNumber**, ChequeAmount, SupplierNumber, SupplierName

*ChequeNumber*, **PurchaseOrderNumber**, PurchaseOrderDate

**2NF**

Date, **ChequeNumber**, ChequeAmount, SupplierNumber, SupplierName

*ChequeNumber*, **PurchaseOrderNumber**, PurchaseOrderDate

**3NF**

Date, **ChequeNumber**, ChequeAmount, *SupplierNumber*

**SupplierNumber**, SupplierName

*ChequeNumber*, **PurchaseOrderNumber**, PurchaseOrderDate



**Merge Purchase Order Payments View with current ERD**



In thePurchase Order Payments View we discovered a new Cheque entity that merges to the existing design through the Supplier Entity AND the Purchase Order.

This solution introduces a “circle” of relationships between Supplier, PurchaseOrder and Cheque. Depending on the businesses needs one of the relationships (and its corresponding foreign key) might be able to be removed. Could this be possible here?

This is the final database design that will support the operations and business rules as outlined in the six different views.