



**redware**

Billing and Microsoft CRM.  
A Guide to using CRM to automate monthly invoicing  
White Paper

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Date: 22 October 2016

Doc: redware-billing-white-paper-14.doc

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# 1. Overview

This White Paper serves as a guide to using Microsoft CRM for monthly or weekly billing, highlighting the most important areas of a robust invoice automation solution, and showing how you can turn Microsoft CRM into a billing machine.

I also discuss the role of an Accounting system and how it is different to a Billing system, and explain how CRM and Accounting can work together to support a Billing operation with hundreds or thousands of invoices being created each month.

I draw on over twenty years of experience in creating large scale billing systems for telecommunications providers and also, more recently, smaller scale bespoke billing applications for organisations of all sizes using Microsoft CRM.

The company I work for produces customisations and software for Microsoft CRM to fill in the few areas of missing functionality that is required to turn CRM into a Billing Machine.

This paper provides an overview of items to think about when planning a Billing implementation and should be especially helpful to Accountants or Customer Service Managers planning business processes involving many hundreds of monthly invoices.

There is an overlap between the three systems discussed in this document and it is worth briefly defining them from our point of view (look at the final section for a deeper discussion of some of the benefits of each):

- **Accounting** – accounting systems primarily manage the recording and documentation of Sales and Purchases culminating in Invoices and Purchase Orders which are a formal record of a financial transaction between Organisations and Customers. Accounting systems allow for credit control by assigning credit limits to each account and have great debt management and debt collecting abilities. Often they can undertake limited Billing by creating regular monthly invoices of a fixed amount only, and they offer varying levels of integration with third party payment systems including bank account reconciliation.
- **Customer Relationship Management** systems focus on communication of all types between Customer Service staff and customers. CRM Systems sometimes also manage the sales cycle and sales pipeline to efficiently manage the documentation right up to the approval of a Sales Order. Usually the accountants take over from here to actually issue the Invoices.
- **Billing** is a third system employed by companies producing large numbers of invoices and is usually completely separate to the Accounts and CRM systems. Some Billing software vendors will offer their own limited accounting or CRM functionality or integrate with market leading solutions. Billing, also described below, focuses on the production and fulfilment of Invoices usually integrated with an efficient and automatic payment collection service such as Direct Debit.

This paper is for Managers and Consultants considering the implementation of a Billing solution where Microsoft CRM is the chosen platform for Customer Service. I discuss in detail what constitutes the Billing process and why it cannot be handled by Accounts, and put forward the case for implementing Billing functionality within Microsoft CRM rather than adding a third system to CRM and Accounting.

My experience is drawn from my employment history and many years of implementing Accounting and Billing solutions for Microsoft CRM. Of course, the few areas where functionality for Billing is missing in CRM are precisely those areas that my company provides to the marketplace.

This paper discusses those missing links so you can consider how they should be implemented in your situation, however the case remains that 90% of the Billing functionality is covered by Microsoft CRM out of the box so it remains an excellent choice to start from.

## 2. Billing

Historically, the term 'billing' describes the business processes surrounding the regular creation and fulfilment of large numbers of sales invoices by large scale gas, electricity and telephone companies with tens of thousands of customers.

This white paper attempts to distil the essence of these processes and show how they can be applied successfully by smaller businesses and organisations using Microsoft CRM, even for businesses creating just a few hundred invoices or less each month or each year.

Why? As the volume of monthly invoices in a business increases, automating the process saves time, increases accuracy and will ensure that everything that is meant to be charged for, will be charged for - reducing business risk, and improving cash flow.

As I explain below, accounting software cannot do this on its own and Billing has traditionally been a labour intensive process within accounting or an expensive standalone application operating independently.

This paper proposes that most billing processes can be managed in Microsoft CRM without the need for specialist Billing software.

### 1 What is Billing ?

Billing now has several competing labels including Electronic Invoicing, EBPP (Electronic Bill Presentation and Payment), e-Billing, e-Invoicing, Invoice Fulfilment and so on. I take these together and explain the processes required to manage, generate and fulfil repeating sales invoices in a manner that can easily scale from small to large numbers of customers.

For these purposes, I break down Billing into the following 8 processes:

1. **Provisioning** - the initial supply of the product or service to the customer, and recording of the customer's billing details.
2. **Validation** - the validation of customers' billing information to catch missing details so they can be rectified.
3. **Billing** - the calculation of the bills for the current period.
4. **Reconciliation** - the process of sense checking monthly billing totals after the billing run (the billing run may need to be repeated or extended if major errors found).
5. **Fulfilment** - the creation and distribution of Sales Invoices to customers.
6. **Collection** - the collection of payments, often automatically.
7. **Accounting** - the integration of invoice data with the accounting system.
8. **Customer Service** - communicating with Customers.

I describe each of these stages in the billing process below, with an emphasis on how the approach might differ from day-to-day accounting practice and how Microsoft CRM can be used to help.

N.B. I will not be discussing marketing or anything around the supply of products or services to Customers. This paper discusses billing processes only.

### 2 Provisioning

- Credit control before supply to reduce risk
- Initial supply of product or service
- Invoicing may form part of the process if an initial payment is required
- Recording of data required to create monthly bills
- Recording of a payment method for efficient collection

Provisioning involves the initial setup and first supply of the product or service to the customer, and the recording of their billing information. For example, it could be a membership, phone service or maintenance contract.

Billing may be part of this process if an invoice needs to be produced (and paid for) as part of provisioning. Credit control should form part of provisioning if it is not already part of the sales and marketing process.

Often, for consumer sales, a valid bank account or credit card is sufficient for provisioning purposes although a problem here may not show until the first payment has been taken (so some companies do a small test transaction first).

Microsoft CRM is ideally positioned for managing the provisioning process, which may involve the coordination of several teams of people perhaps working in different organisations. Financial Services for example require multiple identity checks these days, Engineers may need to be booked for performing phone line installations and so forth.

Credit Control and creating the initial bill are areas that Accounting can perform well of course but this is typically a small part of the provisioning process for many companies.

### 3 Validation

- CRM reports can be used to point customer service towards resolving issues.
- Multiple people can contribute to entering Billing data

The validation process occurs before the creation of the invoices to ensure that any missing customer data required for Billing - such as missing payment details - is resolved before the run.

In Microsoft CRM, the billing data stored in the system can be used to generate an activity report, to resolve issues before any bills are created (with help from Customer Service who can contact customers to retrieve required information). The beauty of CRM is that different users in different departments can be marshalled, so that one department might validate identity information, whilst another organises a site survey or enters timesheet information for billing.

In Telecommunications billing for example, numerous exception files are generated in the validation phase containing customer data that cannot be processed correctly through the billing system. These exceptions happen because say, a new telephone handset has been added and calls are being made before the number has been provisioned onto the billing system. In this case the number is flagged up and needs to be added before the billing run can be completed.

Each business will have their own checks and cross checks. Perhaps a service is contracted from a third party and so a validation against the invoice from the third party might highlight any discrepancies.

In summary, because of its good reporting system, validation is fully supported by Microsoft CRM.

### 4 Billing

- Customer Service and Sales staff can easily create one-off Sales Orders and Invoices
- Custom tables in CRM allow for storage of regular monthly billing
- CRM allows the recording of "billable events"

The core of the Billing process is the creation of the Invoice documents themselves.

Accounting systems often have a facility to create regular monthly invoicing but are unable to cope with additional requirements, for example:

- The quantity consumed might play a role so the invoice amount varies according to the usage. Broadband might be charged by the bit or Gas by the Joule and the invoice amounts change each month.
- One off Invoices might have a complex structure with many little items added as the job goes along. CRM offers a convenient place for multiple people to add these items to be added to an Invoice later.
- Manufacturers often have a “Job Bag” to add picklists of items used to create a bill – for example when putting together components to dispatch a personal computer.
- Professionals often need to bill according to timesheets and expenses again easily stored and updated by multiple people in a CRM.

The Billing process needs to collect these multiple sources of information to create an Invoice.

Often (see below) a Billing Manager is responsible for the overall management of the Billing process and billing may need to be repeated or extended if items have not been included by some data input issue from being issued onto an Invoice.

## 5 Reconciliation

- The Billing Manager is responsible for the Billing run.
- Totals and counts by product and customer can be checked.
- Check against third party invoices.
- Accounting Nominal ledgers are an important check.

The company’s designated Billing Manager should be responsible for the whole billing process, which commences each week or each month with a “billing run”, to generate all the invoices created for that time period.

The reconciliation process occurs after the billing run, and before the final creation of invoices.

The Billing Manager will double check that the amounts being billed make sense - usually against the previous month’s figures and/or this month’s expected sales totals.

The reconciliation process will vary from business to business and should form part of a documented monthly procedure. As a minimum, the total overall counts and amounts broken down by product and customer should be checked against the previous month’s totals.

If regular monthly bills are sent out for example, then the latest count and total should equal the previous month, less any cancellations, plus any new customers.

Accounting systems can add huge power to any billing reconciliation, and the Billing Manager should liaise with the Accountant, who can view the balances on the nominal ledger and see the current profitability status so that action can be taken accordingly.

From a Billing point of view, in my experience, reconciliation is the single most important thing to action each month. It is by necessity a manual process, but one that will show up missed bills - which could amount to a few hundred, or hundreds of thousands, of pounds of revenue!

## 6 Fulfilment

- Electronic Invoicing
- EBPP and EDI
- HMRC requirements for an Invoice
- Microsoft CRM may require some customisation to create and store Invoices
- Email is not a safe delivery mechanism
- Digital Signature on a PDF document
- Push invoices into Accounts

Invoice fulfilment is the process of distributing Sales Invoices to Customers, usually by post or email.

Accounting software is designed to do this, but it is also possible to use Microsoft CRM to email invoices out in a batch, with a little customisation.

There are several different ways to fulfil invoices with Microsoft CRM but all lack some essential feature and you may end up having to implement a custom development here:

- Microsoft CRM has facilities to generate PDF copies of invoices using the SSRS report writer, though it is difficult to modify and manage and automate, and requires help from a developer.
- There are issues with storing thousands of PDF documents within CRM (it can be expensive) and Sharepoint or Azure BLOB folders might be a better option for large numbers of invoices.
- The new Word Templates in CRM 2016 give better functionality for automation and document generation and it is possible to store an email with an attached document automatically with workflow.

In practice a custom solution for creating and storing Invoice documents may be required for Microsoft CRM (although email fulfilment itself is easy to perform). In contrast, Accounting systems are built to allow easy reproduction of previous Invoices, although only the latest online versions store the original invoice PDF automatically on the web.

CRM needs a bit of extra customisation to enable it to fulfil invoices easily. Accounting systems are set up to handle invoice fulfilment out of the box, so if you have the relevant Connector to push Invoices into Accounting from CRM, you have the option of fulfilment from Accounts with Billing functionality supplied by CRM.

## Electronic Invoicing

There is a European Directive 2014/55/EU aimed at encouraging Electronic Invoicing and a VAT Notice from HMRC with further guidance on how to do this. The benefits to companies of faster invoicing and reduced printing costs are estimated at over €40 billion across Europe, although this requires definition of an open machine readable standard for e-Invoices.

The basic message in our context is that an Electronic Invoice created in Microsoft CRM must adhere to the same guidelines as a paper invoice:

- Invoices should have a sequential invoice number and contain a tax point date which is the usually date of supply (or the payment date if earlier). The invoice date could be later and represents the date the document was dispatched.
- The name, address, and VAT number of the Supplier must be shown (prefixed by GB for international invoices).
- The Customer name and address must also be shown and Business to Business invoices in the EU must also show the VAT number of the Customer if UK VAT is to be avoided. There are special rules for VAT for digital distribution of goods.
- There must be an adequate description for supply of goods (or a product number) to identify what has actually been supplied and the unit price indicated for each item (excluding VAT). The VAT rate and the discount amount should also be shown if applicable.
- The total VAT should be indicated on the invoice and repeated in sterling if is a foreign currency invoice.
- Copies of the original invoices must be kept for six years (10 years in Germany).
- Credit notes need to contain the same information as the original invoice.



There are some security issues when sending Invoices by email as email addresses are easily “spoofed” so that anyone is able to send an Invoice looking like it came from your email address. There are many cases of invoice fraud where a fraudster has sent an invoice with new bank account details and hijacked the billing process to their own end.

To avoid invoice spoofing, the EU recommends that documents are electronically signed - the only practical way to do this is to electronically sign a PDF copy of the invoice. The recipient can click on the signature and verify that it has come from the supplier. Another option is to provide a web portal or print a QR code onto the Invoice which opens the invoice on your website with an authenticated logon so the Customer can be sure they are viewing a valid document.

## 7 Payment Collection

- Try to automatically collect a large proportion of payments.
- E-commerce applications can be incorporated with billing and typically take payments first and handle failures on an exception basis.
- Define process to handle each type of payment exception.
- Standing Orders are useful if the amount stays the same each month.
- Direct Debit is a low cost way of collecting payments and can collect throughout Europe with SEPA.
- Credit Card payments are more expensive but work well internationally and payment gateways can now handle subscriptions well.
- Other payment methods can prove useful depending on the target customer.

The aim of a Billing system must be to automate payment transactions as much as possible so that a large proportion of payments occur automatically, saving time and hassle. Billing systems often incorporate a payment gateway to facilitate payments.

Both CRM and Accounting systems need to be customised to do this. The advantage of using a CRM for this is that Customer Service staff can do the follow ups.

However a process needs to be defined for handling the small proportion of transactions that fail. For example a direct debit transaction might fail on the first transaction and a process is required to either double up the payment next time once the correct details have been entered or to take the outstanding amount by other means.

Customers with regular monthly payments can be processed easily if they sign up for Direct Debit, which can now be used to collect payments all over Europe with the SEPA system.

Other payment systems can be considered depending on your customers, e.g. PayPoint outlets allow consumers to pay at a number of outlets across the UK, and electronic banking now allows people to pay easily on demand.

### Direct Debit

Direct Debit is familiar to Customers in the UK and is used to collect variable monthly payments direct from a Bank Account. It is subject to several requirements including a Direct Debit Guarantee and the requirement to Invoice the Customer a couple of weeks before taking the money from the account.

The SEPA program is now implemented across most of Europe and allows collection directly from a Bank Account (in Euros) in a similar manner to Direct Debit. There are several Payment Processing Bureaux which accept transaction files and deal with the complexities of processing payments and notification of any failures.

In the UK, there are some things to consider when setting up a Direct Debit system:

- Individuals can sign up for Direct Debit using a signup form on the internet. Businesses often have more than one signatory on the account and require a paper form to be sent to the Bank.
- A Direct Debit invoice in the UK must be invoiced and sent to the customer three weeks before taking the payment and is subject to the Direct Debit Guarantee.
- Standing orders can be used to collect regular payments each month from customers where the amount does not vary. These transactions are very low cost (free) and easily set up with online banking or by the customer sending a form in to their bank.
- Processing costs are around £10 per transaction file and then around £0.17 per transaction.
- Direct Debit can collect different amounts each month. A business needs to apply for a SUN number from their bank or share a SUN with a bureau service.
- BACS software costs from £250 to £5,000 for controlling submissions to the Bank. Alternatively you can create a file and send to the bank or use third party Bureaux which can cost £250 to set up.
- An alternative if the bank will not give you a SUN is to use a third party or GoCardless who offer a complete system including the initial data capture for 1% of transactions.
- Some care is required when creating a file for transmission to the Bank as different transaction codes are often required for new customers. The BACS system usually emails failed transactions within a few days.
- There are security concerns when storing Bank Account details.

## Credit and Debit Cards

Credit Card payment gateways have improved in the last few years and now offer “continuous authority” to process regular payments in a similar fashion to Direct Debits.

These transactions have a fee of between 1.5% and 3.0% and there is increased risk, as transactions can be subject to a “chargeback” where a customer can request a refund up to three months later.

There are strict PCI (Payment Card Industry) requirements for storing credit card details which are often tokenised and stored with the merchant so you only store a credit card token locally.

There is a system of “chargebacks” for failed transactions which can result in a transaction being cancelled several months later but new validation checks that can be made at the point of receiving the card numbers can remove this financial risk.

## 8 Accounting

- Accounting systems remain a great way to store historical invoice data.
- Accounting systems are designed for credit control and to chase down and record payments and remain the best way to chase down outstanding amounts.
- Nominal ledgers provide a mechanism for an accountant to have a bird’s eye view of the status of a company’s finance and nominal codes should always be respected when uploading from CRM.
- The Communications facilities for email and managing phone calls in Microsoft CRM are better and more scalable for managing billing enquiries and the debt control process.

At Redware, we favour the accounting or ERP system being the final recipient and store for Invoice data, even if the Billing process has been successfully completed within Microsoft CRM.

The main criteria here is to upload invoices at the granularity of Invoice line items and to make sure any product codes are matched with the nominal codes in accounting system to drive the accounting system properly.

Accounting systems are typically not that strong on communications except for the core processes around Invoice fulfilment and sending out statements and debt chasing letters.

There is a strong case for managing all communications with the Customer using a CRM but the customer service representative will need access to the current state of the customer account and invoice and payment history. If this is not possible, these functions will need to be assigned to the Accounts department.

Payments is another area to focus on if you want to run all communications from Microsoft CRM. There will inevitably be some exceptions to successful processing with any system and Customer Service staff will need to be empowered to access the payment system if they are to deal successfully with all queries. An incorrect payment for example on a Credit Card may need to be refunded and the relevant accounting systems updated without having to transfer the call to Accounts.

## 9 Customer Service

- Customer Service staff need access to invoice and payment history if they are to answer billing enquiries successfully.
- Integration with payment systems for speedy resolution of issues.

Customer Service staff using CRM are well placed to communicate with Customers in various ways to provide services and resolve issues perhaps by coordinating processes with several different departments or external suppliers.

We make the case that Billing functionality described throughout this document can be managed successfully within CRM provided that the interface to Accounts and Payment Gateways is carefully managed:

- Customer Service staff may need access to Credit Control during provisioning.
- Customer Service may be responsible for validating payment details.
- The Billing Manager may notify Customer Service of missing information that needs to be completed for successful Billing.
- Customer Service staff need access to Invoice and Payment information to cope with Customer queries.
- Customer Service need to be able to perform some Payment transactions (and refunds) to successfully deal with all enquiries.
- Debt chasing is traditionally managed by Accounting staff but can be successfully controlled within CRM if the accounting data is made available.

### 3. Microsoft CRM as a Billing Machine

Most accounting systems are able to handle recurring monthly Invoices if the amount is the same each month.

However, Invoices often have a variable element based on the amount actually consumed in a particular month, or if additional "billable events" occur throughout the month. Think of mobile phone bills, or parts and labour on call-outs under a service contract.

This means Accounting systems are not always fit for purpose where Billing is concerned.

Microsoft CRM cannot replace an Accounting system - which provides a financial picture of the company - and we recommend that sales invoices are uploaded into accounting software with the greatest of respect for the nominal ledger codes.

However If a large proportion of payments can be processed automatically and efficient procedures employed to handle any payment exceptions - then it is possible to run the Billing system as a standalone system and just upload daily or weekly journal entries into accounts.

Microsoft CRM is particularly suited for Billing because custom entities can be defined to precisely model the business processes required, whilst the standard entities can be used to maintain the data for accounts and the generated invoices.

Some issues to look out for when designing the billing system to work within the context of CRM:

- Don't forget credit control for new Customers.
- Remember that the first bill might form part of the provisioning process.
- Store all the information required to create regular Invoices
- Add workflow for billable events to add items to invoices throughout the month.
- Create an efficient feedback loop where customer service staff are made aware of any problems with billing data so they can resolve them before the next billing cycle.
- Use the reporting and export facilities of Microsoft CRM custom entities to accurately show the items to be billed in any billing period, so that reconciliation to take place.
- Customisation and programming effort may be required to create and fulfil the invoices within Microsoft CRM.
- Remember that Invoices need to be stored for six years and that all tax calculations need to be accurate.
- An accounting application is the recommended destination for invoices, especially where payments are not made automatically via a payment gateway.

## 4. Synergy between Microsoft CRM and Accounts

Microsoft CRM and accounting systems have different functions within a business and are often kept separate.

Billing overlaps the two and finds its place in neither.

I argue that Microsoft CRM is an effective home for most of the billing functions within a business, although I do recommend the accounting database as the final resting place for an invoice in most cases.

If you're looking at the Billing cycle within your business or organisation, the Accounting system has the following benefits:

- An accurate historical record of all invoices (and purchase orders) and payments.
- Tax calculations can be complex and are handled automatically.
- Sales documents including quotations, orders and pro-forma invoices have access to product pricing data and stock levels.
- Nominal ledgers provide an accounting view of the financial status of the company at any point in time and help control annual budgets.
- Credit Control and credit limits can be monitored per Customer (and prospects).
- Aged debtor reports and simple email and letter templates allow for debt chasing activity.
- Add-on payment gateways for credit card and direct debit are likely to be available.
- Administrative tasks for VAT reporting and the year-end are automated.

CRM systems are increasingly being used for the sales cycle and business operations would be more efficient if billing and other accounting aspects can be handled within it.

Here are some of its benefits:

- Changes to customer details and communication are easily managed by a team of customer service staff.
- Microsoft CRM allows sales teams to control the quotation and sales order process so sales managers can effectively manage the sales pipeline.
- Price lists and products can be managed within Microsoft CRM (but stock levels are typically stored elsewhere).

There are also some issues to look out for when planning your Billing implementation with Microsoft CRM:

- Tax calculations are complex and require customisation.
- Invoice fulfilment is possible but in practice requires development effort and storage is an issue for large numbers of invoices.
- Access to invoices and payment data is required for Customer Service staff to efficiently handle billing enquiries.
- Third party connectors allow the uploading of invoices into Accounts.

It is worth mentioning a couple of areas of overlap between Accounting and Microsoft CRM systems not related to Billing:

- Credit Control should form an essential part of the pre-sales process but is often overlooked and performed in the provisioning phase.
- One of the keys to successful implementation of billing processes is automated payments.
- Customer Service often involves understanding exactly what the customer has purchased so access to invoices and payment history can help here.

- Debt chasing can be performed within CRM if the relevant Invoice and Payment details are made available to Customer Service staff.

## 6. Redware Research Limited

Redware Research Limited is a software house and consultancy based in Brighton on the south coast of England specialising in Accounting and Billing integrations for Microsoft CRM.

Redware is founded by me, Stamati Crook, I have 20 years of experience of billing systems, and 10 years' experience of building Billing and Accounts integration solutions for Microsoft CRM.

I have drawn on my experience for this paper, and we offer software solutions for many of the issues raised in this paper. Our current focus is on add-ons for Microsoft CRM to help with areas of CRM that currently require development effort in particular the process of creating and fulfilling invoices i.e. billing.

Our current software offering for Microsoft CRM includes:

- **Billing Connector** to automatically generate recurring invoices and allow simple workflow from custom entities to generate invoice items.
- **Sage 50 Connector** – to integrate with Sage 50 in the UK, ROI, South Africa, Australia and New Zealand (we also have an advanced Enterprise version).
- **Xero Connector** – to integrate with Xero worldwide.
- **Credit Control** integration for credit limits on UK and EU companies.
- **Telecoms Billing** add on for Microsoft CRM.

Please have a look on our website for further details. I hope you have gained a useful overview from this paper – [www.redware.com](http://www.redware.com).