4 Marketing & Sales Process: O2C-Cycle

In this chapter, Business Management is approached from the sales side of the enterprise. We will discuss the sales process, marketing and CRM. For most companies, the sales process is the starting point. From sales orders, other processes are started, such as purchasing process and/or the manufacturing process. The sales process is also known as Order-to-Cash cycle (or: O2C-cycle), and with this cycle, we can include all activities from registering the sales order from the customer to receiving the payment from the customer.

This chapter opens with data about the customer. These are so-called *master data*. In the next two chapters, we will also start with the master data of vendors and items. After the master data, the sales process is discussed in detail.

In the sections about marketing and CRM, the role the ERP system could fulfill is placed in the center. We will conclude with analyses of the sales terrain.

4.1 Customer

In this paragraph, we will discuss the customer and the data of the customer card. We will focus upon the master data, contact data and transaction data as well as payment terms and shipment terms. These terms are defined in general and can be linked to customers and/or to sales orders. Lots of companies divide their customers in customers groups, and in this way it becomes easy to deal with discounts for customer groups. Determining the conditions policy and price includes working with discounts and setting sales prices. Because trading through the Internet becomes very important, we will also pay attention to E-commerce.

Customer Card

Master data of a customer are registered in the ERP system. These are more or less stable data which do not need to change whenever an order of an existing customer is received. The registration of these master data takes place on the **customer card**. For example, among the data that are inputted are company name, address, primary contact person, currency code, specific agreements about discounts, customer discount group, payment terms, etc. In Figure 4.1, there is an example displayed of the customer card of Dynamics NAV 2009 (Role Tailored Client). Not all data are displayed; NAV 2009 Role Tailored Client works with fast tabs (these are the grey bars on the screen print). These fast tabs can be folded out as you can see for 'General' and 'Communication'. The other fast tabs are hiding the data below, but can show the most important information on the tab itself (e.g., location code BLUE as the plant which is used normally to deliver goods from, on the fast tab 'Shipping').

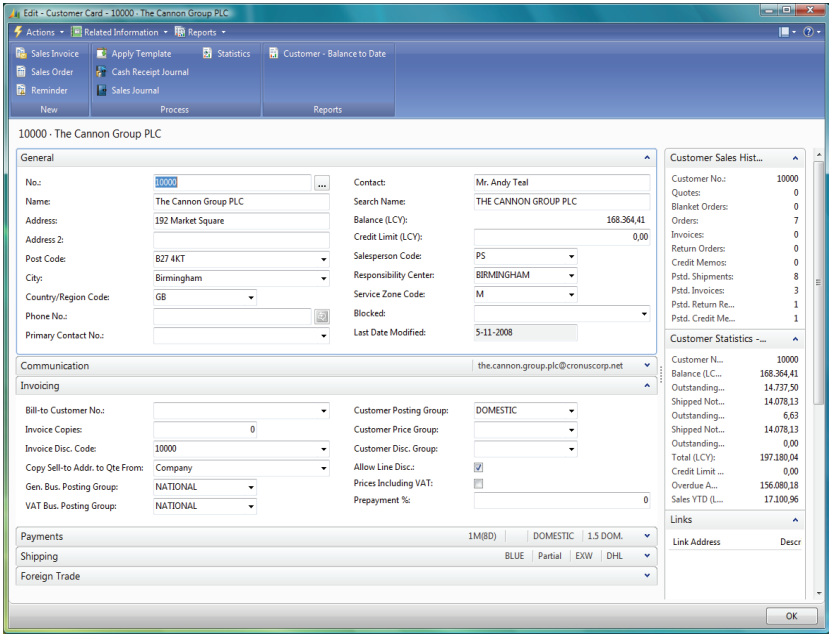

Figure 4.1: The Customer Card (RTC)

In many enterprises, the salespeople make a note of every contact they have with a customer. A CRM module of an ERP system can hold data of each and every customer contact including subject, agreements and possible continuations on earlier contacts. Formally, a possible customer is called *prospect*. In Section 4.4, we will discuss this matter more in depth.

Besides master data and contact data, there are also **transaction data** to register on a customer card. The data which are registered on the card are segregated data, such as quotations and orders all related to this customer. In Figure 4.1, you can for instance see the 'balance LCY' where LCY stands for 'local currency' and 'outstanding orders' for orders that have not completely been delivered. The information is only in total amounts and is not detailed in the customer card. However, you can drill down to the details by clicking on the amount (the amount is underlined like a hyperlink when you scroll over it).

To be sure that the sales transactions get into the general ledger, which is the heart of the financial system, Dynamics NAV uses **posting groups**. When order deliveries, invoices, payments, credit memos and so on are posted, posting groups are used by the program to determine which general ledger accounts have to be changed. There are a lot of posting groups, and in this chapter we will focus a bit on them. You can use customer posting groups to make a distinction between postings national/international. We will pay more attention to the posting groups in Chapter 7.

For reporting, it is important to think ahead and decide which information about customers and sales is needed to get rapid insight into sales and customer information. Also, in conjunction with the sales tax, it is important to divide the customer posting groups into the different sales definitions that fit to tax legislation. In Chapter 7, we will also discuss in which way *dimensions* can help to get a thorough report in a smart way.

In some ERP systems, customers are first entered as contacts, and only after that is it possible to designate the type of relationship (customer, vendors, competitor, bank, etc.). A relationship is only registered in one position; this way of working is known as

normalization. In daily practice, the sales department can decide about sales relations (that is, customers), and the sales data are replenished for logistical and financial purposes such as delivery address and invoicing address.

Most ERP systems do not distinguish between the terms *customer* and *debtor*, although there is a formal distinction. A *customer* is a commercial term, whereas *debtor* is a customer to whom we have sold on account and thus have a debt-claim on that customer.

Payment and Delivery Terms

Registering customer data is an action that supposes cooperation of the sales department and of the financial department. Besides commercial data, the **credit limit** also has to be decided upon and registered. The judgment of the creditability is an important step on the quotation trail and order trail. We prefer not to deliver goods to a non-creditable customer unless against payment in advance or at the same moment the goods are delivered in cash.

Creditability has two aspects:

1. **Creditability as amount**: the amount for which we are willing to deliver on his account
2. **Creditability as period of time**: the number of days the customer has to make a payment after receiving the invoice

Lots of enterprises use standard amounts and standard periods of time. However, if there is a very large sales order at hand, it is advisable to get some extra information about the customer through special agencies or through banks. If it is a well known customer, you can look up their payment behavior in your ERP system. Questions to ask yourself when entering (and accepting!) a quotation or sales order might be:

- Is the amount becoming too high?
- Is the customer late with his payments?

If there is a regular relationship with a customer, it can be utilized to raise the creditability amount. However, it goes without saying that this can only be done with the utmost prudence.

The creditability is one of the **payment terms** which are valid for the total of the current debt-claims of the customer. There are also conditions which are order-specific, as you can see in Tables 4.1 and 4.2 (these are the default values in Dynamics NAV).

Table 4.1: Payment Terms

Code	Description	Discount Date Calculation	Discount Percentage
COD	Cash on delivery	NA	0
CM	Pay before the last day of the current month	NA	0
7 DAYS	Pay within 7 days net	NA	0
14 DAYS	Pay within 14 days net	NA	0
21 DAYS	Pay within 21 days net	NA	0
1M (8D)	Pay within a month; if you pay within 8 days, there will be a discount	8 days	2%

There also are **shipment terms**; in Dynamics NAV they are called *shipment methods*. Dynamics NAV gives the following shipment methods as default:

Table 4.2: Shipment Terms (Shipment Methods)

Code	Description
CFR	Cost and Freight
CIF	Cost Insurance and Freight
CIP	Carriage and Insurance Paid
CPT	Carriage Paid to
DAF	Delivered at Frontier
DDP	Delivered Duty Paid
DDU	Delivered Duty Unpaid
DELIVERY	Delivery
DEQ	Delivered ex Quay
DES	Delivered ex Ship
EXW	Ex Warehouse
FAS	Free Alongside Ship
FCA	Free Carrier
FOB	Free on Board
PICKUP	Pickup at Location

Many shipment terms come from the time when goods were transported by ship. It is, of course, possible for a company to define its own shipping terms. Most companies use the so-called *Incoterms*, which is the international standard.

Customer (Discount) Groups

In many enterprises, customer groups are fixed. In such a group, customers are listed that have a certain characteristic in common. As an example, a manufacturer sells to wholesale vendors (intermediate trade) as well as with retailers, and therefore

decides to work with two customer groups. Because of these groups, it is possible to grant a higher **discount** to wholesalers. In Dynamics NAV, we can use customer discount groups. You must fill in on the customer card which customer discount groups are applicable for that particular customer. After that, the application of the correct discount will take place automatically.

Discounts can be applied per customer discount group, but also per customer, per item and per order. ERP software has been designed so that the software calculates the lowest possible net price for the customer within the settings of all discounts. Dynamics NAV calls this the *best price rule*, which means that you can work with different prices for different purposes (e.g., different customer groups). For every single item line in the sales order, the system will decide which combination of discount percentage and sales price will render the lowest possible net price.

Setting the Sales Price

The top level management decides upon the strategic price and condition policy of the enterprise and the lower organizational levels (usually the sales staff) will 'fill in' the policy. The exception to this rule is that, when dealing with really big projects or big orders, the top level management will have to authorize the sales price. Dynamics NAV uses the best price rule and will display/suggest the lowest net price for every line item.

E-Commerce

E-commerce is the electronic variant of regular sales, or sales through the web. In this book, we do not separately discuss E-commerce because this concept is only possible whenever the business processes are well designed and in order. Just after the turn of the century, a version of E-commerce lead to an enormous fiasco because the web shop was seen as a free-standing issue. Nowadays companies have learned that E-commerce has to be integrated in all business processes in order to get a working solution. The company must give customers access to parts of the ERP system (e.g., within the sales process), which creates serious

security issues. The integration of E-commerce is also seen in the electronic payment which has to be built into the regular sales process.

By the way, the B2B (Business to Business) market is about ten times bigger than the B2C (Business to Consumer) market.

4.2 Sales Process (O2C-Cycle)

The sales process can be styled as shown in Figure 4.2.

Figure 4.2: The Sales Process

Apart from these activities, we also pay attention to:

- Working with blanket orders
- Return orders and credit memos

4.2.1 Contacting the Customer

A customer contact is created when a potential customer seeks contact, or because the company executes a sales promotion. Sales promotions can be done by advertising, visits of a trade representative, survey by phone and so on. In Section 4.5, we will discuss the possibilities of CRM for more easily getting the right customer contacts. The prospect is converted into a customer as soon as possible.

4.2.2 Issuing Sales Quotation

In some cases, the customer asks for a **quotation** (**RFQ = Request for Quotation**) for a specific described order, such as when there are no public quotations and no Internet catalogue available. Quotations are also requested when the customer wants to buy a very large quantity and desires a discount on the regular sales price.

If the conditions are already known, issuing a sales quotation can of course be passed over.

It is useful to register the quotations on a sales quote in order to have all data on hand when the customer decides to convert the quotation into a sales order. You do not have to fill out the whole order again because all previously entered data are used. In case the prospect does not want to place the order, the sales reports are not soiled in any way.

In order to create a sales quotation, you first have to register the quotation data. The **quotation form** is divided into two main parts: the **header** and the **item lines**. The header consists of all data that apply for the whole quotation, and the line items specify which items are desired (one line for each item). If you create a quotation, you fill in the sell-to-customer number and the system will collect the customer data from the database. At that time, there is also a creditability check.

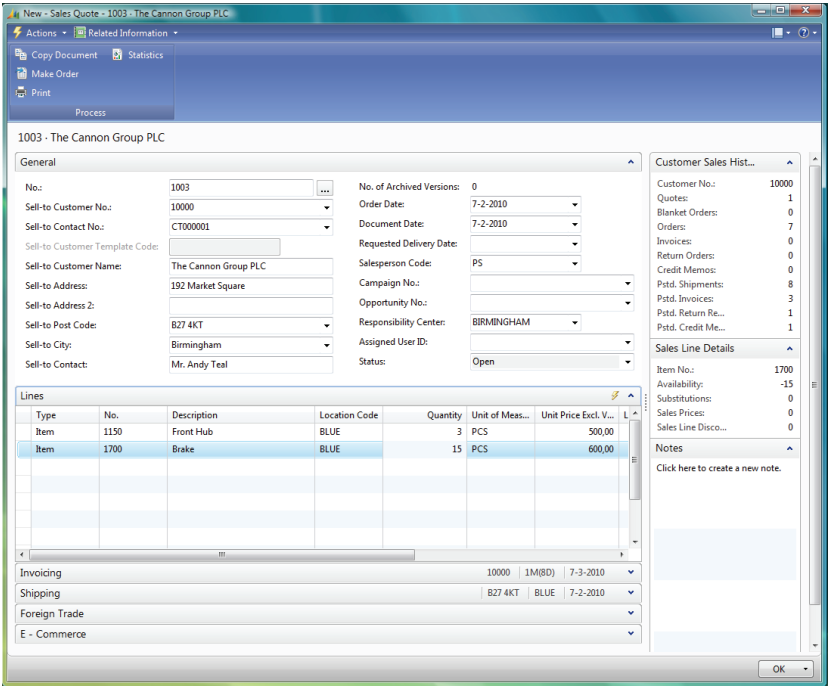

Figure 4.3: New Sales Quote (RTC)

In Figure 4.3, a sales quote screen of Dynamics NAV is reproduced. The structure of header ('General') and line items ('Lines') can easily be seen. You can also see the *fact boxes* on the right-hand side of the screen. In this screen, the fact boxes 'Customer Sales History' and 'Sales Line Details' are displayed.

In this sales quote screen, not all fast tabs are folded out. You can see unfolded **fast tabs** for:

- Invoicing
- Shipping
- Foreign Trade
- E-Commerce

These fast tabs operate in the same way regular tabs in the Classic Client do, but you can have more than one fast tab folded out so you can decide for yourself which data you would like to see together. In the fast tabs, some important data are displayed in abbreviated form. In Dynamics NAV terminology, these data are promoted to the fast tab itself.

As was mentioned earlier, you can include different items in one quotation. In Figure 4.3, you can see three front hubs and 15 brakes in one quotation. In the fact box, you can see that there is no stock available for Item # 1700. These data are of course derived from the ERP database. You can only see the line details of the quotation line item that is selected.

Items, customers and so on are usually entered as numbers (codes). Employees do not have to learn these codes by heart because they can be easily looked up in the system. In daily practice, employees normally know most regular codes by heart.

By sending the quotation to the customer, the company is obliged to fulfill the order if the customer agrees to the sales quotation. The company has to deliver the items according to the conditions that are valid for the quotation, so it is important that all data are completely registered and all calculations are correct. In order to update the sales prognosis, you have to estimate the probability of acquiring the sales order. In some cases, it is needed to reserve capacity, such as resources of workers and

machines, or to contact your vendor in order to reserve some items that are needed. It is common practice to express the probability in a percentage.

The complete adjusting and configuring of the quotation cycle in the ERP system will reduce the response time on requests for quotations dramatically when comparing to a non-ERP setting. Requests for quotations that are answered quickly have a greater chance of becoming an order!

Usually there is a closing date for each quotation and the prospect can place an order according to the conditions in the quotation before this closing date. At this point, the quotation is easily converted into a sales order. When, however, the closing date has expired, the quotation is closed and can only be consulted for historical analysis. You can, for instance, easily extract management information, such as the number of quotations or amounts or percentages from quotations because all data are available in the ERP database.

4.2.3 Sales Order Processing

By converting a quotation to a **sales order**, a new sales order is created in the ERP system, and the data are copied from the quotation onto the sales order. This reduces input errors and redundant work. It is of course also possible to create an order directly without earlier quotation. In this case, all order data have to be entered into the sales order. Other methods of receiving sales orders could be a web shop or via a mobile device, and then the data from the web shop or mobile device must be imported into the ERP system. A direct input is possible if the ERP system can handle the order input as a regular function. More traditional ways such as receiving orders by phone, letter, e-mail or fax are also possible. All data have to be entered manually.

As was mentioned in Section 4.1, the **creditability check** is very important and has to be performed when entering a sales order, even in the case of an earlier quotation as the

creditability could have been deteriorated. This check is displayed in Figure 4.4.

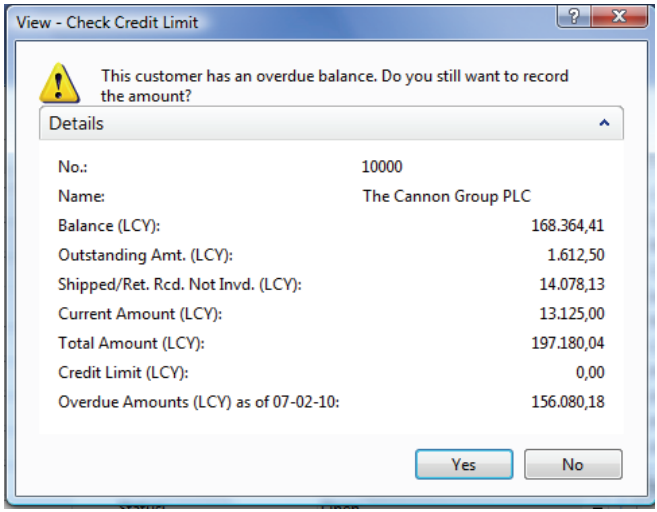

Figure 4.4: Check Credit Limit

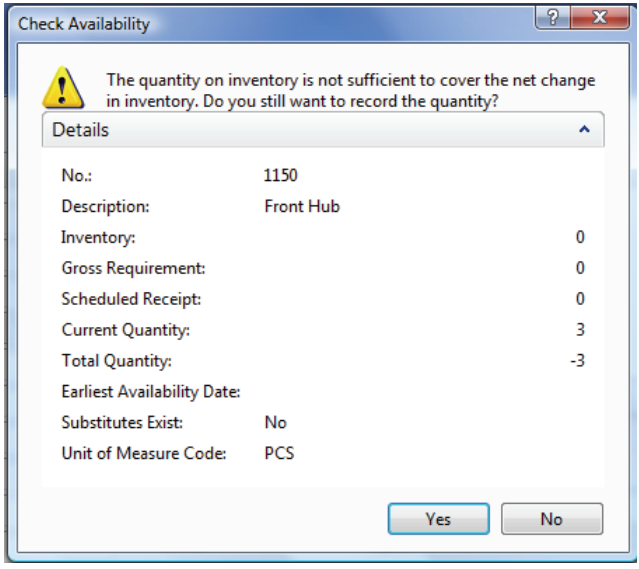

Figure 4.5: Check Availability

After the creditability check, you also have to decide upon the **availability of the items**. Here we can distinguish 'Available to Promise' (**ATP**) and 'Capable to Promise' (**CTP**). In the first case, the items are in stock in the warehouse; in the latter case, you have to decide upon the capability of the delivery, dealing with a normal procuring procedure (in the case of items you can buy from your vendor) or dealing with the production planning (in case of items you have to manufacture yourself). The most important issue is to determine the first available delivery date to get the goods to the customer. This check is displayed in Figure 4.5.

The external document number is also recorded in the sales order. This is a reference number of the customer (the purchasing document number in the system of your customer).

An example of a sales order is displayed in Figure 4.6. You can see the resemblance with the quotation.

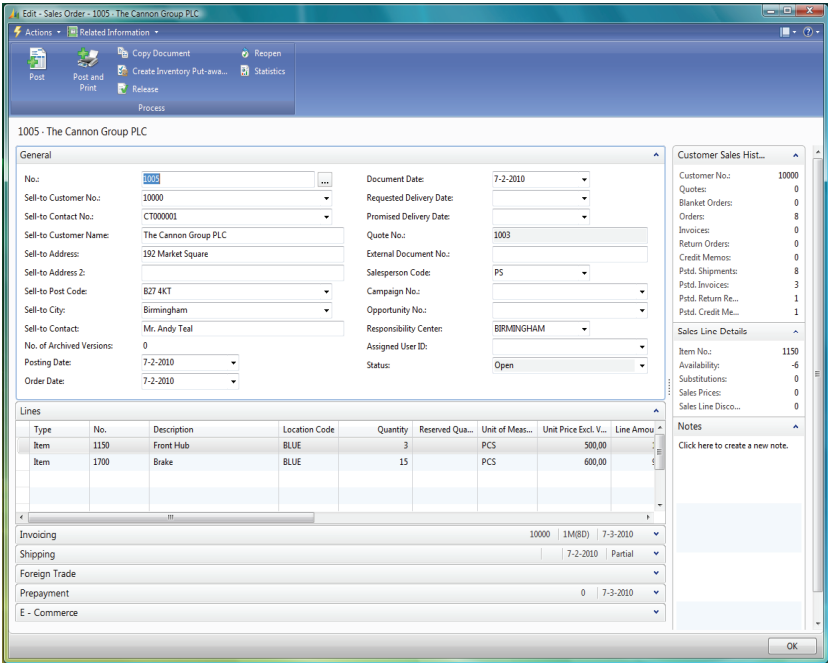

Figure 4.6: Sales Order (RTC)

When needed, the ERP system can print an order confirmation that can be sent to the customer. An order confirmation can prevent possible misunderstandings between company and customer. More and more ERP systems can communicate easily with office applications in order to give documents a nice layout with the company look and logo, and these documents can be sent to the customer. Besides document handling via office applications, it is also possible to use your favorite e-mail software to send the documents electronically instead of regular mail.

The customer generally would like to know when he can expect to receive the items. In most companies, it is possible to look up this information in the logistics module of the ERP system (without consultation of the warehouse staff) if the requested items are available. In other cases, you can get a promised delivery date for items that are ordered by our vendor but are not yet received.

When the sales order is created, there will be no financial postings. After the creditability check and the availability check are completed, the order is released for delivery and invoicing. Releasing a sales order is an action for the sales staff.

All activities within the sales process have been executed by employees such as the office sales force, account managers, and sales representatives of the sales department.

It is possible to inspect all open orders. Account managers and sales reps can access the orders from their PDAs, for instance, to see the status of an open order or the due payment by a specific customer.

4.2.4 Delivery and Shipping

The ERP system is also available in the warehouse. Warehouse personnel can look up which orders have to be shipped that day. The system selects the sales orders that are cleared for delivery and the shipping date is almost reached.

The warehouse personnel can see the role center as displayed in Figure 4.7.

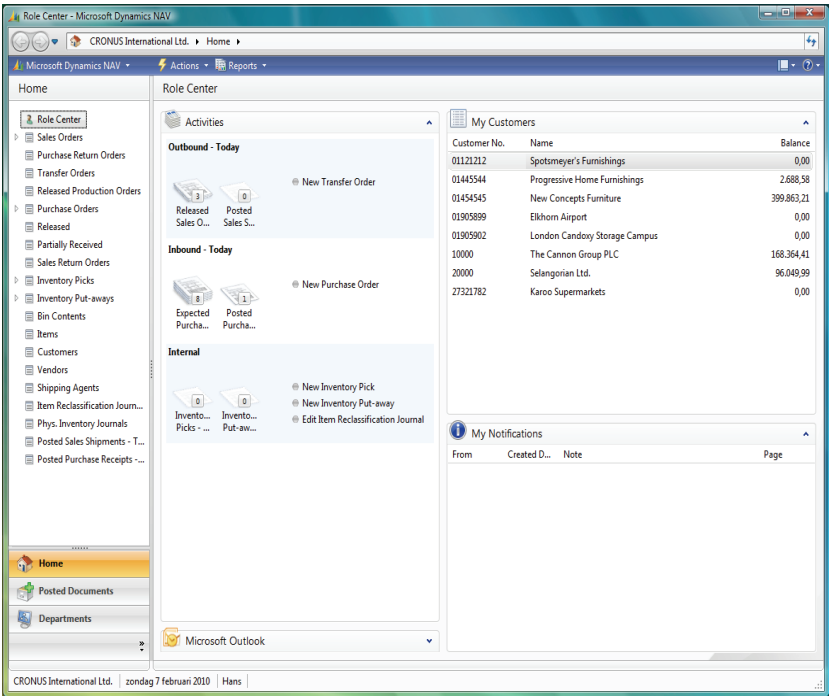

Figure 4.7: The Role of Shipping and Receiving (RTC)

As you can see, warehouse staff does not only perform **outbound deliveries**, but receives items from the vendors, as well. Let us suppose that the purchase of the needed items to deliver the sales order we created in the last section has lead to an inbound delivery of 3 front hubs and 15 brakes.

When the warehouse worker opens his stack of outbound deliveries (**released sales orders**), the sales order screen (see Figure 4.6) is displayed. The orders are **picked** in the warehouse and then they are **packed** and **shipped** to the customer. The ERP system can also provide the necessary shipping documents, which can then be printed in the warehouse and added to the shipments.

The warehouse worker presses the 'Post' button after shipping the items to the customer and chooses 'Ship' from the following menu (see Figure 4.8).

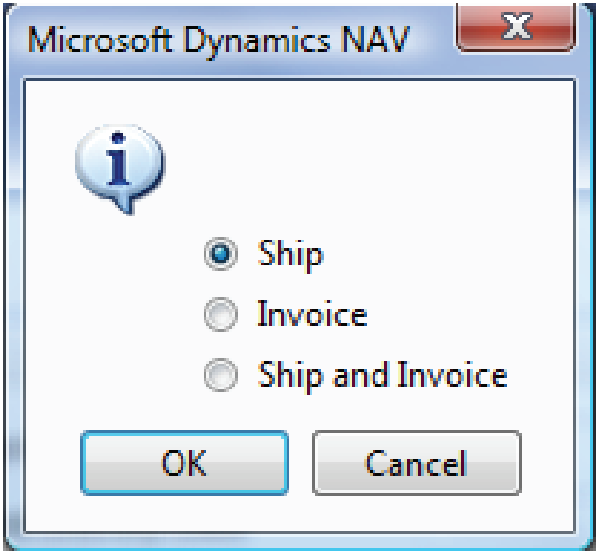

Figure 4.8: Choose Option Menu

When the 'OK' button is pressed, the shipment is posted in the ERP system. The sales order is stacked as a posted document and can be reviewed by sales staff and warehouse staff.

In the system, the general ledger is updated (a lower value of the stock) and also the logistical data (less quantity in the warehouse) are updated. In more general terms, the event 'shipping' automatically leads to actions in different parts of the ERP system. In other words, this is an example of integration of sales, logistics and finance.

4.2.5 Billing

After the items have been sent, it is time to bill the customer. The sales order will almost always contain enough data to write out the bill. There some situations in which it is not possible to write the bill with just sales order data and you therefore will have to consult the warehouse. This can be the case when you deliver quantity in pieces, but invoice quantity in weight.

Billing is the responsibility of the sales department, but is usually executed by the finance department. Some companies run the billing job every day, while others bill every two weeks.

Billing is done easily by opening the sales order and pressing the 'Post' button again and choosing the option 'Invoice' as displayed in Figure 4.8.

Until now, we have assumed that shipping the items and sending of invoices are two separated streams. In daily practice of SMB companies, the invoice is often enclosed with the shipping of the items. In this case, you can choose the option 'Ship and Invoice' in Figure 4.8.

It is also possible to use **pre-payment**. In this case, the customer pays partially before the goods are shipped. Once a pre-payment has been set up on a sales order, a pre-payments invoice (for the amount that has to be pre-paid on the sales order) can be created.

The billing process is also an **event driven action**; it is the updating of financial data such as VAT, revenue and cost of sales in the general ledger and the accounts receivable details. The billing process is also the time to account for the profit or loss on this transaction by posting it automatically to the general ledger. This phenomenon is known as the **matching principle**; revenue value and cost of sales will always be posted in the same posting period.

In general, whenever a sales order is posted, the following occurs:

- Update obligations registration
- Update customer open debt-claim
- Update general ledger (financial mutation)
- Update stock (logistic mutation)
- Update VAT registration
- Update analysis and reports

4.2.6 Collecting Money

The customer has a certain period of time in which he has to pay. This period is called **repayment time**. Figure 4.9 explains some terms in relation to collecting money from customers.

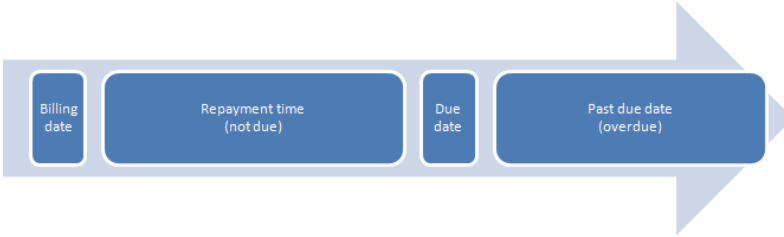

Figure 4.9: Due Date Terminology

In the period between **billing date** and **due date,** the debt-claim is not due, so the customer does not have to pay until the due date. The due date is calculated by adding the repayment time to the billing date. After moving past the due date when the customer is late paying his debt, there will be an **overdue debt-claim.**

If a customer does not pay his debt on time, the company has to take action to persuade the customer to issue payment immediately. The ERP system can easily produce lists of overdue posts that are even sorted by the number of days they are overdue. The system can also produce reminders and urgent requests and send these to the bad payers. In the end, the debt-claim can be assigned to a specialized collection agency for an extra cost. If a customer refuses to pay, the creditability check of the next order(s) will be negative. In this case, there will be no more deliveries unless against pre-payment or cash payment upon delivery.

When the customer pays his debt, the accounts receivable are updated. This can be done automatically by updating the accounts receivable records on basis of bank postings. This process of matching two corresponding entries in bank account and in accounts receivable is called **settling** or **reconciliation**.

4.2.7 Working with Blanket Orders

Most companies have long-term relationships with some of their customers. They agree to buy a large quantity of items in the coming period (e.g., a year), but in several separate deliveries. An

example of when a **blanket sales order** could be used is if a customer places an order of 10,000 units of an item and wants the items to be delivered in 2,500 units in the first months of the next year. These agreements are stated in a contract, usually called admeasurements contract, which is valid for all orders that customer places in the year. Of course the company is willing to offer against a lower price as normal or to offer a special discount. Mostly the discount is granted after the period has expired, and only then is it known if the customer has indeed ordered the earlier agreed quantity.

If a company works with blanket orders, there is no need to use a quotation procedure when putting in an order. Since all conditions are already laid down in the blanket agreement, the customer puts in an order which will be delivered and invoiced as soon as possible. Of course you will need a quotation procedure when negotiating about the conditions of the blanket order contract.

ERP systems are well equipped to support blanket orders successfully. The systems can calculate the right price and can keep track of the delivered and invoiced quantities, as well as the quantity which is still to be delivered to a specific customer. When working with a discount afterwards, the ERP system can produce a credit memo to make sure this activity is processed correctly. The credit memo lowers the debt-claim on the customer.

4.2.8 Return Orders and Credit Memos

Each and every enterprise has to do with **return sales orders** (inbound returns). Customers may return shipments because the items are damaged upon arrival, for example, or because the wrong items have been delivered. Sometimes customers have bought too many items and want to return some of them, and companies usually permit their customers to return merchandise.

The procedure of inbound returns is rather awkward. The process looks a bit like a turned-around sales process. We can distinguish the following phases:

1. The customer contacts the sales department and asks if the items can be returned

2. The sales employee agrees to the request and creates a return sales order in the ERP system, and hereby the warehouse is acknowledged that there will be goods coming in from this customer
3. The warehouse employee receives the sending of the customer and posts the goods receipt in the ERP system
4. The sales employee creates a credit memo in the ERP system en sends it to the customer

In order to handle the procedure correctly, lots of companies work with an **RMA procedure** (Returned Material Authorization). An RMA number identifies the return sending and is proof for the customer that the returning is authorized by the sales department. It is recommended that RMA numbers are also entered in the ERP system and the warehouse staff also uses these numbers to make their work easier.

Returned items sometimes create a problem regarding the ultimate destination of these goods. If items are redundant or wrongly delivered, they can be placed back into stock after inspection. The ERP system knows that the items are back in stock and also puts the correct price in the item record. The system can also assign the correct location to store the items. If items are damaged or are not suitable for placing back into stock due to other reasons, an authorized person has to decide if the items can be sold at a lower price to a junk dealer or if the items have to be destroyed. In either case, this decision and the execution have to be entered into the ERP system.

4.3 Marketing

The American Marketing Association (AMA) states: "**Marketing** is an organizational function and a set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders."

This book is about ERP, so we cannot get into details about marketing. That is the reason we will only discuss some main topics.

On a macroeconomic level, marketing is about distributing goods and services among consumers. You can distinguish the following two functions:

1. **Information exchange between manufacturers, wholesalers and consumers**
2. **Stabilization function/distribution function**

Marketing also pays attention to the supply chain and to different distribution channels. At the moment, there is also much interest in the microeconomic level with considerations such as how an enterprise has to decide about product development, as well as all sorts of other strategic issues such as communication, price and distribution to operate on the market at a profitable level.

Marketing is, for instance, about dividing customers into groups on the basis of one or more communal characteristics. We use the term *segmentation* to divide customers into different groups. When doing so, it becomes easier to focus your attention to specific target groups. A company can set up marketing mix tools for each segment. The marketing mix tools are:

- Product
- Price
- Promotion
- Place

Example 4.1

A company manufactures and sells rollator walkers and focuses on elderly people in general. By segmenting, the company can give attention to a customer group which has a higher expendable income and has interest in a fashionable, trendy model which is equipped with lots of extra appliances, but can also focus on the more traditional customer group with a lower expendable income which does not bother about trends and agrees with a simple, low budget model. Advertising can be different for the two different segments.

Segmentation is a demand-oriented approach of the market. The product or other marketing mix tools have to be adapted to the different market segments.

It is also possible to work with *campaigns*. A *campaign* is a sort of project to support specific marketing initiatives. From every **campaign**, the status is monitored in the system, and you can also display the most important facts and figures of a specific campaign such as the target audience for the campaign, the generated revenues and the number of started opportunities.

Segmenting and working with campaigns is also possible in most ERP systems, and is of course also possible in Dynamics NAV, as you can see in the following two figures.

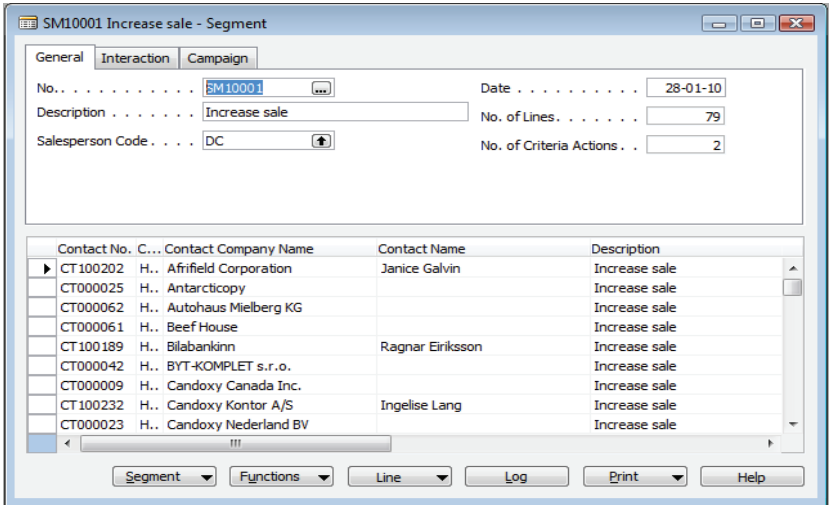

Figure 4.10: Segmentation (CC)

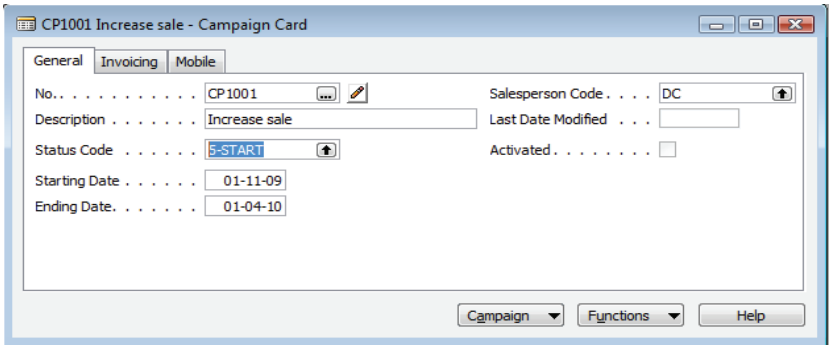

Figure 4.11: Campaign (CC)

4.4 Customer Relationship Management

Customer Relationship Management or Customer Value Management (a term from M. Bügel) is all about the relationships a company maintains with its customers. It is a well known statement that keeping existing customers is much easier that acquire new customers, and it is a fact that getting a new customer costs an average of ten times as much as keeping an existing customer's business. To retain customers, the company has to make an effort in getting to know each and every one. **CRM** has existed since long before the term was invented. In the past, the shopkeeper in a small village knew all of his customers and also knew in which items they were interested. In this way, he could make sure that he had the items his customers wanted to buy. He could also advise the customer, bearing in mind that customer's particular preferences.

Nowadays, CRM is a more systematic and grander set-up. Enterprises can use customer cards and login accounts, for example, to register and analyze buying behavior in order to provoke the customer to buy a similar but more luxurious and also more expensive item.

CRM is a strategy which makes it possible for companies to identify customers, pull them in and retain them. The target is increasing the customers' satisfaction and thereby increasing the company's profitability. Each company can distinguish itself from others by the customers it has.

'Know your customer' must be directly followed by 'and register his characteristics'. Characteristics can be transaction data, but can also be the summary of a sales conversation with the customer. The company builds up a database around every customer and analyzes the data regularly in order to provoke the customer into buying a bigger volume of products. In some industries, a good relationship is of more importance than a bigger volume, so it is important that sales staff build a good relationship with the customers. Keeping track of all communication around these contacts is an important tool to improve customer satisfaction. The customer gets the feeling that he is being taken seriously. A well maintained CRM system is of high value.

A sales rep or an account manager can consult his PDA or Smartphone anywhere and at any time to connect to the ERP system. When all contacts are in the database, the salesperson can

review the actual situation before visiting a customer in order to track the actual problems the customer might have. After his visit, he can type in his remarks in his PDA/Smartphone and connect again in order to update the database of the ERP system. Service technicians can also use mobile connections to get all needed information on their PDAs/Smartphones.

Marketing guru Jay Curry uses a customer pyramid, positioning starting customers at the base and repeat customers at a higher level in this pyramid. According to him, CRM is about:

- Get them in
- Move 'em up the pyramid
- Keep 'em in

A survey of PriceWaterhouseCoopers shows that only 1% of customers buy every product of the company, so you can increase the revenue to each customer when you try to sell other, and preferably more expensive, products. Marketing campaigns can be focused better to the right target audience and must produce a higher result.

When CRM is properly implemented and used, it will produce some big advantages:

- Lower costs because of higher operational efficiency
- Higher revenue because of a better segmented market
- Better strategy and better possibilities to measure effects of promotions

Example 4.2

At KLM (the former Royal Dutch Airlines, now part of Air France), CRM is a profitable issue according to CRM director Cristina Zanchi in the book CRM – The Customer in the Leading Role – Microsoft Dynamics*. After two years of CRM, KLM has about 20% more customers added to its customer database of 3.3 million customers. In 2006, 13% of the KLM customers considered booking a trip with KLM more often, which lead to a 9% increase in revenue. KLM claims to have defined as much as 11 contact points such as check- in, boarding, experience during the flight and the 'see you*

again' on arrival at the destination. By getting to know the customers better, KLM can, for example, send a personalized targeted mailing to customers with text such as:

"Dear Customer,

We know that you love to play golf and that is why we have composed the golf arrangements especially for you."

Data that are collected are name, address, travel patterns and habits including typical destination choices and information about that for which customers may have made complaints or offered compliments. Other data collected include who is paying for their ticket, which hobbies they have, what native language(s) they speak and how profitable they are for KLM.

Almost the same data that are registered on the customer card is on the contact card. In Figure 4.12, the contact card is presented:

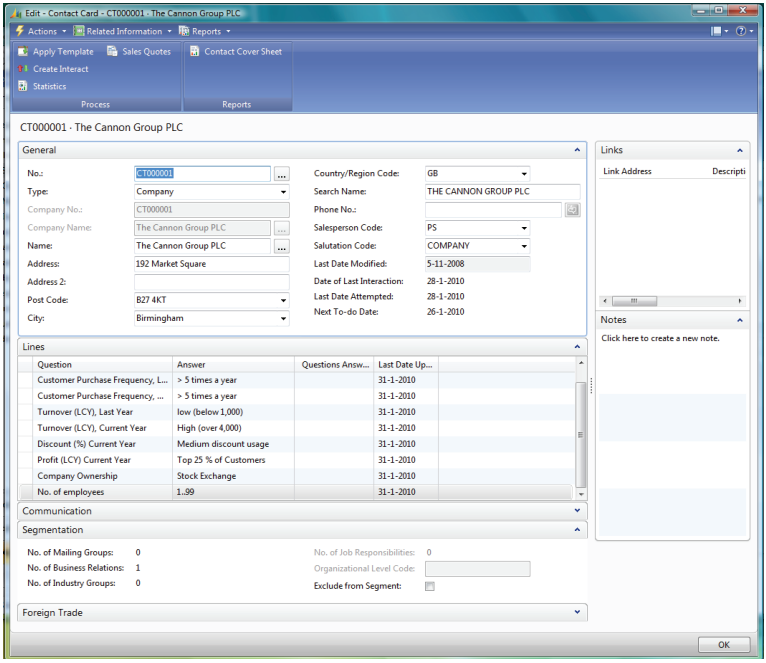

Figure 4.12: Contact Card (RTC)

After the sale, it is important to pay attention at the **after sales service**. The customer expects that the sales staff will service him after the goods have been delivered and have been paid for. For this issue, you can make use of the service module of the ERP system. In Dynamics NAV, you can use the following functions:

- Service order management (information about open service quotations and service orders)
- Contract and SLA management (SLA stands for Service Level Agreement , which is a contract in which there are details about which service level can be expected)
- Resources planning and material planning, prioritizing of activities and jobs
- Tracking and tracing of service items (with serial numbers and stock data)

4.5 Analyses

It is important to be able to analyze all kinds of data, such as the revenue per region or per sales rep, or to be able to compare the revenue information to the figures of the previous three years. The analyses are only possible if, when posting the sales orders, all kind of characteristics are entered into the system. The types of characteristics define the possibilities of analyses. If you, for instance, input a region code to each and every customer, it is possible to analyze sales per region.

In Dynamics NAV, you will find so-called *dimensions*. A **dimension** is a characteristic that can be added to a posting. By an extensive use of dimensions, it is possible to sort all kinds of postings to many different points of view. Such a point of view is a dimension (e.g., revenue per region), but is also extended to, for example, revenue per region per sales campaign per customer group. By using dimensions, you can analyze trends and compare all kinds of lists with data on several different dimensions. All ERP systems have a wide range of helpful tools such as filters, account schedules, lists and queries. Dynamics NAV has the dimensions: a very powerful tool to get the reporting you would like to have.

Executing all kinds of detailed analyses is also known as **Business Intelligence (BI)**. Because lots of calculations and sorting activities have to be performed on large numbers of data within the database, the operational activities in the system are very much delayed. Because of this delay, many companies decide to make a copy of the database overnight and use this copy for BI purposes.

In Dynamics NAV, you have a number of standard analyzing possibilities for the O2C-cycle. You can use sales budgeting for revenue targets which have to be achieved; this tool can be used in detail. You also have sales analysis **account schedules** in which you can divide revenues (in money and in quantity of items sold) and compare them with comparable figures of other periods, other regions, etc. Dimensions are also good tools to use in order to sort sales figures in different views.

There are also normal analyzing tools such as executing a report in which the balance of a special group of general ledger accounts is displayed. For this purpose, you can use the *account schedule layout* in which you can easily model a template. Dynamics NAV generates a report with all figures from the template, and you can generate this report at any time.

Business intelligence used to be the working area of specialists, often with a thorough mathematical background. Nowadays we see a trend in bringing BI to every end user as the reporting tools are becoming increasingly easier to use. Additionally, exporting sales-oriented data from the ERP system to Excel is very simple, and the link can even be made dynamic so data are updated whenever the Dynamics NAV database is updated.

You can get another easy analysis by displaying a statistics screen, which is among others possible in almost every card screen (customer, items, etc.). In a number of cases, there is a link between sales/CRM and finance. The finance process will be discussed in Chapter 7.

Reports to determine what percentage of quotations have indeed become sales orders can also be generated. In CRM, the quotation portfolio is registered, including the expected delivery

date and the chance of scoring the order. This gives a nice basis for revenue forecasting and is also usable for a liquidity forecast.

CRM can extract the number of customer visits a certain sales accountant has made, and the costs of these visits can be extracted from the HRM/finance modules. In this way, you can calculate what the costs of a customer visit by an account manager have been, and even determine which customer visits only cost money and which ones are profitable. To get an impression about the impact of a certain account manager on revenues, reports can be generated to analyze the results of customer visits by sales manager.

Analysis at a higher level can include these examples:

- Does the number of customer visits influence the revenue?
- Does the number of customer contacts influence the revenue?
- Which revenue was reached by the leads of latest sales exposition or sales campaign? Was this profitable?

List of Basic Terms

Account Schedule	Account schedules can be used to analyze figures in general ledger accounts or to compare general ledger entries with general ledger budget entries
After Sales	All activities which take place after completing the sales transaction. Think of guarantee claims, service, returns
Availability	Possibility to deliver items to a customer to a customer
Blanket Order	Order in which a specific customer agrees to buy a huge quantity of items in the coming period (e.g., a year), but in several separate deliveries

Contact Data	Data about a relation, like a customer or a vendor
Credit-Worthiness	Estimation of the possibility that a customer is not able to pay the invoice
Creditability Limit	Maximum amount of money a customer can buy on account
CRM	A strategy which makes it possible for companies to identify customers, get them in and keep them in with the target of increasing the profitability and also increasing the customer satisfaction
Customer Card (Customer Record)	Overall picture of all data which are registered about a certain customer
Customer Pyramid	Graphic illustration in the shape of a pyramid, with the starting customers at the base and the better, more spending customers at a higher place
Debt-Claim	Amount a customer has to pay in total for all invoices he has received. The customer is liable to pay this amount.
Dimension	Characteristic which can be added to a transaction for later analysis purposes. Dimension is a Dynamics NAV specific term.
Discounts	Lowering the sales price as consequence of a special relation to a customer or because of a large quantity in a sales order.
Header (of a card screen)	General name for the top part of a card screen which shows the data that are valid for the whole card screen.
Item Lines (of a card screen)	General name of the bottom part of a card screen which shows the data of the specific items that are valid for the order. In one item line there is space for just one item.

Marketing	"Marketing is an organizational function and a set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders." Source: American Marketing Association
Master Data	Data which are more or less stable; they do not need to be changed whenever an order of an existing customer is received
O2C-Cycle	Sales process, from first customer contact, quotation, order, delivery, invoicing and receiving payment
Overdue Amount	Amount of money the customer should have paid already
Payment Terms	Agreements regarding the conditions for paying the invoice by the customer
Posting Group	Technique to update a (logistic) transaction into the general ledger. Posting group is a Dynamics NAV specific term.
Quotation	Message to a customer about price and other conditions under which a specific sales order is delivered
Quotation Card (Quotation Record)	Overall picture of all data which are registered about a certain quotation
Reconciliation	Matching corresponding entries, e.g., in bank account and in accounts receivable
Relation	Contact, like a customer or vendor
Repayment Time	Period within the customer has to pay the amount of the sales invoice
Return Sendings	Items which are received back from a customer

RMA	Returned Material Authorization. An RMA number identifies the return sending and is proof for the customer that the returning is authorized by the sales department.
Sales Analysis Report	Custom-made report about the sales in the recent past, compared to other figures
Sales Budget	Target for the number of products to sell in a specific coming period
Sales Credit Memo	Sales invoice with a negative total figure; this lowers the debt-claim of that customer
Sales Invoice (Bill)	Billing document that is created after the sales delivery has taken place
Sales Order	Registration of a specific sale with all details
Shipment Terms (Shipment Methods)	Agreements about the conditions under which the delivery to the customer takes place
Shipping	Sending items to the customer
Stock Value	Amount of money that represents the quantity of goods in stock
Strategy	A strategy is a long-term plan of action at a high abstraction level designed to achieve a particular goal

Assignments

4.1

Produce eight multiple choice questions (each with four answer alternatives) for yourself and discuss these with your fellow students.

4.2 NAV (§ 4.1)

SitExclusively is a trading company which sells all sorts of exclusive sitting furniture. The enterprise has sole representation contracts for the whole country with several vendors. SitExclusively delivers to retailers but also to private persons. The retailers get a higher discount on orders than the private individuals. Sometimes there is a sale such as a warehouse clearing with a 40% discount or more. Orders which exceed $100,000 get a one-time discount of 3%. When the order figure on yearly basis exceeds $500,000, an extra bonus of 2% is paid at the end of the year. In the payments terms you can read, "Payment within 30 days net; when paid within 7 days you get a discount of 1%."

The company has decided to implement an ERP system and has the following questions:

a. In which way can SitEffectively configure the customer data so that it matches the targets as closely as possible?
b. In which ways could this company use:
    1. Line discounts
    2. Customer group discounts
    3. Yearly revenue bonuses
    4. Order discounts
    5. Item discounts
    6. Payment discounts
c. In which way can the company use the discounts of (b) in Dynamics NAV? When answering this question, we do not expect a fully detailed answer, but more an indication of the direction where to look.

4.3 (§ 4.2)

Sixstep Products has implemented its sales process in an ERP system. The company is regularly contacted by customers who would like to place large orders that exceed the creditability limit of $10,000. These orders have to be refused by the sales staff. The amount of the credit limit is decided on because of some experiences in the past with bad payment behavior of some customers. The sales manager is complaining about this matter; he claims to miss a lot of revenue and that his prospects and customers are looking out for another vendor from where to purchase their desired merchandise. The sales manager has created a temporary solution by cutting the large orders into smaller orders which individually do not exceed $10,000.

In which way can a solution be found that is acceptable for all parties involved? In the answer, you must find a few directions for a solution and choose one of these. Explain your choice.

4.4 (§ 4.2)

Vineguard only delivers its products by pre-payment.

a. Describe the steps in the sales process (O2C-cycle) of Vineguard.
b. Detail each step in a few lines in order to make clear what is involved.

4.5 (§ 4.2)

The music magazine HotTops is being published by Benos. The company sells subscriptions and advertisements. In this assignment, we discard the sales on subscriptions.

In which way can Benos use the functionality of blanket orders in its sales process?

4.6 NAV (§ 4.3 + 4.4)

Software vendor SoftFix would like to actively contact its customers with commercial messages. When implementing the

ERP system, customers have been divided into companies and resellers. SoftFix wants to keep the existing customer groups but would like to streamline the communication better to temporary sales actions.

In which way(s) can Dynamics NAV support this?

4.7

Find in literature and on the Internet a minimum of three examples of successfully implementations of sales processes. Write a report of one page describing the results you have found.

4.8

Search for a contact in a trading company that operates an ERP system and compare its sales process to the standard sales process which is described in this chapter. Analyze the differences.