



Accounts Receivable Management for Small- to Mid-Sized Companies

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Course # 1133365, Version 2003, 2 CPE Credits

your self-study.
 **your way.**

Course CPE Information

Course Expiration Date

Per AICPA and NASBA Standards (S9-06), QAS Self-Study courses must include an expiration date that is *no longer than one year from the date of purchase or enrollment*.

Field of Study

Accounting. Some state boards may count credits under different categories—check with your state board for more information.

Course Level

Basic.

Prerequisites

There are no prerequisites.

Advance Preparation

None.

Course Description

If a company's existence is measured by revenue, then its lifeblood must be how well it manages accounts receivable. Many business executives say that a sale isn't a sale until the money has been collected. This course reviews best practices in the accounts receivable function of small to medium commercial entities as it relates to invoicing and pricing. It also focuses on credit best practices including credit evaluation, use of Z Score and other methods of securing customer payment when open-ended credit is deemed too risky. This course also explores collection best practices, including those related to account reconciliation. Payment application, internal controls, and available banking technology are also reviewed.

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Instructional Design

This Self-Study course is designed to lead you through a learning process using instructional methods that will help you achieve the stated learning objectives. You will be provided with course objectives and presented with comprehensive information and facts demonstrated in exhibits and/or case studies. Review questions will allow you to check your understanding of the material, and a qualified assessment will test your mastery of the course.

Please familiarize yourself with the following instructional features to ensure your success in achieving the learning objectives.

Course CPE Information

The preceding section, “Course CPE Information,” details important information regarding CPE. If you skipped over that section, please go back and review the information now to ensure you are prepared to complete this course successfully.

Table of Contents

The table of contents allows you to quickly navigate to specific sections of the course.

Learning Objectives and Content

Learning objectives clearly define the knowledge, skills, or abilities you will gain by completing the course. Throughout the course content, you will find various instructional methods to help you achieve the learning objectives, such as examples, case studies, charts, diagrams, and explanations. Please pay special attention to these instructional methods, as they will help you achieve the stated learning objectives.

Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

Review Question Answers and Rationales

Review question answer choices are accompanied by unique, logical reasoning (rationales) as to why an answer is correct or incorrect. Evaluative feedback to incorrect responses and reinforcement feedback to correct responses are both provided.

Glossary

The glossary defines key terms. Please review the definition of any words you are not familiar with.

Index

The index allows you to quickly locate key terms or concepts as you progress through the instructional material.

Qualified Assessment

Qualified assessments measure (1) the extent to which the learning objectives have been met and (2) that you have gained the knowledge, skills, or abilities clearly defined by the learning objectives for each section of the course. Unless otherwise noted, you are required to earn a minimum score of 70% to pass a course. If you do not pass on your first attempt, please review the learning objectives, instructional materials, and review questions and answers before attempting to retake the qualified assessment to ensure all learning objectives have been successfully completed.

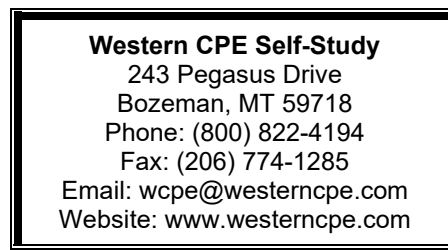
Answer Sheet

Feel free to fill the Answer Sheet out as you go over the course. To enter your answers online, follow these steps:

1. Go to www.westerncpe.com.
2. Log in with your username and password.
3. At the top right side of your screen, hover over “My Account” and click “My CPE.”
4. Click on the big orange button that says “View All Courses.”
5. Click on the appropriate course title.
6. Click on the blue wording that says “Qualified Assessment.”
7. Click on “Attempt assessment now.”

Evaluation

Upon successful completion of your online assessment, we ask that you complete an online course evaluation. Your feedback is a vital component in our future course development.



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Accounts Receivable Management for Small- to Mid-Sized Companies

Learning Objectives

After completing this section of the course, you will be able to:

- Associate the importance of the billing, pricing, and credit memo process to accounts receivable best practices
- Differentiate between customer credit evaluation techniques
- Define and use the Altman Z score and other ratios in evaluating customers
- Recognize nontraditional methods to secure customer payment
- Recognize best practices to the collection function
- Associate the importance of internal controls with the payment application function

Introduction

If a company's existence is measured by revenue, then its life blood must be how well it manages accounts receivable. Many business executives say that a sale isn't a sale until the money has been collected.

This course examines best practices in accounts receivable management. Accounts receivable management is associated with both credit and collections. These important functional areas work with sales, as well as treasury and bank vendors to ensure the maximum realization of cash from sales revenue.

While a good credit function holds the key to "safe sales"—those sales for which you will be paid—the best accounts receivable management will also find a way to take riskier sales and minimize that risk wherever possible through credit insurance or other arrangements. Best practices dictate that sales and accounts receivable work hand-in-hand to maximize good sales opportunities, ensure that order processing and invoicing is controlled and timely, and that pricing is up-to-date and accurate.

A properly managed accounts receivable function also has significant impact on the organization's overall cash flow. Best practices dictate that accounts receivable management ensures that there are diverse customer payment methods available, that payments are processed timely and accurately, and that the process is controlled to ensure that all amounts due are timely paid.

This course explores each functional area, starting with the sales function, and the best practices that relate to accounts receivable management. Credit and collections will each be discussed followed by accounts receivable management administrative best practices, which will include portfolio review, internal controls, and payment application. Banking best practices as they relate to accounts receivable management will be explored last.

Written Policies and Procedures

Best practices will always begin with written policies and procedures. Why written? Written policies and procedures are there for reference and the education of employees. If a required process or control is not performed, it's tough to refute what's in the Policy/Procedures manual. However, with no written policies and procedures, and with employees relying solely on word of mouth passed down from employee generation to generation, it's much easier for an employee to say "No one told me".

Another important element of written policies and procedures is that they must be incorporated into training. It doesn't do much good to take a new employee, point at the manual and say, "There it is". Training on policies and procedures should be performed at the time of hire and annually thereafter. The employees should also sign a document acknowledging their training sessions. If you do need to dismiss someone for lack of compliance, this will go a long way toward dismissing claims of "I didn't know" or "No one told me".

Written policies and procedures will be the first best practice listed in all sections of this course. The written policies and procedures should include all of the best practices that follow.

Accounts Receivable Process Overview

<u>Sales</u>	<u>Credit</u>	<u>Collections</u>	<u>AR Management Administration</u>	<u>Bank</u>
Customer/Contract Administration	Customer Credit Evaluation	Portfolio collection strategy	Portfolio review	Remittance Processing
Pricing	Approval of Credit Lines	Account reconciliation	Internal controls	
Order processing/Invoicing	Monitoring of Credit Lines		Measure unapplied payments	
	Secured Sales Methods		Payment application	

Sales and the Accounts Receivable Management Process

You've got a new customer. This is fantastic news. However, now that the new customer has been acquired, there is some work that needs to be done on the front end of the process to ensure the following:

- Customer information is properly captured for invoicing
- A credit application is completed
- Pricing for the customer is appropriately approved and used for that customer

- Orders and order fulfillment are accurate and correct in terms of customer, price, quantity and terms
- Invoices are delivered promptly, to the attention of the proper person or department
- Returns, discounts, and other allowances or credits are approved and recorded

Why are these items important to the accounts receivable management process?

- If customer information on the customer file used for billing is incorrect, this may delay invoices, giving the customer a late payment excuse
- A credit application should be part of the customer set-up process to determine whether the customer is credit worthy and on what terms sales will be made. An organization should not extend credit to customers who represent unacceptable risks to the company.
- If sales are made at unapproved prices, there will be invoice discrepancies, which will impede collection.
- If orders and related fulfillment (shipments in most cases) are not controlled, customer disputes cannot be refuted or shipments may be made that are unbilled.
- One of the most common reasons for nonpayment is that the invoice was not received. Ensuring that the invoice is always timely sent to the appropriate person or department can help to mitigate this common excuse.
- If the customer nets their payment for unrecorded returns or allowances, then a collector will try to collect this amount. At best, it turns into a complicated reconciliation process between the collector and the customer. At worst, it is a customer relations nightmare that could jeopardize the customer relationship.

Best Practices – Sales Processes

Written policies and procedures for customer administration, pricing, order processing, and invoicing.

All new customers fill out a credit application that is reviewed and approved by the credit function prior to establishing a credit line and repayment terms.

Why is this important?

- Only the credit function should grant credit. The sales function should never promise nor approve credit lines or repayment terms, as they have a conflicting objective. The sales function's objective is to move product. The credit function's objective is to ensure that credit is only extended to those customers that have demonstrated ability and propensity to repay at a reasonable level. While not every sales function would grant extremely liberal lines of credit and repayment terms, it is not a good control or best practice to permit that possibility.
- If credit is not properly approved, charge offs may increase. This is a "black eye" to the credit and collections functions, but also has ramifications in financial reporting as bad debt expense increases. An increase in charge offs may also require more borrowing, tying up lines of credit, and increasing interest expense. Additionally, increases in charge offs may cause loan covenant violations (depending on the loan covenants).

Customer pricing approval is required for all customers. Approval should be at the management level and documented. Customer agreements and/or purchase orders should be reviewed to ensure the pricing conforms to approved prices.

Why is this important?

- Pricing discrepancies represent a collections hurdle. When pricing is incorrect, or perceived by the customer to be incorrect, they don't want to pay.
- If the customer does pay, they will pay at the price that they think is correct, resulting in account reconciliation issues and collector intervention with the customer. This can be damaging to customer relationships.

Customer orders are controlled and can be matched to fulfillment (shipment) and an invoice.

Why is this important?

- Customer orders should be reviewed for proper pricing at order entry. The impact of pricing discrepancies is discussed above.
- Collection issues are resolved with information. If there is a discrepancy, the collector must be able to refer to a purchase order and fulfillment (shipping) information to resolve the discrepancy with the customer and obtain payment. Without this information at hand, collections may be slowed by disputes which will impact the measurements used to gauge accounts receivable management and, more importantly, will slow cash flow.

Invoices are sent timely to the correct person/department in a manner that facilitates payment.

Why is this important?

- You want the invoice to be timely to minimize that as an excuse for non-payment. If you have only mailed invoices, consider the following as alternatives:
 - Email the invoice and request that receipt be acknowledged.
 - Fax the invoice either manually or using an automated system.
 - Develop a customer site where they can log-in and view their invoices.
- Things get lost—whether they are sent by mail, email, or fax. Getting the invoice to the right person or department ensures that it doesn't get lost and, by extension, doesn't get paid. This can be part of the customer administration process that asks to whom the bill should be sent.

- It's nice to obtain payment by check, but have you considered putting other accepted payment methods on the invoice?
 - Instructions to log on to the company website and:
 - Pay by credit card.
 - Pay by EFT (electronic funds transfer) into your company's bank account. The easiest form is an ACH.
 - Pay via PayPal.
 - (To use a company website and award customer log on ID's will require some programming effort. However, you can still easily add a section for credit card information on the invoice that can be sent back and processed.)

All credits for returns, allowances, and discounts are approved and, if approved, properly recorded.

Why is this important?

- You want to make sure that any credits to the account are authorized. Unauthorized credits could lead to fraud in the AR function where AR employees credit the account and, when the customer remits in full, the money is misappropriated.
- It's a needed control
- The customer will generally pay for the amount of the invoice, less returns, allowances, and discounts that the customer thinks is correct. If there are returns, allowances, and discounts that the AR function is unaware of, this could lead to account reconciliation issues and collector intervention with the customer. This can be damaging to customer relationships.

Case Study

A new Director of Accounts Receivable was hired at ABC Company. During his first few days on the job, he spent most of his time evaluating processes and benchmarking performance against other companies where he had worked. After this preliminary evaluation, he noticed the following:

- Days Sales Outstanding (DSO) was almost triple that of his understanding of normal customer terms.
- Using employees per account as a measure, staffing was very high in the collections function.
- Accounts Receivable Agings indicated an unusually high volume of accounts receivable that was past due.
- Charge offs as a percentage of sales over the past few years was also abnormally high.

Thinking that this must be a credit issue, he approaches the Credit Manager, a long-term employee, to gain a better understanding of the credit granting process at ABC Company. After a lengthy discussion, he can find no material weakness in the credit granting process. He then shares his observations with the Credit Manager to see if any light can be shed on the root cause of the issue.

The Credit Manager has some interesting observations. “Invoicing has always been slow. To compound that issue, pricing is seldom correct on the invoices. The emphasis is on making the sale. So, salespeople go out and cut deals, but never take the time to have the deal approved or recorded in the billing system.” He continues, “The salespeople basically manage their own accounts. They approve returns. Once again, the approved returns are seldom communicated. This creates a problem for us, since a credit memo is seldom issued. It also creates problems for the warehouse as they’re receiving product back and don’t know what to do with it. The end result is that the customer either pays what they think is owed 30 days from when he receives the invoice or don’t pay at all until the issues are resolved.”

The new Accounts Receivable Director sees how these problems impact the DSO and aging. He asks, “Are all the collectors needed just to reconcile accounts?”

“Yes. We don’t have many issues of customers who are unwilling or unable to pay. But, because of all the issues, account reconciliation takes up most of our time.”

“What happens when the account is reconciled?”

“The difference is charged off to bad debt expense. We have to reach a conclusion after discussing the item with the salesperson. Since the salespeople don’t want to fill out the forms for billing to issue credits, we wind up charging it off.”

The Accounts Receivable Director now has a clear idea of what has been happening. He asks to meet with the CEO and the Treasurer to describe the problem and to propose his solution, which consists of the following:

- Pricing must be approved and entered into the billing system.
- Returns must be approved and entered into the billing system.
- Sales people must be held accountable for both price changes and returns.
- Invoicing should occur no more than one day after shipment.

The CEO interjects that all this bureaucracy will screw up the relationship that the customer has with the salesperson. He wants the customer to have quick answers.

The Director of Accounts Receivable counters that there’s a cost to the current system. The additional costs are:

- Slow pay means more cash tied up in AR. Currently the company has \$250 million in sales with a DSO of 90, resulting in accounts receivable of \$62 million. If the standard terms of 30 days could be enforced, the accounts receivable balance would be \$21 million. This would free up \$41 million of cash.

- If the company didn't need to borrow \$41 million to cover accounts receivable, it would save over \$2 million in interest costs at a borrowing rate of 5%.
- There are at least 20 extra people in collections at an average annual salary of \$35,000 doing nothing but reconciling accounts for differences related to pricing and returns. This represents \$700,000 of wasted labor costs.
- There is also a misstatement of revenue since all the pricing and return discrepancies are running through bad debt expense as opposed to revenue.

The Treasurer agrees with all the numbers.

The CEO then wants to confirm that the company could save \$2.7 million by implementing these suggestions. The Accounts Receivable Director and Treasurer both agree. The suggestions were implemented within the following six months.

Credit

The credit process is best summarized with the phrase, "know your customers." A properly designed credit application will go a long way toward accomplishing that objective. By ensuring that all customer information is captured on the application, the process of understanding the customer is that much easier to accomplish.

A properly designed credit application should also include all the terms of sale and terms of credit as well as other terms and conditions. It is essential to involve your attorney in this process to maximize your potential recovery on customer defaults. You don't want any legal defenses to avoid payment. Past due accounts should be charged interest and this should also be covered in the terms and conditions.

In addition to the information on the application, every bit of relevant data available should be used. Sometimes, there's a tendency to try to save a few bucks on credit reports. While common sense should always be used, don't be too cheap. If your credit decisions are to grant tens or hundreds of thousands of dollars of credit, you don't want your response if a deal goes bad to be, "Well, I saved \$30 by not pulling a credit report."

After the initial credit granting process, there needs to be a method of monitoring customer credit lines. A relationship with the sales force is essential to this process, especially if your customers are geographically scattered. Sales can provide tremendous insight into customer risks and geographic economic risks that would be otherwise difficult to ascertain. If your credit reporting source has a monitoring service that notifies you when a score has changed, this is an invaluable monitoring tool.

Credit granting can be an art as well as a science. You need to find a way to make the sale, and they can't all be cash on delivery. There is some flexibility that's required. Some measures that may be used are UCC filings, credit insurance, factoring, and personal guarantees. While none of these eliminate the risk, they may take the risk of sale to an acceptable level. If these strategies are used, many of them have a cost that must be factored in with customer pricing.

Overall, the credit function should perform the following:

- Customer credit evaluation
- Administer the approval of customer credit lines
- Monitor and re-evaluate customer credit lines
- Provide other means to make the sale and minimize risk

Best Practices – Customer Credit Evaluation

Written policies and procedures for the credit administration and approval process.

Have a complete, thorough credit application that includes a W-9, terms and conditions of the sale and credit, an agreement to pay and one that provides for interest and costs of collection in the event of non-payment. An attorney should be involved in the drafting of the credit application to insure that all terms, conditions, agreements and penalties are enforceable.

Why is this important?

- You need to confirm and understand actual company name, for of organization (Corp., LLC, Partnership, sole proprietorship), any doing business as (dba) names, address, billing address, tax ID number, years in business, trade references (including contact names) and bank references (including contact names) and desired credit line.
 - Confirmation of the actual entity name is important to understand whether that entity is properly established with the appropriate state.
 - Very important if legal action is necessary (It's difficult to sue a non-existent entity).
 - Time in business is important to understand. Start-ups are riskier than long-term established companies.
 - W-9 and tax ID number may be needed for 1099 reporting compliance.
 - Both trade references and bank references should always be checked. Contact names make this much easier since you will presumably be given the person most familiar with the accounts.
 - Make sure that the telephone numbers provided make sense for the company or bank. In other words, if the trade reference company is in Chicago (generally, area code 312) and the contact name for the trade reference has an 812 area code (southern Indiana), this should cause some skepticism on your part. Same approach for bank references.
 - Financial information should also be included. This should be two years of sales revenue, Net income, Total Assets and Net Worth. This should provide a good “snapshot” of the customer’s financial size and ability to repay to credit line.

- In the event of non-payment, you want to make your recovery efforts as easy as possible. In addition to interest, you also want the defaulting customer to pay for all costs of collection, including reasonable attorney fees allowed by law.

Understand the desired or needed customer credit line

Why is this important?

- The desired credit line should be on the credit application.
- As a practical matter, you don't want to award a \$10,000 credit line to a customer whose needs are a \$250,000 credit line.
 - This is both impractical and potentially insulting to the customer.
- You must understand the potential credit risk and allow that to dictate the credit evaluation process
 - A "tiered" approval process is most effective (discussed below).

Develop a consistent credit evaluation process that uses a matrix of credit report scores, other scores, and financial analysis.

Why is this important?

- Eliminates as much subjectivity as possible.
- Consistency will garner the support of sales personnel.
 - Any rule applied on a consistent basis makes explanation and understanding much easier.
 - For a decline, showing the scores and demonstrating where those scores fall in the matrix is much more defensible than just saying no.

Use a tiered credit approval process. You may want to set a typical credit line or range of credit lines that is comfortable to your organization and requires a lower level of investigation. The credit lines above what is typical require more investigation to be performed.

Why is this important?

- Higher credit line customers (risk of loss) warrant more investigation and analysis.
- Lower credit line customers (risk of loss) should require less analysis.
 - You don't want to perform the same amount of work for a \$2M credit as you would for a \$10,000 credit.
- A thorough analysis, appropriate for the risk, is the key.

- All customers should have all information on the credit application verified and confirmed and have a credit report pulled before credit is awarded. Given the easy availability of information on the internet, this is a fairly easy task.
 - At a minimum, this will confirm that the company has a history of on-time payments and is a real entity.
- In addition to approval, an assessment of the reasonableness of the credit line also needs to be made. The ability to repay is always an important consideration. Even if your organization considers it to be a smaller amount, you don't want to grant a \$10,000 credit line to a start-up company that may not have the financial strength to repay it.

Tier 1 Customer Credit Analysis

This will apply to the typical level of customer credit awarded. It requires the lowest level of investigation.

Procedures

- Verify and confirm all the information on the credit application.
 - Confirm existence of entity.
 - Confirm all trade and bank references to ensure that they're acceptable.
 - Telephone numbers make sense.
- Pull credit report
 - In addition to score and payment history, confirm entity and other information.
 - Also confirm if the entity is in bankruptcy, has liens, or UCC-1 filings.

What Business Credit Reports are Available?

Dun & Bradstreet (D&B) – D&B has several business credit reports and tools available. Their common reports use a composite credit score that is a combination of a credit appraisal and financial strength, generally measured by the business' net worth. The credit appraisal is measured as follows:

1 – High

2 – Good

3 – Fair

4 – Limited

The financial strength component ranges from 5A (\$50,000,000 and over) to HH (up to \$4,999).

So, using this measurement, you would have an idea of the credit appraisal of the company, as well as the financial strength to be applied to a credit line.

D&B also uses a Paydex score that is a bit more definitive in terms of appraising whether a company pays its bills. This score measures the payment experience of a company and assigns a score based on the record of on-time payments. It assumes that a proven record of on-time payments corresponds to a lower credit risk. Therefore, the higher scores are better. The Paydex score ranges from Unknown to 100 and is interpreted as follows:

81-100 – Pays ahead of terms

80 – Pays on terms

70 – Pays 15 days slow

60 – Pays 22 days slow

50 – Pays 30 days slow

40 – Pays 60 days slow

30 – Pays 90 days slow

20 – Pays 120 days slow

Experian SmartBusiness Reports – Experian uses an Intelliscore Plus credit score. The score ranges from 1 – 100 with the highest scores indicating the lowest risk. A score of 76-100 is categorized as a low risk account. It also provides separate information on the following for the credit appraisal process:

- Business background information
- Comprehensive financial information
- Credit risk factors
- Banking, trade, and collection history
- Past liens, judgments, business registrations, and bankruptcies
- Uniform Commercial Code (UCC) filings

Equifax Small Business Credit Report – The Equifax Credit Risk Score assigns a score from 100-1000 with the highest score indicating the lowest risk of delinquency. It also includes a business failure score that measures the likelihood of business failure over the next 12 months. This report includes:

- Bureau Summary - summary of financial and non-financial accounts
- Public Records - any Secretary of State business registration, judgments, liens, or charge-offs reported
- Two Scores - Equifax Credit Risk Score™ and Equifax Business Failure Score™
- Payment Trend and Payment Index - a 12-month payment trend and comparison to industry norm

National Association of Credit Management (NACM) Trade Credit Report – Provides payment history information from businesses that are members of NACM. The payment history is summarized. Based on payment history and other factors, a credit score is generated on a scale of 250 – 850 that is indicative of the probability of late payments over the next six months. Based on the score, a risk class is assigned that ranges from 1 (low risk) to 5 (high risk).

Business credit reports provide the ability to confirm application data, as well as payment history reported by a variety of sources. Most sources will, at a minimum, report payment history. A reliable score based on this payment history can be used in a credit matrix.

The availability of public records such as bankruptcy, liens and UCC-1 filings cannot be understated. If any of these exist, you want to be aware of it and adjust your credit decision accordingly. Liens and bankruptcy are extremely important to understand from a credit risk perspective. UCC-1's become important to the equation in that if all of your company's competitors are using this instrument as security against loss, you don't want to be the only one selling on a completely unsecured basis.

There are many other credit reports available. This is just a sample of the information and scores that are available. Your selection will depend on your customer type (large or small), your desired information and cost.

Sample Tier 1 Credit Matrix

The Tier 1 credit matrix range is a determination that needs to be made based on your company's needs and the risks that it's willing to take. As an example, we'll use an organization that has decided that its typical credit line to be offered is \$10,000 or less. This provides a majority of its customers adequate credit and the risk of loss is acceptable.

The \$10,000 in this example is not suggesting that all customers should have a credit line of \$10,000. If your organization provides smaller individual credit lines, within the context of this example, Tier 1 may range from \$1 - \$10,000 while Tier 2 is anything above \$10,000. Once again, this is a decision that must make sense given your company needs as well as available personnel to administer the process.

Once you have determined the dollar amounts for Tier 1, the approval matrix should be comprised of a combination of credit report scores and results of trade inquiries. A determination also needs to be made if the level of credit is warranted.

Assume that the D&B Paydex score is used. For Tier 1 customers, you may only wish to approve those customers that have a Paydex score of 70 or higher (pays 15 days slow or better) and have no questionable items when investigating trade and bank references nor have any adverse public records. The adverse public records are very important. You need to know if the entity is in bankruptcy and take the appropriate steps to protect your company's interest.

You also want to be certain that your line of credit makes sense given the financial size of the company. You may wish to restrict the line or not offer an unsecured line (secured credit ideas are later) to those companies that have not been in business for at least 1-2 years.

So, the approval matrix for Tier 1 can be very simple. Assuming that approval is to be granted for a Paydex score of greater than 70, a business that has been operating for more than two years and has no adverse application items (trade references, bank references, liens, or bankruptcy), the approval matrix may appear as follows:

Paydex Score	Years in Business	Adverse Application Items	
>90	>5	No	
>80	4	No	Approve
>70	3	No	
>60	2	Yes	
>50	1	Yes	Decline
>40	0	Yes	

What about the credit line? This may be evaluated in many ways. It can be evaluated as a percentage of the customers equity or it can be evaluated as a percentage of total assets. It can also be evaluated based on the credit line size offered by other companies. Percentage of equity and total assets can be useful in establishing a risk cutoff. Also, if your line is within the average that other companies are offering, you at least know that you are not risking more than the average.

For Tier 1 customers, the credit line should be reasonable. This is a subjective determination. Basically, it should not be well above the average of other companies nor should it be a high percentage of net worth. If this is the case, you may wish to look at other means to offer credit discussed later.

D&B has a credit limit recommendation tool that is available if you wish to have a more objective means of establishing the limit benchmark. This, and other D&B tools, is available at www.dnb.com.

Illustrative Case of Tier 1 Customer

XYZ, Inc. has applied for credit. Their credit application indicates that they are organized as a corporation, have been in business for three years, and have had sales for the past two years of approximately \$500,000. Its total assets for the past year are \$1,000,000 and its net worth is \$100,000.

XYZ desires a credit line of \$10,000, which is in the company's Tier 1 range.

A credit report is ordered and, upon investigation of the credit application and credit report, the credit analyst discovers the following:

- The company pays its bills 30-60 days slow.
- There is a lien for unpaid taxes.

If your consistent methodology indicates that payments should be no more than 15 days slow and there should be no liens, this would be a no to an open line of credit. The slow pay and existence of a lien for unpaid taxes indicates cash flow issues. There may be a secured method to use that is discussed later.

Tier 2 Customer Credit Analysis

Tier 2 would be that level of credit granted above Tier 1. These represent your more significant lines of credit and, accordingly, your higher risk of loss. These customers require more analysis than Tier 1.

Procedures

- Verify and confirm all the information on the credit application.
 - Confirm existence of entity.
 - Confirm all trade and bank references to ensure that they're acceptable.
 - Telephone numbers make sense.
- Pull credit report.
 - In addition to score and payment history, confirm entity and other information.
 - Also confirm if the entity is in bankruptcy, has liens, or UCC-1 filings.
- Obtain customer financial statements.
 - Financial ratio analysis
 - Z score

The major difference in Tier 2 is that the customer must submit financial statements and the credit analyst must subject these to financial ratio analysis and Z score analysis. Should audited financial statements be required? These are always better. However, it depends on customers. If you're in an industry where very few of your customers have audited financial statements, then it doesn't make sense.

If you are willing to accept internally prepared financial statements, they should be accompanied by a statement signed by an officer/owner (depending on entity type) that they are true and complete and accurately represent the financial condition of the customer company. This statement should be on the financial statements. The credit analyst should be aware of using internally prepared financial statements and subject them to a much greater degree of skepticism which includes reviewing them, ensuring computational accuracy and assessing whether they represent the customer's financial condition.

Working with Internally Prepared Financial Statements

Working with customer prepared financial statements can be challenging. First and foremost, you want to make sure they add up. An easy way to do this, as well as other tests, is to input the

customer financial statement data into a spreadsheet that you have prepared. Your spreadsheet financial statement categories may be slightly different from the customer prepared version, but in most cases you can combine or move items to make it fit.

By re-entering the data, you can easily confirm the computational accuracy. If you use a standard spreadsheet, you can also have formulas for computing certain financial ratios and to roll forward certain accounts to make sure that everything appears to be reasonable.

The suggested ratios and processes follow:

Income Statement

- Compute gross margin percentage for the past two years and note any inconsistencies.
- Compute net margin percentage for the past two years and note any inconsistencies or anything unusual.
- Compute interest expense as a percentage of average debt and note anything unusual.

Balance Sheet

- Compute Day Sales Outstanding for accounts receivable for the past two years and note any inconsistencies.
- Compute Inventory Turnover for the past two years and note any inconsistencies.
- Compute Accounts Payable Turnover for the past two years and note any inconsistencies.
- Roll forward Property, Plant and Equipment using depreciation figures from the Income Statement and deriving net additions. Ensure that it is reasonable.
- Roll forward long-term debt using minimum payments, ensuring that it appears reasonable
- Roll forward equity using net income, ensuring that it appears reasonable.

While these procedures will not provide the same assurance as an audit, they will at least provide some limited assurance that the financial statements are reasonable. It's a subjective call. However, while we attempt to make as many things as possible in the credit process more objective, in the end, there are still many subjective opinions.

By using your own spreadsheet, you can also prepare your own Statement of Cash Flows. Many customer prepared financial statements will omit this statement. This is important as the suggested financial ratios to be used in the credit decision process are all cash flow ratios and require a Statement of Cash Flows.

Financial Ratio Analysis

Financial ratios can provide a clear, concise snapshot of a customer's financial performance. Deteriorating ratios are a cause for concern on the part of the analyst. In certain ratios, an amount less than one may be a good reason to say no to a traditional open line of credit.

Most ratios focus on the Balance Sheet and Income Statement. However, for measuring a company's liquidity, there are many advantages of using the Statement of Cash Flows in this assessment.

Cash Flow Ratios measure the company's ability to generate cash from operations to pay for unavoidable obligations such as interest and debt. If the company is unable to generate adequate cash to pay these obligations, then there is a liquidity crisis. It is important for the credit professional to foresee these challenges and properly assess whether the company can continue as a going concern.

We will use the following cash flow ratios:

Operating Cash Flow Ratio

The Operating Cash Flow ratio measures the ability of the company to pay current liabilities with cash provided by operating activities. The Operating Cash Flow ratio is expressed as Cash Flow from Operations / Current Liabilities.

Cash Interest Coverage Ratio

The Cash Interest Coverage ratio measures the same basic coverage as the Times Interest Earned ratio, just using a different numerator. While the Times Interest Earned ratio uses Earnings before Interest and Taxes, this ratio uses Cash Flow from Operations + Interest Paid + Taxes Paid as its numerator. Like the Times Interest Earned ratio, the intent is to measure the company's ability to make interest payments on debt. A low multiple indicates more risk of being unable to make interest payments than a high multiple. A multiple of less than 1.0 indicates a high risk of default.

Current Debt Coverage Ratio

The Current Debt Coverage ratio is expressed as (Cash Flow from Operations – Dividends) / Current Portion of Long-term Debt. It is intended to measure the company's ability to meet its debt repayment obligations. The higher the ratio, the higher the comfort that the company is able to meet its debt commitments. A lower ratio indicates more risk.

Using these ratios can provide more insight as to the future solvency of a company in the credit decision process.

Example of Financial Ratio Analysis

Assume that customer financial statements were submitted that contained the following (\$000's):

	2009	2010	2011
Cash	185	123	23
Accounts Receivable	120	160	300
Inventory	150	150	300
Other Assets	10	10	10
Property and Equipment	250	275	300
Total Assets	715	718	933
Accounts Payable	150	150	300
Current Portion of Long-term Debt			50
Accrued Expenses	40	40	40
Long-term Debt	500	500	450
Total Liabilities	690	690	840
Retained Earnings	-	3	68
Shareholders Equity	25	25	25
Total Equity	25	28	93
Total Liabilities and Equity	715	718	933

	2010	2011
Sales Revenue	1,000	1,500
Cost of Sales	610	900
Gross Margin	390	600
Expenses:		
General & Admin	295	404
Interest	50	50
Depreciation	40	37
	385	491
Income Before Tax	5	109
Income Tax Expense	2	44
Net income	3	65

	2010	2011
Operating Activities		
Net Income	3	65
Adjustments:		
Depreciation	40	37
(Increase) decrease in certain assets		
Accounts Receivable	(40)	(140)
Inventory	-	(150)
Increase (decrease) in certain liabilities		
Accounts Payable	-	150
Net Cash provided by Operating Activities	3	(38)
Investing Activities		
Purchases of Property and Equipment	(65)	(62)
Financing Activities	-	-
Net Decrease in Cash	(62)	(100)

When examining the Statement of Cash Flows, some items pop out, such as:

- Cash flow from operations in 2011 is negative.
- The largest source of cash in 2011 is Accounts Payable.
- Cash has consistently declined over the past two years.

Operating Cash Flow Ratio

The Operating Cash Flow ratio measures the ability of the company to pay current liabilities with cash provided by operating activities. The Operating Cash Flow ratio is expressed as Cash Flow from Operations / Current Liabilities.

In this example company, the Operating Cash Flow ratio for 2011 is $-38 / 390$ or -0.10 . For 2010, the Operating Cash Flow ratio is $3 / 190$ or 0.02 . This indicates that the company, as it is currently operating, is not generating adequate cash to cover current liabilities. This number will vary greatly among different industries, so it is important to compare this number to industry averages. However, in this case it is clear that there is a concern, even without industry averages.

Cash Interest Coverage Ratio

The Cash Interest Coverage ratio measures the company's ability to make interest payments on debt. A low multiple indicates more risk of being unable to make interest payments than a high multiple. A multiple of less than 1.0 indicates a high risk of default.

Using the formula $(\text{Cash Flow from Operations} + \text{Interest paid} + \text{Taxes paid}) / \text{Interest paid}$, our example company has a Cash Flow Coverage ratio of $(-38 + 50 + 44) / 50$ or $56/50 = 1.12$. This is a low multiple, indicating more risk.

Current Debt Coverage Ratio

The Current Debt Coverage ratio is expressed as $(\text{Cash Flow from Operations} - \text{Dividends}) / \text{Current Portion of Long-Term Debt}$. It is intended to measure the company's ability to meet its debt repayment obligations. The higher the ratio, the higher the comfort that the company is able to meet its debt commitments. A lower ratio indicates more risk.

In our example company, the Current Debt Coverage ratio is $-38 / 50 = -0.76$. The ratio is negative which indicates great concern that cash will be available to meet the debt repayment obligation. In this example, the credit analyst should have great concern about the ability of the company to repay its current debt as well as its ability to continue as a going concern.

If any, or all, of these ratios are unacceptable, a determination will also need to be made as to whether the customer can obtain more debt. Making this assessment can be risky since it is extremely difficult to predict what a lender may or may not do. However, if lack of cash is driven by tremendous growth or another positive factor, this will need to be a consideration.

Altman Z Score

The Altman Z score for bankruptcy prediction was first published by Edward Altman, an Assistant Professor of Finance at New York University, in 1968. He was trying to find financial ratios that could distinguish between a healthy company and one that might be distressed and enter bankruptcy.

To accomplish his goal, he evaluated common financial ratios of approximately 66 companies, all with assets or more than \$1M. Approximately half of the firms had a bankruptcy in their past while the other half did not. He then used a statistical technique called Multiple Discriminant Analysis to determine which ratios were most predictive of bankruptcy and the proportion of those ratios to use.

Upon testing, Altman's model was found to be 80-90% accurate in predicting bankruptcy one year prior to the event. However, it is also inaccurate 15% - 20% of the time in predicting bankruptcy—predicting that a firm will go bankrupt when it doesn't.

While the accuracy rate is not 100%, it is still very good. It is so good that the Altman model has gained wide acceptance among accountants, auditors, and even the courts.

Altman's original model was designed for publicly traded manufacturing firms with assets of greater than \$1 million. However, he has subsequently created two additional models to be used for private manufacturing companies and private nonmanufacturing companies.

The Altman models use the following ratios:

- A. Working Capital/Total Assets
- B. Retained Earnings/Total Assets
- C. Earnings Before Interest and Taxes/Total Assets
- D. Equity/Total Liabilities
- E. Sales/Total Assets

Note that for public manufacturing companies, Equity is defined as the market value of equity. For nonpublic manufacturing companies, Equity is simply book equity.

The proportions of each ratio change with each model. For a private manufacturing company, the Altman Z Score model and evaluation follows:

$$Z \text{ Score} = 0.717*A + 0.847*B + 3.107*C + 0.42*D + 0.998*E$$

Once the math has been done, the way to evaluate the result is:

- A score of less than 1.23 has a high likelihood of bankruptcy
- A score of 1.23 – 2.9 is in the “gray” area
- A score of greater than 2.9 is a safe company

In the credit decision process for a private manufacturer, if the Z Score is greater than 2.9 (assuming all other factors are positive), you can feel fairly secure in your lending decision. If the score is less than 1.23, there is a high likelihood that the company will go into bankruptcy in the next year. It's time to look at credit insurance or secured lending options. The range of 1.23-2.9 is the tricky range. It's neither safe nor is it a high likelihood of bankruptcy. These require a hard look at other information, as well as professional decision making.

For a public manufacturing company, the Altman Z Score model is (note Equity is market value of equity):

$$Z \text{ Score} = 1.2*A + 1.4*B + 3.3*C + 0.6*D + .999*E$$

Evaluation:

- A score of less than 1.81 has a high likelihood of bankruptcy
- A score of 1.81 – 2.99 is in the “gray” area
- A score of greater than 2.99 is a safe company

For a private nonmanufacturer, the Altman Z Score model is:

$$Z \text{ Score} = 6.56*A + 3.26*B + 6.72*C + 1.05*D$$

Evaluation:

- A score of less than 1.1 has a high likelihood of bankruptcy
- A score of 1.1 – 2.6 is in the “gray” area
- A score of greater than 2.6 is a safe company

Note that the private non-manufacturer model does not use Sales/Total Assets.

The original model was developed for manufacturers. The nonmanufacturer model was intended to fit service companies. A continuing criticism is that the model does not work for financial institutions.

Computation of Z Score using example data

Assume that the sample financial statements, above, are for a private manufacturing company. The components of the Z Score for 2011 follow:

- A. Working Capital/Total Assets = (Current Assets – Current Liabilities)/Total Assets = $(623-390)/933 = 0.2497$
- B. Retained Earnings/Total Assets = $68/933 = 0.0729$
- C. Earnings Before Interest and Taxes/Total Assets = $159/933 = 0.1704$
- D. Equity/Total Liabilities = $93/840 = 0.1107$
- E. Sales/Total Assets = $1500/933 = 1.6077$

$$Z \text{ Score} = 0.717*0.2497 + 0.847*0.0729 + 3.107*0.1704 + 0.42*0.1107 + 0.998*1.6077 = 2.4212$$

- A score of less than 1.23 has a high likelihood of bankruptcy
- A score of 1.23 – 2.9 is in the “gray” area
- A score of greater than 2.9 is a safe company

The Z Score is within the gray area. It’s not safe, nor does it have a high likelihood of bankruptcy.

Sample Tier 2 Credit Matrix

Tier 2 customers are those above your typical credit. The Tier 2 matrix should have more inputs than Tier 1.

For these Tier 2 customers, we want an evaluation of past payment performance, trade references, time in business, and also want to know whether there are any adverse public records, which is the same data that was evaluated for a Tier 1 customer. In addition, we also want to specifically evaluate the financial condition of the company to ensure that it has adequate liquidity to survive for the next year. To accomplish this, we use cash flow ratios, as well as the Altman Z Score.

While at a large consumer electronics manufacturer in the 1990’s, I found that payment performance was not as indicative of problems for large customers. Unfortunately, they paid on-time right up until the bankruptcy filing. The best leading indicator of a problem was the prediction of a liquidity issue.

Cash flow ratios are very good at predicting liquidity issues. A large component of the Altman Z Score is based on the prediction of a liquidity problem.

Therefore, a matrix of payment performance and a prediction of possible cash flow liquidity issues should be somewhat persuasive. (However, it's ultimately up to you to decide what factors are most important to your business). A possible matrix may look like this:

Paydex	Z Score				
Score	>2.9	1.23-2.9	<1.23		
>80	Approve				
70	Approve				
60	Consider based on financial analysis				
50					
40	No				
30					
20					
<u>Financial Analysis</u>				>1.1	<1.1
Operating Cash Flow Ratio					
Cash Interest Coverage Ratio					
Current Debt Coverage Ratio					
				>2 years	<2 Years
<u>Time in Business</u>					
				No	Yes
<u>Adverse Public Records</u>					
Credit Recommendation					
Approval:					
Analyst					
Credit Manager					
Controller					

This incorporates all of the data that has been discussed so far into one easily understood document. Assume that the customer's Paydex score was 70, has been in business for three years and all trade references were good. Also assume that there are no bankruptcies or liens. Using the financial information from above, the approval document may look like this:

Paydex	Z Score				
Score	>2.9	1.23-2.9	<1.23		
>80					
70					
60		2.42			
50					
40					
30					
20					
Financial Analysis				>1.1	<1.1
Operating Cash Flow Ratio					(0.10)
Cash Interest Coverage Ratio				1.12	
Current Debt Coverage Ratio					(0.76)
				>2 years	<2 Years
Time in Business				3 years	
				No	Yes
Adverse Public Records				X	
Credit Recommendation			Decline		
Approval:					
Analyst					
Credit Manager					
Controller					

Why decline? The company is paying its bills, has been in business just over the minimum two years, and has no adverse public records. It appears to be growing in terms of sales. However, it is not generating adequate cash to cover future needs and has depleted its cash position. In the absence of securing new debt, the company will simply run out of money.

If this is the decision, other means of securing the sale will be discussed later.

Credit Approval

The higher lines of credit being evaluated should be approved by higher levels of company management. The credit manager should be an acceptable authority level for typical lines of credit. Above that level, it is suggested that the next level be that of Controller.

For very significant customers, the Chief Financial Officer, President, or both should be involved in the credit approval. Why? There may be information unknown to the credit manager or others regarding the benefits of the customer that may change the risk/reward proposition. It is assumed that higher levels of organizational management also have greater levels of knowledge and information. It is important to match risk exposure with the appropriate level of authority.

Regarding the suggested Tier 2 approvals, the best practices suggest a formal “write-up” of the customer evaluation and recommendation. As a practical matter, those customers to be approved by the Chief Financial Officer or President will likely require some form of expanded documentation with an executive summary.

Credit Monitoring

After the credit has been granted, it is essential to monitor the customer. Things change. A safe company last year may become a very risky company this year due to many factors, some within and some outside the company’s control.

Best practices dictate that customers be monitored routinely and, if available, automatic notification alerts be utilized for changes in customer payment habits or credit score.

Best Practices – Customer Monitoring

Monitor customer payment habits continually

Why is this important?

- Lack of customer payment may be the first evidence of financial difficulty.
- Inquiries of collections personnel working the account and the sales personnel should be made to evaluate the situation.
- If there’s no easy explanation such as lost account credits, lost returned merchandise or a valid dispute, customer credit should be re-evaluated immediately.

Use your credit reporting agency to monitor accounts using both a payment score and, if provided, a predictive score such as a Z score.

Why is this important?

- If your credit decision was based either partially or principally on a credit score, then automatically monitoring that score would be an easy way to track your customers.
- If the credit reporting agency that you’re using offers the service, have them notify you if a credit score is adjusted downward by more than 5%-10% (May be higher or lower depending on the agency and the scoring system).
- Provides you with assurance of immediate knowledge of any changes to the customer’s financial situation even if you’re being paid on-time.
- There will likely be an additional cost for this service, if it’s offered. However, it’s well worth the price to have the immediate notification.

Review higher risk accounts (Tier 2) at least every year.

Why is this important?

- Things may change that are not evident in the customer payment history or the credit score.

- Liquidity is the key to this evaluation.
- You want to be in a position to predict if the customer may have any deterioration in their liquidity or financial position.
 - Use Z Score.
 - Use cash flow ratios.

Develop a relationship and feedback from sales personnel.

Why is this important?

- The sales personnel are the “feet on the ground.” In most instances, they visit the customer and can provide their insight and observations.
- If a shift has been cancelled or equipment is being sold, this may be a bad sign
- Sales personnel generally know what is going on in the industry, based on their wide array of contacts.
 - May be told of customer problems by a competitor of the customer.
- On a more positive note, you also want to work closely with sales if there’s an issue with a good customer not being given an adequate credit line.
 - Your mission is to grow sales...safely.

Case Study – Tier 1 Customer

XYZ Company has been a customer for five years. It has a typical credit line and has never paid late. Two invoices are now past due. You check with the collections manager and are told that there are no account reconciliation issues. The collector working the account has been told that payment will be made in the next week or two.

What should you do?

First of all, you need more information. While the instinctive reaction is to “cut them off,” they may just be having some administrative problem rather than a problem paying. Good relationships with good customers are important.

Check the credit report. If it looks good, there may not be an issue. If it doesn’t look good and there is evidence of many recent slow pays, then you likely must curtail their credit and minimize your exposure. However, before you do so, you want to talk to sales and inform them of the situation.

If there’s nothing bad on the credit report, talk to sales personnel. They may have some insight. They may also be able to discuss the issue with someone at a higher level in the organization who can provide a better answer. Also, check the trade references on the credit application to see if they’re experiencing any problems.

If these steps do not yield any conclusive evidence, do not authorize new sales and see what happens in the next week or two. By doing this, you have limited your exposure (no new sales) and continued an important line of communication with the customer, as well as sales personnel.

Case Study – Tier 2 Customer

A Tier 2 customer has become delinquent. You check the credit report and there are several recent reported delinquent payments. This is one of your larger customers.

What do you do?

The first thing is to talk to sales personnel. They need to know about the potential problem, especially if it's with a large customer. Reducing or eliminating the credit line of a large customer may have a large impact on revenue.

If you are able to do so, obtain updated financial statements. Perform cash flow analysis and a Z Score test to see if any results differ significantly from your previous analysis. If cash flow ratios and Z scores are deteriorating, then a method of selling other than an open line of credit will likely need to be evaluated (discussed later).

If cash flow ratios and Z scores are not deteriorating, you now have a subjective call that will need to be made while communicating with sales, finance, and executive personnel. In this case, the collective decision may be to reduce the line and restrict terms. By taking the sales terms down from 60 days to 30 days, you have eliminated about half of your risk. To induce the customer to accept these terms, you may offer price reductions or other incentives. Once again, the goal is to make the sale in the safest manner possible.

Methods to Secure the Sale

One of the most important duties of the credit function is to figure out a way to make the sale. It's easy to say no. The hallmark of a true professional is to come up with a way to turn a no into a yes while still keeping the inherent risk of the transaction at an acceptable level.

There are several ways to accomplish this goal. These ideas do not eliminate the risk. However, they can reduce the risk to the point where the risk level is acceptable. Since these ideas are outside of the normal course of business, they all require more work and, in some cases, more expense. In cases where more expense is required, you will want some organizational controls to ensure that pricing to the customer is adequate given any higher risk level, as well as the higher level of associated expense.

So, if a traditional line of credit is not approved, what are some of the best practices to make and secure the sale?

Methods to Secure the Sale Best Practices

Obtain credit insurance where it is available and makes commercial sense to do so.

What is Trade Credit Insurance?

Trade credit insurance is a property and casualty insurance product purchased by businesses with trade receivables. It insures some or all of the receivables portfolio against loss due to insolvency of the customer.

How Trade Credit Insurance Works

Trade credit insurance covers a portfolio of customer receivables. A portfolio can consist of a single customer, selected customers, or can be the entire receivables portfolio.

Typical credit customers are generally covered under a blanket coverage that relies on the insured's credit criteria and credit monitoring. If a customer cannot pay, the policy covers the loss up to the agreed upon policy limit.

The credit criteria used and adherence to credit limits are very important to this coverage. Each customer must have a credit limit and that limit or the methodology to arrive at that limit is agreed to between the insurer and the insured.

Larger customers are evaluated separately. A credit limit and policy limit are set with the insurer. In many cases, larger customers are actively monitored by the insurer. This monitoring may result in changes to the credit limit over time, as the insurers risk rating of the customer increases or declines.

The premium is generally a percentage of covered accounts receivable balances or credit limits.

Benefits of Trade Credit Insurance

Trade credit insurance permits you to extend more credit to large customers where the risk concentration may have been perceived to be too great. If you have one customer that has a higher risk profile and also represents a significant portion of your accounts receivables, you may not want to extend more credit to that customer. However, by using trade credit insurance, you can safely increase sales to that customer. An evaluation of the costs of credit insurance and its impact on margins will be required.

You may also pursue larger customers whose credit needs were thought to be too risky or too large. A credit insurer can help you monitor your customer base and assist in pointing out the weaker customers as well. The benefit of this is that if you have ample warning of a weakening large customer, you have time to plan for replacing that customer so that a sudden loss of revenue is not a surprise. You don't want your business to be dependent on financially weak customers.

Trade credit insurance permits you to expand sales while providing a set cap on the associated risk levels. Like any other insurance product, it is an important tool whose use must be appropriate for the circumstances.

U.S. Trade Credit Insurers

There are many insurance companies that offer trade credit insurance. This is a list of the larger companies. Should you wish to pursue this strategy, this list provides a starting point for evaluation and discussion.

- Euler Hermes – Allianz
- Red Rock Insurance Services Ltd.
- XL Catlin
- Zurich Insurance
- AIG

Factoring

A factoring company purchases a company's receivable for a discounted amount of the face value of each invoice. There are two types of factoring—recourse and nonrecourse. A recourse factor is simply used to accelerate cash flow. Basically, for a discount fee, you can get your money now rather than waiting for 30 or 60 days. A recourse factor does not assume the risk of nonpayment and, in the event of nonpayment, the selling company will be required to repay the factor.

A nonrecourse factor buys the invoice and assumes the risk of nonpayment. The benefits of a nonrecourse factoring arrangement include:

- Cash up front.
- Elimination of payment risk.

The detriments of this arrangement include:

- Cost.
- Possible erosion of customer relationship if factor uses aggressive collection techniques with customer.

Personal Guarantees

A personal guarantee may be provided by the owner or partner of a customer. This document binds the owner or partner to personally pay the obligations of the company in the event the company defaults. While a personal guarantee is enforceable, its usefulness is dependent on the financial capacity of the guarantor. In other words, you don't want to rely on a personal guarantee for a \$1 million line of credit when the guarantor's net worth is \$50,000.

Personal guarantees can be an effective tool and may be relied on to a certain extent. With sufficient information, you may obtain an understanding of the guarantor's net worth. One item of information that is more difficult to obtain though is the number and dollar amount of other debts that are also personally guaranteed.

Due to the above, it is suggested that personal guarantees supplement your credit underwriting, but are not used as a basis for granting credit.

UCC-1s

The Uniform Commercial Code is a body of law governing commercial transactions. It covers areas such as sale of goods, negotiable instruments, and commercial paper. Article nine of the code covers secured transactions and how a security interest is created so that a debtor can recover goods from a defaulting creditor.

An instrument in Article nine of the code is a UCC-1. This is a security instrument that provides the creditor a perfected security interest in the underlying collateral. While the sale and the documents of the sale may create a security interest in the collateral, the filing of a UCC-1 perfects this interest.

For inventory transactions, the filing of a UCC-1 perfects a security interest in both the goods sold and the proceeds of those goods. Filing of the UCC-1 is an important step because if this

filing is not done, the creditors' interests are limited and may become subordinate to other creditors. If a UCC-1 is filed and the debtor becomes insolvent, the creditor may recover any unsold inventory and may also have an interest in the debtors cash and bank accounts for the proceeds of sold inventory.

To file a UCC-1, this filing is generally done at the state level, with the Secretary of State. Filing records are public, so you can see who else has filed UCC-1s with your customer. This may be important since, if other creditors have filed UCC-1s, you should too.

A UCC-1 gives you the right to recover your inventory should the creditor become insolvent. You may also be able to recover the proceeds of sales of unpaid inventory, but, in reality, this is unlikely. Recovery of inventory using a UCC-1 will require the assistance of an attorney who is knowledgeable of the Uniform Commercial Code.

A UCC-1 is a good mechanism to further secure your accounts receivable. Once again, it's not absolute assurance and its use should supplement your existing underwriting standards.

Collections

If good credit policies and procedures are implemented, the collections process should be easier. However, there will always be late payers. Collections is the key to ensuring that cash flows in as expected, maximizing cash inflows, and minimizing borrowing costs.

The collection function can be combined with the credit function or kept separate. Either way, communication between the two is a key element to success. In order to successfully monitor customers, credit needs to be aware of late payments and other issues that arise in the collections process. To be successful in collections, collectors will need to know information from the credit process, such as whether a personal guarantee is in place, a UCC-1 has been filed, as well as the financial condition of the company.

Effective collections involves personal interaction with the customer. While many use letter and email campaigns, the personal approach is usually more effective. Collectors should not hesitate to pick up the telephone and call.

Information at the collectors' disposal is a key element in overcoming payment objections. If you're being told that a shipment was not received, it's much easier to handle this objection if you have a digital image of the signed receiving document in front of you. You may then tell the customer the date it was received, who signed for it, and also offer to email them a copy as proof. Access to all available information is essential to successful collections.

Another key to collection success lies in the payment application process. Proper application of customer payments will result in fewer unnecessary calls due to misapplied payments. A collection call should be made for an item that is truly past due, not an item where the payment was erroneously applied to a payment that is not yet due.

Collectors should also have multiple payment tools at their disposal. The ability to accept forms of payment beyond checks is important. Credit cards and PayPal over the phone and ACH payments are a few examples of alternate payment methods.

The right software can make life a lot easier. Be certain that your software provides the proper tracking tools and information, so that collectors can be as effective as possible.

Another essential part of the collections process is working with the sales function. The sales people can help with access to the right people to resolve disputes and can also be of tremendous assistance in the collections process. The involvement of sales is critical to a successful collections effort.

Collections Best Practices

Written policies and procedures:

Use the telephone.

Why is this important?

- A telephone call is more personal than email or a letter. It garners more attention and is interactive. It provides an opportunity to develop a relationship, which may result in a payment.
- It is easy for a customer to ignore a letter or email. It is much more difficult to ignore a telephone call.
- A telephone call also places more urgency on the matter. There is a past due payment and you want it resolved as quickly as possible.

Keep good records of collection activity.

Why is this important?

- Documenting discussions with customers regarding past due accounts allows collectors to keep track of promises made and those promises which are kept and broken.
- Holds customers to their promises.
- Permits evaluation of customer behavior.
- Documentation of collection activity makes it easier for other collectors to become involved with the account.
- Documentation may be reviewed by credit to reassess customer risk.

Many companies refer to this activity as “Customer Notes.” These notes are an invaluable tool. Not only do they permit a dedicated collector with a memory aid, but also permit the account to be worked by another collector. This is important if you want to use collection queues (discussed below) or if a dedicated collector is ill or leaves your employment.

Many accounts receivable management software vendors have customer notes integrated into their systems. If this is not integrated into the software currently being utilized by your organization, you may want to look at new software or find a “workaround” to document and retrieve customer discussions.

Have easy access to records.

Why is this important?

- Many times, past due amounts are the result of customer returns, credits, or other disputed amounts.
- Having access to shipping records, return records, credits issued, and other applicable records can help resolve customer disputes quickly.
- Best method is for the collector to have access to digital archives of these records. Researching paper files takes more time.
- Time taken resolving disputes is generally a waste of the collector's time. The less time taken with these matters, the more time can be spent on collecting those accounts where realization of the payment is actually at risk.
- By being able to respond to disputes quickly and easily, you are not wasting organizational overhead costs. More importantly, it provides good customer service.

Offer alternate payment methods.

Why is this important?

- Payments should be on-time.
- More payment options will achieve your goal of on-time payment and increase customer satisfaction.
- Accept credit cards, PayPal, ACH, and wires.
- For control purposes, it is better to have a portal on your company's web site for these payment options. The customer can log in and make these payments. This eliminates issues with collectors having access to bank account information and credit card information, which they may (a) retain, (b) write down on a piece of paper that is not properly destroyed, or (c) may use again without the customer's permission.

Control payment application procedures.

Why is this important?

- The most time consuming issue for many collectors is handling reconciling items such as deductions taken for returns, other credits, discounts, etc.
- If most or all of these can be handled when the customer payment is posted to the account, the collector will not have to waste time dealing with "nonissues" that involve the customer taking authorized deductions.
- Having collectors resolve reconciling items takes up time that could be spent on collection issues.
- To the extent that personnel posting payments to the account can identify and properly post these known items to the account, it saves time and eliminates unnecessary overhead.

This is a difficult issue and is addressed in more detail in the Account Reconciliation section, below.

Have software that facilitates collection efforts.

Why is this important?

- Collectors should have information at their fingertips.
- Account reconciliation is an important consideration. Software should facilitate this process.
- Customer data, history, and related documents (invoices, returns, credits, etc.) should be in one place that is accessible.

Facilitate training.

Why is this important?

- A properly trained employee is a productive employee.
- Collectors should represent the company in a positive manner. Training reinforces company policies regarding professionalism.
- Collectors need to bring in payments. However, you don't want any ethical breaches while they're doing it.
- A rogue collector can cost more in lost business than it costs to train and supervise collectors.

Communicate with sales people.

Why is this important?

- Sales people can help with collection by providing access to customer personnel and facilitating the resolution of disputes.
- Most often are extremely helpful with account reconciliation items.
- Can intervene on true collection issues and help as well.
- A professional sales person wants to know how his/her accounts are paying.

Assign accounts for high dollar and/or high adjustment customers.

These accounts will be important to your organization. Most of the time, these accounts will follow the 80/20 rule in that they will be around 20% of your customers but will provide about 80% of the sales revenue. It is important to develop relationships with these accounts and provide good customer service.

Why is this important?

- Assign experienced people who can develop a relationship with customer personnel.
- Collectors should know the account and reconcile deductions quickly.

- While you want to ensure that every dollar owed is collected, customer service is also key to this account relationship.

Use collection queues for low dollar/low adjustment customers.

These accounts will be “mom and pop” customers who, while still important, do not comprise significant sales volume. They will also generally have lower account reconciliation needs.

Why is this important?

- You can leverage overhead by not having dedicated collectors on these accounts.
- Collectors only address and resolve delinquent accounts.
- Accounts without issues will not be “touched.”

Be aggressive with customers after charge-off.

Why is this important?

- Once a customer balance has been charged-off, the customer relationship has been spoiled.
- Send these balances to an attorney for suit or to a collection agency as quickly as possible to maximize the recovery potential.

Collections is a key part of the organization. It sometimes requires a heavy hand in extreme delinquency situations. Most often, it requires someone with good problem solving abilities who can determine whether there is a delinquency or whether the customer deducted authorized amounts from its payment. Problem solving, communication, and customer service are all important elements of this essential task.

Account Reconciliation

Account reconciliation is all about information. Your company has issued an invoice for a specific amount and you expect it to be paid. However, the customer may pay less due to returned merchandise, discounts, credits, etc. Identifying the difference between what was billed and what was paid is the key to this process.

Collectors in commercial environments wind up in the reconciliation process more often than they are involved with a customer who refuses to pay. If proper information is not available to reconcile accounts, account reconciliation can eat up a great deal of time and effort, almost all of which is non-productive collector time. It also has a secondary effect of irritating the customer.

What can be done to minimize the time spent in the account reconciliation process?

- Remittance instructions – the invoice should specify how the customer should remit and require, at a minimum, the invoice number(s) being paid. The customer should be instructed that any deductions include the applicable credit memo numbers or, if a discount is taken, the discount amount should be specified. This is a simple step. Some

customers may disregard instructions. However, if no customer is instructed on your preferred method, it's a guarantee that no one will comply.

- Issue credits quickly – If there's a lag in the issuance of credits, it's very likely that the customer will pay their invoice prior to a credit actually being issued. Since the customer does not have a credit memo to reference, it will be an undocumented deduction to their account which will require investigation on the part of a collector. If credits are issued quickly and the customer has applicable credit memo numbers when paying the invoice, this will result in less unmatched items as payments are posted.
- Work with customers to detail the remittance – This goes hand in hand with remittance instructions. In certain instances, customers will want to write a net check that pays the invoice(s) and also deduct proper amounts for credit issued. However, this net check will not make much sense without any detail of the invoices being paid or the reason for the deductions. This scenario will create a reconciliation nightmare. By working with the customer to provide adequate information, it will save a great deal of time and aggravation.
- Automatically apply discounts – If the accounts receivable management system will automatically calculate and apply discounts to the account, you can take care of one potential reconciling item. If the payment does not qualify for a discount, the system should also highlight this fact.

Payment application is extremely important to this process. The more effective you are at applying funds to the proper invoice/credit memo/discount at the onset of the process, fewer collectors are required to reconcile the account at the back end of the process. You can reduce overhead and let collectors do what they do best: Collect truly delinquent payments.

Case Study

XYZ Manufacturing has had horrible accounts receivable aging. Accordingly, customer charge-offs have been high. No one could get a handle on the issue, so an experienced Director of Collections was hired to address the situation.

The new Director of Collections started by inquiring about cash applied to a suspense account (cash deposits for which the customer could not be determined). He determined that the cash suspense balance was quite large and had never been reviewed. He asked for the cash suspense balance to be aged and found that many balances were also quite old.

Based on this information, he decided to reconcile a sample of customer accounts. While contacting the respective customer's accounts payable staff to reconcile the accounts, he noted the following:

1. There were several invoices that the customer claims were paid. He found the payments in cash suspense (payment applications personnel had never been trained on how to do a customer lookup. If the customer number was not apparent to them, it got posted to cash suspense).
2. Credit memos were not properly applied, resulting in portions of invoices being reflected as delinquent.
3. Customer account statements were not provided to customers.
4. All customers were irritated by collection calls on items that were paid.

After this investigation, the Director of Collections determined that the company didn't have a customer payment problem. It had a payment application and customer account reconciliation problem. Since cash was not properly applied to the customer account, balances were being written off that were actually paid. Additionally, portions of invoices that were offset by credit memos and other approved adjustments were also being charged-off. The lack of process and controls had resulted in incorrect customer balances, overstated charge-offs, and aggravated customers. Most importantly, since every customer balance was suspect, it was difficult to enforce customer payment of amounts actually due.

Immediate steps were taken to remedy the situation. The first step was to develop policies and procedures governing accounts receivable that included payment application and account reconciliation. Next, payment applications personnel and collectors were trained in proper payment application and account reconciliation techniques. Payment applications personnel received additional training on the software being used and how to perform lookups by customer name. A member of management was tasked with reviewing the cash suspense account and unapplied cash balance each day, and ensuring that all cash suspense and unapplied cash was investigated and properly applied within a two day window.

In teaching collectors to reconcile accounts, they were told to work with the customers so that remittances had adequate information regarding which invoices were being paid and credits being utilized. All assigned accounts had to be reconciled.

He also worked with billing to put remittance instructions on the invoice to help customer accounts payable staff.

Lastly, customer statements were prepared and mailed monthly so that the customer could provide an added control over account balances. He met with some resistance on this as it had been determined that a monthly mailing of customer account statements was too costly. However, the objections were easily overcome, especially when it was pointed out that a number of customers preferred email to regular mail for invoicing.

The impact of these changes was swift. Once payments and credits were properly applied, the aging looked far more reasonable. Charge-offs declined precipitously. The process was controlled and, over time, the function gained credibility with the customer.

Accounts Receivable Administration

Portfolio Review

The portfolio review process is essential to understanding the composition of your accounts receivable portfolio. It basically monitors your overall level of repayment risk for your company.

The most basic measurement is an aging analysis. This indicates the number and corresponding accounts receivable balance of those customers who are current, 1-30 days past due, 31-60 days past due, 61-90 days past due, and those that are greater than 91 days past due. Monitoring this analysis at least monthly can indicate whether there are any negative trends in the portfolio and identify any potential repayment risk based on the age of the related invoices.

A related measurement is days sales outstanding (DSO). This is computed by taking the accounts receivable balance and dividing it by the average daily sales.

Example

Accounts receivable balance at March 31 - \$2,000,000

Month of March Sales - \$1,750,000

Daily sales (March sales divided by 31) - \$56,452

Days sales outstanding – $(\$2,000,000 / 56,452) = 35$ days

This measurement can be computed monthly or annually. Monitoring how this measurement fluctuates can provide more information than delinquency. It can provide important information such as whether large customers are being granted more generous payment terms or whether early payment discounts are not being taken. It is an important overall control tool.

Another key measurement is to delineate accounts receivable balance by individual customer. Focusing on the largest customers can indicate whether there is a concentration of risk in one or a small group of customers that needs to be addressed. If the risk concentration is larger than anticipated, steps such as credit insurance or factoring may be taken to reduce the risk level.

Since cash is king, many companies measure cash collections on either a daily or monthly basis. A highly leveraged organization may wish to measure cash on a daily basis. Many companies can use the monthly measurement in an effective manner. A significant increase or decrease in cash collections should correspond to an increase or decrease in sales revenue. If not, this may indicate a delinquency issue or a terms issue.

Tracking charge off is also a key performance measurement. This can measure the effectiveness of the credit function as well as provide important information for computing the Allowance for Bad Debts for financial reporting. In compiling information for the Allowance calculation, it is important to understand how many accounts that reach 30, 60, 90, or 120-plus days past due are ultimately charged off. By applying these historical percentages to year-end figures, an objective, defensible Allowance figure can be computed.

Given the above discussion of account reconciliation and its importance, measurement of accounts that require no manual account reconciliation should also be important. Measuring the number of accounts where the entire payment is properly applied with no reconciling items provides insight and focus on this problem area. A payment posting with no unapplied/unreconciled items is sometimes called a “straight through reconciliation.” By measuring the number of straight through reconciliations, one can focus on improving this metric and reducing personnel costs in the reconciliation process.

Internal Controls

Accounts receivable has direct responsibility for one important internal control and participates in other internal control functions. The control function directly related to accounts receivable management is to ensure that customer payments are posted correctly as to account, amount and period. Indirectly, accounts receivable can confirm that billings are for the correct amount and account.

Proper segregation of duties is essential to any internal control. To accomplish the objective of ensuring that payments are posted correctly as to account, amount and period, payment application personnel must be segregated from those who are able to make account adjustments, including charge offs. This will minimize the possibility of employee fraud.

What types of employee fraud can occur? In areas that process cash, lapping and payment diversion are the two most prevalent. In lapping, an employee may take a payment from customer A to conceal the theft, the employee posts a subsequent payment made by customer B to customer A's account. Then, a payment made by customer C will be posted to customer B's account. It is a fraud that requires a lot of manual work on the part of the employee. Most lapping schemes are detected when the employee orchestrating the scheme leaves or goes on vacation.

Payment diversion occurs when an employee takes a payment and then adjusts the customer balance related to the payment. By adjusting off the balance, the customer account appears to be correct. However, the cash goes into the employee's pocket rather than being deposited into the company accounts. This is why it is so important that employees dealing with customer payments not be able to make account adjustments.

In environments that do not handle cash, the same types of fraud may occur, but are far more sophisticated. Where controls are especially weak, an employee can set up a customer, receive merchandise, then write-off the balance due or perpetuate a lapping scheme using other customer payments. More sophisticated schemes may involve sales people trying to achieve bonus objectives by creating bogus sales and colluding with an accounts receivable employee to write-off the balance.

Payments received should be tracked by daily deposit or batch totals and all cash applied should be balanced to the batch total, if applicable, as well as the daily deposit total. There will generally be unapplied payments, which are those payments for which an invoice cannot be identified. Anything posted to unapplied payments should be reviewed by management and aged to ensure resolution.

Controls should be in place to ensure that all payments are applied at least at the customer level. Any use of a cash suspense or other account used for payments for which the customer cannot be identified should be monitored. This can be accomplished through a daily review by management. The cash deposits reviewed should then be carried over to the bank reconciliation process.

Controls over posting payments to the proper account are accomplished through management review, as well as the statement process. Customers should receive statements. If a payment received by a customer is not reflected on the statement, the customer will likely complain. These complaints should be addressed by management who can evaluate what went wrong in the payment application process.

Customer statements are also an effective tool to ensure that billings are valid and properly recorded. If a customer receives a bill or statement that reflects something not ordered or

received, there is a high likelihood of complaint. Proper investigation and follow up of the complaint by management should highlight what went wrong with the transaction.

Another necessary control involves accounts that are charged off and account adjustments. This activity must be controlled with proper approvals. Charge offs and adjustments should be reviewed and approved by the appropriate management level and this duty should be segregated from payment application.

Controls in the accounts receivable process hinge on segregation of duties, timely statements sent to customers, and appropriate management review. These steps should minimize the likelihood of any fraud and also ensure that reported amounts are correct.

Case Study

No Controls, Inc. permitted collectors to apply customer payments and adjust account balances. There was no management review of adjustments. This process was used to avoid the additional expense of a payment application function.

For an out-of-state customer, a collector established a corporation with the same name as the customer and then established a bank account in that name. As the customer made payments, the collector would adjust some of the balances so that there was an appearance of overpayment by the customer. Since the collector applied the payments, these fictitious overpayments would never be applied to future invoice amounts.

As the overpayment grew, the collector would periodically request that the cumulative overpayment amount be remitted to the customer. When the check to the customer was created, the collector would pick it up from accounts payable stating that he wanted to personally mail it to the customer with a note. Instead, the collector would deposit it into the bank account that he created.

This fraud may have been prevented by (a) segregated payment application function, (b) proper approval of customer account adjustments, (c) regular preparation and mailing of customer statements, and (d) some accounts payable controls as well.

Payment Application

Payment application, sometimes called cash application, is a very important yet underappreciated function. When payment application is performed properly, time in account reconciliation can be minimized. Proper focus in this area can save time, personnel costs, and frustration (both on the part of the customer and on the part of collectors).

The best practice is to pay close attention to this area. Many times, it is taken for granted and ignored. Do this at your own peril. A controlled, efficient payment application process will result in a much more efficient collection process.

There are practical considerations to payment application beyond just ensuring that customer accounts are properly stated. If there are disputed amounts due to payment application, customers may stop paying until the disputes are resolved. If this happens, an inability to process payments can cause an interruption to incoming cash. This is a very important practical consideration.

Payment application should be a simple process. Customer payments are matched with open receivables. However, complexities in the form of deductions, discounts, and other items complicate the process.

Proper payment application requires information from the accounts receivable system such as customer name, customer number, invoice number, invoice amount, credit memo number, credit memo amount and details covering other possible deductions such as discounts, etc. It also requires the same level of detail on the customer remittance. There are many things that hinder this process including:

- Company credits not processed or processed too slowly.
- Errors in the company's billing system.
- Liberal discount policies with no clear guidelines as to when discounts may be taken.
- Customer checks contain no remittance detail.
- Customer checks contain invoice numbers only, but the check amount does not match the invoice totals.
- Customer makes an "on-account" payment that is not meant to correspond to any particular invoice.

The inability of payment applications personnel to identify a customer will generally result in the payment being applied to an account called "suspense." The name is not important. The important item is that the account used for these unidentified payments must be monitored and reviewed to ensure that payments are applied to the proper customer account.

Things that the company can control such as processing credits, billings, and enforcing discounts should be addressed quickly. You have control over these items. As an example of the problems caused by these issues, assume that customer Global Retail has sent a check for \$457,000. In the remittance detail, the check has the following:

Invoice 123789	\$550,000
Discount 2%	-\$11,000
CM 4567	-\$82,000

The accounts receivable system shows the following:

Invoice 123789	\$550,000
Discount 2%	-\$11,000

What happens to the \$82,000? This now becomes a reconciling item that must be investigated. If it turns out that it is a proper deduction and the only reason for the investigation is the inability of the company to post credit memos in a timely manner, it is wasted time that could have been better spent on productive activities.

Customer remittances that contain little or no remittance detail are more difficult to correct. Your level of control over the customer is greatly diminished. In this case, the power of persuasion is your ally. If personnel calls accounts payable personnel each month to reconcile the account,

they may be able to convince the accounts payable personnel that it would be easier to include the remittance detail than handle questions each month.

Using the example, above, if the company's accounts receivable system indicates the following for customer Global Retail:

Invoice 123789	\$550,000
Discount 2%	-\$11,000
CM 4567	-\$82,000

You receive a check for \$400,000 with no detail whatsoever. The payment applications personnel will be unable to match the payment to the deductions. This will result in \$400,000 being applied to invoice 123789 with a balance showing as due. If the customer deductions are authorized, this will not only show past due amounts that are really not past due, but may also result in collection calls that are unnecessary and may irritate the customer.

Proper attention to this process can save a great deal of time and effort in the accounts receivable function. Management should monitor and review cash suspense items daily, ensuring that these items are resolved. Unapplied payment amounts should also be measured with the goal of maximizing payments being correctly applied during the payment application process. By measuring and monitoring unapplied payments, management can intervene and assist in fixing any company issues, as well as any customer issues.

The benefits of an efficient payment application process are:

- Good internal controls.
- Fewer personnel needed to engage in account resolution.
- Improved customer satisfaction.
- More meaningful aging reports as management tools.
- Fewer disputes and fewer reasons for customer nonpayment.

Best practices for payment application is for management to ensure that adequate controls are in place and that the process is actively monitored. Monitoring payment application can result in reduced costs, greater control, and better customer satisfaction.

Case Study

Systems, Inc. applied payments to customer accounts, but did not worry about matching payments and deductions. As long as the overall account balance was reduced, there was little concern about matching specific payments to specific invoices and deductions. Business was booming and payment application was the least of the company's problems.

Since payments were applied to the customer account, but not matched, there was a great deal of unapplied cash on each customer account. This was not reviewed nor even treated as a concern. When the customer paid, it was generally assumed that the payment was a payment in full. No review of accounts receivable was performed.

A vast majority of customer credits taken related to pricing adjustments. In a competitive industry, these adjustments were always to reduce the price. Unfortunately, credit memos were seldom issued. Almost all the business consisted of a one-time sale, so customer statements were not prepared. As long as customers were paying and the overall accounts receivable balance appeared reasonable, the main concern was growing the business.

Given Systems, Inc. success in growing revenue, they became an acquisition candidate for a private equity firm. It was an exciting event for the founders and the culmination of their effort. As was the custom of the private equity firm for all acquisition candidates, auditors were sent in to examine the company's records.

One thing that was asked for was a schedule of unapplied cash and an accounts receivable aging. This schedule was dutifully prepared and submitted to the auditors. Company personnel were completely unaware of the impact of unapplied cash on the purchase price.

Since credit memos were seldom issued, the accounts receivable balance was overstated. Cash was simply applied to the customer account and, because of customer deductions, the cash applied never fully covered the invoice amount. Accounts receivable was growing not only from revenue, but from a growing pool of customer deductions that were not properly accounted for. Accounts that had paid in full were still reflected as accounts receivable.

On the revenue side, pricing adjustments were sitting in accounts receivable. Since the payments were not properly posted, reductions in pricing were never properly reflected as reductions in revenue. This resulted in an overstatement of revenue as well.

Once everything had been evaluated, the adjustment was posted as follows:

Dr.	Revenue	\$4,750,000
Cr.	Accounts Receivable	\$4,750,000

This adjustment also reduced the purchase price as both assets and revenue had been overstated. It was a great surprise to the founders and a lesson that something as simple as payment application can have a large impact on the business.

Bank Remittance Processing Options

Use of a bank lockbox has many control and processing efficiencies. From a cash flow standpoint, having customer payments go directly to a lockbox can accelerate available cash by getting every dollar to into the company bank account quicker. This is a distinct advantage.

Whether or not to use a lockbox simple as a deposit tool depends on cost versus benefits. There is a lockbox processing cost. This must be weighed against the benefit of a reduction in interest costs by accelerating cash flow and the cost of using internal personnel.

Most banks with lockbox operations will offer a service that compares your customers geographic locations to their lockbox locations and, using average email times between cities, will compute the most advantageous lockbox locations. Your benefits are the reduced interest

costs associated with a reduction in payment “float,” the time between when a payment is made and received.

Another decision associated with a lockbox is whether to use their payment application services. This makes sense when customers generally provide good remittance data and your accounts receivable management system can accept a remittance file from the bank lockbox and automatically match the remittances to information on the accounts receivable system. In this environment, matching exceptions would kick out for manual review.

This is another cost benefit decision. The cost is obviously the price of this service. Benefits are not having to employ payment applications personnel in-house. However, use of a lockbox to provide this service requires constant monitoring. If there are many exceptions that must be handled, you can find yourself in a situation where you’re paying for both the lock payment application services as well as employees to handle the exceptions.

In a high exception environment, it may make more sense to have in-house personnel perform the payment application duties. Each customer may have a different way of preparing remittances and it’s easier to train dedicated in-house personnel than outsourced bank personnel.

If a customer can send remittance data using electronic data interchange (EDI), this can be used with electronic funds transfer such as an ACH. The goal of EDI is the electronic transfer of business information in a standardized, machine readable format. There are several formats and your company and customer would need to agree on a format for remittance data.

If your company and customer agree on a format and the content of remittance data, the use of EDI should help payment application tremendously. Payment application should be as easy as importing the EDI file and matching to the data on your company’s accounts receivable system (There’s a great deal of programming time involved in this goal unless your accounts receivable software already has EDI capabilities).

Once again, there is a cost benefit analysis that must be performed. Generally, only medium to large customers are going to offer this functionality. To make it worthwhile, your accounts receivable management software must be able to accommodate the processing of EDI transactions. If you have customers willing to provide data in an agreed upon format using EDI and your company’s software can handle it, it is a productivity enhancer.

Many banks will act as a conduit for EDI remittance information. If EDI is used, your customer would send both an ACH for payment and an EDI remittance file to your bank. The bank would then credit the company account for the ACH and forward the remittance data to your company.

The benefits of EDI are:

- Improved processing efficiency
- Reduced costs
- Reduction in errors
- Secure, predictable payments

The hindrances to using EDI are:

- Cost
- Complexity
- Few customers have the capability
- Few banks are EDI capable
- Standards are complex

While EDI for remittance data is becoming more prevalent, it's not the norm for small to medium sized entities. However, if you have the resources, its benefits are tremendous.

Considers for using a bank lockbox are cost versus:

- Interest cost avoidance
- Personnel cost
- Internal controls

The internal control element has not been addressed yet. Adequate segregation of duties is important to processing payments as well as posting payments. Another consideration for using a bank lockbox is whether your company can achieve the needed segregation of duties with existing personnel. While it is costlier, the added control benefit may be worth it.

Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

1. Which of the following is true regarding customer pricing?
 - a. Any pricing discrepancy is much easier to handle when the customer pays rather than ensuring that the price is correct when the invoice is created.
 - b. When the customer pays, they will pay at the price that they think is correct. If this price differs from the billing system, there will be account reconciliation issues and possible collector intervention with the customer.
 - c. As long as the price is agreed to between the customer and the sales person, the price on the billing system doesn't matter.
 - d. Collectors never get involved in pricing discrepancies.
2. Which of the following is true regarding credit reports?
 - a. All credit reports provide a score.
 - b. All credit reports predict the risk of business failure.
 - c. All credit report scores have the same scale.
 - d. It is important to understand what each credit report measures, the source of the information, and the scale used for any score.
3. The Operating Cash Flow ratio uses which financial statement line items?
 - a. Net Increase/(Decrease) in Cash, Current Liabilities.
 - b. Net Cash Provided by Operating Activities, Interest Expense.
 - c. Financing Activities, Current Liabilities.
 - d. Net Cash Provided by Operating Activities, Current Liabilities.
4. Which of the following is true regarding the Altman Z Score?
 - a. It is 80%-90% accurate in predicting bankruptcy one year prior to the event.
 - b. It is 100% accurate.
 - c. It is inaccurate 50% of the time, predicting that a firm will go bankrupt when it does not.
 - d. The primary ratio utilized by the model is Net income / Revenue.

5. What are the benefits of using trade credit insurance?
 - a. Trade credit insurance permits you to extend more credit to large customers where the risk concentration may have been perceived to be too great.
 - b. Trade credit insurance provides unlimited credit lines to all customers.
 - c. The insurer has no influence on credit limits for those accounts that are insured.

6. Which of the following will **NOT** help minimize time spent in the customer account reconciliation process?
 - a. Remittance instructions in the invoice.
 - b. Prompt issuance of credits to the customer.
 - c. Work with customers to provide adequate detail with remittances.
 - d. Keeping detailed notes of each customer contact.

Review Question Answers and Rationales

Review question answer choices are accompanied by unique, logical reasoning (rationales) as to why an answer is correct or incorrect. Evaluative feedback to incorrect responses and reinforcement feedback to correct responses are both provided.

1. Which of the following is true regarding customer pricing?
 - a. Incorrect. By not addressing the problem where it should be addressed, in billing, payment applications personnel will not know how to post the payment and collections personnel will likely need to contact the customer and then investigate which price is correct, resulting in an inefficient use of time.
 - b. Correct. Pricing discrepancies cause a difference between what is billed and paid. These discrepancies must be addressed and cause inefficiencies in both payment application and collections.**
 - c. Incorrect. Differences in pricing between the customer and billing system cause payment applications personnel to not know how to post the payment and collections personnel to contact the customer and then investigate which price is correct. This results in unnecessary personnel time and payment posting delay
 - d. Incorrect. Pricing discrepancies between the customer and company will likely result in collector intervention as either an account reconciliation issue or a collection call due to a partial payment of an invoice.
2. Which of the following is true regarding credit reports?
 - a. Incorrect. Not all credit reports provide a score. Some just provide the information without a score.
 - b. Incorrect. Not all credit reports predict the risk of business failure.
 - c. Incorrect. Some report scores are on a scale of 1-5, others are on a scale of 1-100, while others are on a scale of 250-850.
 - d. Correct. Different credit reports have different sources of information, different information being reported and, if a score is used, may use different reporting scales.**
3. The Operating Cash Flow ratio uses which financial statement line items?
 - a. Incorrect. Net Increase/(Decrease) in Cash, Current Liabilities is not a measurement used in the Operating Cash Flow ratio.
 - b. Incorrect. While Net Cash Provided by Operating Activities is a component, Interest Expense is only a component of the Cash Interest Coverage ratio.
 - c. Incorrect. While Current Liabilities is a component, Financing activities is not.
 - d. Correct. Net Cash Provided by Operating Activities, Current Liabilities are both components of the Operating Cash Flow ratio.**

4. Which of the following is true regarding the Altman Z Score?
- a. **Correct. It is 80%-90% accurate in predicting bankruptcy one year prior to the event. Not every customer predicted to enter bankruptcy will enter bankruptcy.**
 - b. Incorrect. It is only 80%-90% accurate in predicting bankruptcy. While a very good tool, it is not 100% accurate.
 - c. Incorrect. It is inaccurate 15%-20% of the time, predicting that a firm will go bankrupt when it does not.
 - d. Incorrect. Net income / Revenue is not a ratio used by the Altman Z Score.
5. What are the benefits of using trade credit insurance?
- a. **Correct. Using trade credit insurance permits you to extend larger levels of credit to customers whose risk profile would otherwise not permit this.**
 - b. Incorrect. Credit limits are important to this coverage. Each customer must have a credit limit that is agreed to between the insurer and insured.
 - c. Incorrect. A credit limit and policy limit is set with the insurer and larger customers are actively monitored by the insurer, which may result in changes to the credit limit.
6. Which of the following will **NOT** help minimize time spent in the customer account reconciliation process?
- a. Incorrect. Remittance instructions in the invoice will help remind the customer to detail the invoice being paid and any deductions taken and the desired format.
 - b. Incorrect. Prompt issuance of credits to the customer will ease any discrepancies between deductions taken by the customer and those deductions reflected on the accounts receivable system.
 - c. Incorrect. Working with customers to provide adequate detail with remittances will help identify and resolve deductions taken by customers.
 - d. **Correct. While making customer notes is a recommended procedure, this will not help in the customer account reconciliation process.**

Glossary

This is a glossary of key terms with definitions. Please review any terms you are not familiar with.

Altman Z Score: A bankruptcy prediction model developed by Edward Altman that has gained wide acceptance among accountants, auditors, and the courts. The Altman model uses five financial ratios and weights them to develop a Z Score. The Z Score is then evaluated to assess the likelihood of bankruptcy.

Approval matrix: An objective, consistent methodology that incorporates credit report scores, other scores, and financial analysis with minimum criteria for acceptance.

Cash flow ratios: A measure of a company's ability to generate cash from operations to pay for obligations such as current liabilities, interest and debt. These ratios include the Operating Cash Flow ratio, Cash Interest Coverage ratio and Current Debt Coverage ratio.

Credit reports: Reports compiled by business credit reporting agencies that may measure a company's payment history, financial strength, banking history, past liens, judgments or bankruptcies, UCC filings, and other available information. These reports may be accompanied by one or more scores, which indicate the credit worthiness of the company.

Days sales outstanding: A measure of average portfolio turnover that is computed by taking the accounts receivable balance and dividing it by the average daily sales for a period. The result of this computation represents that average number of days that a receivable is outstanding.

EDI (Electronic Data Interchange): The electronic transfer of business data in a standardized, machine readable format. In accounts receivable management, EDI is most often used for remittance information.

Factoring: The purchase of accounts receivable for a discounted amount of the face value of each invoice. There are both recourse and nonrecourse factors. A nonrecourse factor purchases the invoice and assumes the risk of nonpayment. A recourse factor does not accept the risk of nonpayment.

Lapping: An accounts receivable employee fraud scheme where a payment is taken from a customer and, in order to conceal the theft, subsequent payments from other customers are applied to the prior customers' accounts. If the theft is from customer A, then a payment from customer B will be applied to A's account. Another payment from customer C will be applied to customer B's account, etc.

Lockbox: An arrangement with a bank to have customer payments mailed directly to the banks' post office box and deposited directly into a bank account.

Payment application: The process of matching customer payments with open receivables, credit memos, and discounts.

Remittance: A customer payment. The remittance detail shows the invoices paid and credits taken that represent the amount of the payment.

Suspense: An account that is used by payment applications personnel when a customer account cannot be located.

Terms and conditions: The legal aspects of the sale that dictate the company's rights and remedies in the event of nonpayment by the customer. These often include when interest will be applied to an outstanding balance and at what rate, the ability to recover collection costs and the ability to recover reasonable attorney fees in the event litigation is necessary.

Trade credit insurance: A property and casualty insurance product that insures some or all of the receivables portfolio against loss due to customer insolvency. It is generally dependent on the credit criteria utilized and the existence of agreed upon credit limits.

UCC-1: A security instrument that, when filed, provides the creditor a perfected security interest in the underlying collateral and proceeds of that collateral.

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Qualified Assessment

Accounts Receivable Management for Small- to Mid-Sized Companies

Course # 1133365, Version 2003

Publication/Revision Date:

March 2020

Course Expiration Date

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1. Which is **NOT** a reason that customer account credits be approved and recorded?
 - a. The ability to issue unauthorized credits could lead to employee fraud.
 - b. If there are returns or other allowances that are not properly recorded, this could lead to account reconciliation issues and collection calls.
 - c. It's a needed control to ensure that amounts reported on the financial statement are accurate.
 - d. It will result in higher revenue.
2. What is the most likely outcome of a two week lag in preparing and mailing invoices to customers who are on 15 day terms?
 - a. Payments will be received late and not until an invoice is received.
 - b. Customers will pay on-time without an invoice.
 - c. Customers will call to see how much they owe.
 - d. Customers will pay a few days late without an invoice.
3. What are the advantages of a tiered approval process?
 - a. No credit application data is needed for lower credit line customers.
 - b. Lower credit line customers are automatically approved.
 - c. Higher credit line customers receive more investigation and analysis.
 - d. You don't need to monitor the payment habits of lower credit line customers.
4. For a private manufacturing company, an Altman Z Score of less than 1.23 indicates:
 - a. An excellent lending opportunity.
 - b. That a merger is underway.
 - c. A high likelihood of bankruptcy.
 - d. A safe company.

5. Which of the following is **NOT** important to monitoring customer credit exposure?
- a. Monitor customer payment habits.
 - b. Use credit reporting agencies to alert you of a negative change in customer payment practices.
 - c. Obtain feedback from sales personnel.
 - d. Offer alternative payment arrangements.
6. You have a customer who represents an unacceptable risk of insolvency to your company. Which factoring arrangement should you utilize?
- a. Nonrecourse.
 - b. Recourse.
 - c. Collections.
 - d. Payment guarantee.
7. Which of the following best describes a payment diversion scheme?
- a. An employee steals a customer payment and then adjusts the customer's balance with a credit for the amount of the payment.
 - b. A payment is taken from a customer and, in order to conceal the theft, subsequent payments from other customers are applied to the prior customers' accounts. If the theft is from customer A, then a payment from customer B will be applied to A's account. Another payment from customer C will be applied to customer B's account, etc.
 - c. A salesperson conspires with an accounts receivable employee to create bogus customer sales and then write-off the balance.
 - d. Credits are not properly applied to the customer account.
8. _____ is an effective tool to ensure that all billings are valid and properly recorded.
- a. Consolidation of duties.
 - b. Customer statements.
 - c. Lapping.
 - d. Payment diversion.
9. Which of the following does **NOT** complicate the payment application process?
- a. Credits not processed.
 - b. Customer checks do not include remittance detail.
 - c. Pricing errors in the billing system.
 - d. Payment by check.

10. What are the benefits of EDI?
- a. Cost.
 - b. Complexity.
 - c. Improved processing efficiency.
 - d. Few banks are EDI capable.



Answer Sheet

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Course Evaluation
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