LEARNING OBJECTIVES

- To describe the business environment for the revenue collection (RC) process
- To analyze the effect of enterprise systems and other technologies on the RC process
- To describe the RC process logic, physical characteristics, and support of management decision making
- To describe and analyze controls typically associated with the RC process

Introduction

The M/S process performs the critical tasks of (1) processing customer orders and (2) shipping goods to customers. The RC process completes the Order-to-Cash business process by accomplishing three separate yet related activities: (1) billing customers, (2) managing customer accounts, and (3) securing payment for goods sold or services rendered.

The revenue collection (RC) process is an interacting structure of people, equipment, methods, and controls designed to:

1. Support the repetitive work routines of the credit department, the cashier, and the accounts receivable department
2. Support the problem-solving processes of financial managers
3. Assist in the preparation of internal and external reports
4. Create information flows and recorded data in support of the operations and management processes

First, the RC process supports the repetitive work routines by capturing, recording, and communicating data resulting from the tasks of billing customers, managing customer accounts, and collecting amounts due from customers. Next, the RC process supports the problem-solving processes involved in managing the revenue stream of the company. As but one example, the credit manager, reporting to the treasurer, might use an accounts receivable aging report such as the one in Figure 11.1 to make decisions about extending further credit to customers, pressing customers for payment, or writing off worthless accounts. Third, the RC process assists in the preparation of internal and external reports, such as those demanded by investors and bankers. Finally, the information process creates information flows and stored data to support the operations processes and decision-making requirements associated with the process.

The RC process occupies a position of critical importance to an organization. For example, an organization needs a rapid billing process, followed by close monitoring of receivables, and a quick cash collections process to convert sales into cash in a timely manner. Keeping receivables at a minimum should be a major objective

1 To focus our discussion, we have assumed that these departments are the primary ones related to the RC process. For a given organization, however, the departments associated with the RC process may differ.
of an RC process. While we tend to associate the RC process with mundane record-keeping activities, the process also can be used to improve customer relations and competitive advantage. First, let's take a look at the organizational aspects of the RC process.

Organizational Setting

Figure 11.2 (page 376) presents a horizontal view of the relationship between the RC process and its organizational environment. Like its counterpart in Chapter 10, it shows typical information flows handled by the RC process. The flows provide an important communications medium among departments and between departments and entities in their relevant environment. The object here is simply to have you identify the major information flows of the RC process. Technology Insight 11.1 (page 377) discusses how horizontal information flows in an enterprise system become automated and therefore more efficient in terms of supporting the RC process.
Figure 11.2  A Horizontal View of the RC Process.

NOTES:
1. The information flows shown above are representative of those related to revenue collection process. The figure, however, does not show all information flows. For example, sales returns and allowances are not shown.

2. See Table 11.1 for a description of information flows 1–10.

Review Question
How does the RC process relate to its organizational setting?

Table 11.1  Description of Horizontal Information Flows*

<table>
<thead>
<tr>
<th>Flow No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shipping department informs the accounts receivable department (billing section) of shipment.</td>
</tr>
<tr>
<td>2</td>
<td>Accounts receivable department (billing) sends invoice to customer.</td>
</tr>
<tr>
<td>3</td>
<td>Accounts receivable department (billing) informs general ledger that invoice was sent to customer.</td>
</tr>
<tr>
<td>4</td>
<td>Customer, by defaulting on amount due, informs credit department of nonpayment.</td>
</tr>
<tr>
<td>5</td>
<td>Credit department recommends write-off and informs accounts receivable department.</td>
</tr>
<tr>
<td>6</td>
<td>Credit department, by changing credit limits, informs sales order department to terminate credit sales to customer.</td>
</tr>
<tr>
<td>7</td>
<td>Accounts receivable department informs general ledger system of write-off.</td>
</tr>
<tr>
<td>8</td>
<td>Customer makes payment on account.</td>
</tr>
<tr>
<td>9</td>
<td>Cashier informs accounts receivable department (cash applications section) of payment.</td>
</tr>
<tr>
<td>10</td>
<td>Cashier informs general ledger of payment.</td>
</tr>
</tbody>
</table>

*Many of these steps may be automated. See Technology Insights 11.1 and 11.3 for descriptions of these steps in an enterprise system implementation.
Enterprise System Support for Horizontal Information Flows

The information flows presented in Figure 11.2 are very similar to what we would expect if the organization were using an enterprise system. However, many of the tasks outlined would occur quite differently because of the messaging capabilities embedded in contemporary enterprise systems. Let's take a look at each of the information flows in Figure 11.2.

1. The flow of information from the shipping department to the accounts receivable department (billing section) is an automatic trigger from the enterprise system. As soon as the shipping department enters the shipment into the enterprise system, a message is sent to the billing module in preparation for step 2. If necessary, a message of the update could also be routed to the accounts receivable department.

2. As a regularly scheduled event, the billing department uses the enterprise system to generate an invoice and transmit the invoice to the customer either by mail or electronically.

3. The generation of the invoice (step #2) automatically updates the accounts receivable balances in the general ledger portion of the enterprise system.

4. Periodic reports are generated based on lack of customer payment and trigger a credit hold on the account. A message is also automatically routed to the credit department to review the account.

5. As a regularly scheduled event, the credit department reviews accounts and determines when accounts should be written off. A message is routed to the accounts receivable department authorizing a write-down, and accounts receivable confirms.

6. As a regularly scheduled event, the credit department reviews and revises credit for customers and changes are automatically made to the credit data accessible by the sales order department.

7. Authorization of write-down in flow #5 by the accounts receivable module automatically updates general ledger balances.

8. Customer payment is received either by mail or electronically.

9. Cashier records payment into the enterprise system and the accounts receivable balances are updated. Accounts receivable instantly has updated information.

10. Recording of payment by cashier (step #9) automatically updates general ledger balances.

As is apparent, much of the processing of information flows becomes simply automatic updating of relevant data stores. These automatic updates occur because of the integrated nature of the enterprise system and its underlying database. If the information needs to draw the attention of another person, automatic messaging systems can automate the notification process as well.
The Billing Process

At the time the sales order documents were prepared in the order entry department, copy 1 was sent to the billing department (the annotation to the left of the sales order data indicates that these "sales order notifications" are held pending receipt of the shipping notices). At the end of each day, billing receives (from the shipping department) batches of bills of lading (copy 1), accompanied by shipping notices (sales order copy 2).
In the billing department, a clerk compares the details of these documents. Data that fail to pass the document-matching control are removed from the batch; these data are handled by a separate exception routine. Corrected data will be submitted to the computer during a subsequent processing cycle.

If there is agreement among the data items, the billing clerk prepares batch totals, logs each batch, and sends the batches to data control. Data control logs the batches and forwards them to data preparation. Data preparation clerks records the shipping notices to the sales event database. A second clerk reenters the inputs. After reconciliation of any differences between the manually calculated batch totals and the batch totals calculated by the program, the sales data are forwarded to computer operations. This concludes the recording process.

The first step of the update process is to sort and merge sales data in order to prepare the data for sequential processing against the accounts receivable master data. A maintenance run brings the master data up to date and prints one or more reports. Any errors discovered during the process run are recorded with the error suspense data along with a record of each sales order (i.e., shipping notice) number processed during the run.

Output invoices are sent back to data control to be logged out and then are sent to the billing department. Once the invoices have been received by the billing department, a clerk logs the batch back in and matches the invoices with the sales orders and bills of lading. If the documents match, the original invoice is sent to the customer, and the copy is filed with the sales order and bill of lading.

Once you have had the opportunity to study the billing process documented in Figure 11.6, stop and consider how this might change in an enterprise system environment. After you have thought through the impact and the resulting changes to Figure 11.6, read Technology Insight 11.3, which provides an overview of how a fully implemented enterprise system impacts the billing process discussed in this chapter.

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**Technology Insight 11.3**

**Enterprise System Support for the Billing Process**

The main effect of the introduction of an enterprise system into the billing process depicted in Figure 11.6 is the integration of the processing programs and the various data stores into a single unified processing system with a single underlying database. In terms of the diagrams, the primary impact is therefore on the activities depicted within the “data center.” These changes are demonstrated in the diagram on page 389. Note that the systems flowchart has significantly simplified, but the consolidation of all of the processes and databases shown in Figure 11.6 to the single process and database in the figure shown on page 389 is indicative of the complexity within an enterprise system. You should also recognize that for clarity and comparability the diagram shows the use of batch totals and batch comparisons. In many enterprise-wide environments, traditional batch control procedures as depicted on page 389 might not be retained, depending on how much the organization decides to change its business processes upon implementation of the enterprise system.
TECHNOLOGY INSIGHT 11.3 (continued)

[Diagram of the process flow for order-to-cash with data center, data preparation, data control, and accounts receivable billing section highlighted.]

- Integrated ERP system
  - Invoice
  - Integrated database
  - Error and summary report
  - Invoice
  - BT

- Shipping notice
  - Accepted data
  - Log the batch
  - Invoice
  - Invoice
  - Invoice
  - BT
  - BT

- Bill of landing
  - Invoice
  - Invoice
  - Invoice
  - Invoice

- Sales order
  - Sales order
  - Bill of landing
  - Match documents
  - Log the batch

- Held pending receipt of the invoices
  - Errors handled by an exception routine
  - BT = batch totals

- Customer