

# Finding Meaningful Measures for a Hard-to-Measure Billing Team

*This case study is for educational purposes only and shouldn't be adopted as an off-the-shelf performance measurement solution. Each team's performance results and measures are unique to their own purpose and priorities. All details have been changed to preserve anonymity.*

## About the team

This freight business distributed freight such as whitegoods, canned foods or beer to various retail outlets around the country, for their customers. The billing team within this freight business was responsible for creating statements and invoices for these customers, and processing payments.



Even though their outputs are very tangible (bills, essentially), the billing team struggled to decide what was worth measuring for them. An obvious outcome is that customers pay their bills on time. But of course, the billing team is not in full control of that outcome. And measuring just the number of bills they generate seemed too trivial a measure.

## STEP 1: Get your team customer-focused

### Step 1.1: What are the team's outputs?

The primary outputs of the billing team's process include:

- statements, invoices and adjustment notes
- receipts for payments received from customers
- overdue notices

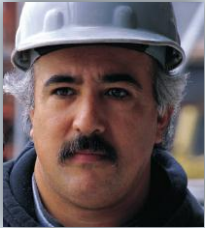


## Step 1.2: Who do they give these outputs to?

The recipient of each of these outputs is the customer whose freight is shipped.

## Step 1.3: Create "Customer Personas"

The billing team agreed that they had one primary Customer Persona:

<i>Customer Persona</i>	<i>Description</i>
<p>Greg Grundle</p> 	<p>Greg is the Distribution Manager in a 47-staff business that manufactures soft drinks for national distribution. His primary goal is to get the manufactured product onto store shelves as quickly as possible after they are bottled and boxed. Greg is responsible for overseeing the outbound logistics for the business, and is usually the one who interacts with us to schedule shipments, and who coordinates delivery with the end customers who receive the shipments.</p>

## STEP 2: Narrow down the team's most important outcomes

### Step 2.1: What matters most to customers?

A few years ago, the freight business' marketing department arranged for a market research company to conduct focus groups of their customers. They wanted to find out what the most important attributes of using freight services were to their customers. What they found was a set of 12 dominant service attributes:

1. Freight in good condition
2. Freight available on time
3. Being kept informed
4. Prompt responses to queries
5. Accurate invoices/statements
6. Access to right people
7. Solving problems



8. Customer focused staff
9. Understand customer's business
10. Turnaround time of equipment
11. User friendly documents
12. Personal relationships

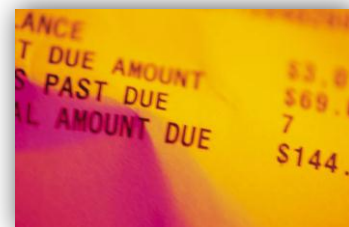
## Step 2.2: How well is the team doing these things?

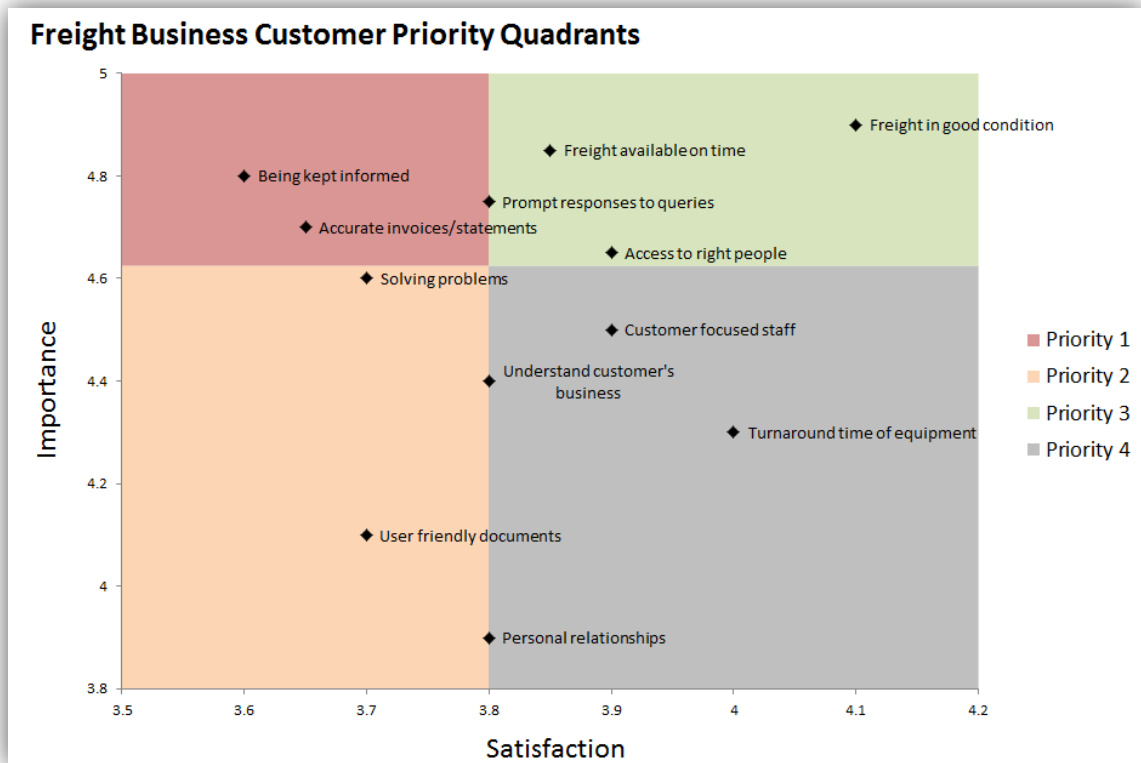
Via their most recent customer survey, conducted online using SurveyMonkey as they always do, the freight business measured the importance and satisfaction of each of the 12 attributes of using a freight service:

Key	Attribute of Service	Satisfaction	Importance
1	Freight in good condition	4.11	4.89
2	Freight available on time	3.83	4.86
3	Being kept informed	3.61	4.81
4	Prompt responses to queries	3.78	4.75
5	Accurate invoices/statements	3.65	4.7
6	Access to right people	3.9	4.65
7	Solving problems	3.7	4.6
8	Customer focused staff	3.9	4.5
9	Understand customer's business	3.8	4.4
10	Turnaround time of equipment	4	4.3
11	User friendly documents	3.7	4.1
12	Personal relationships	3.8	3.9

## Step 2.3: What are the team's priorities?

The freight business identified that one of the top three priorities for improvement was the accuracy of their invoices and statements. Customers were not paying bills because they were based on inaccurate or confusing rates. This immediately became a priority for the billing team.





## STEP 3: Uncover the team's highest points of leverage

### Step 3.1: Outline the team's process

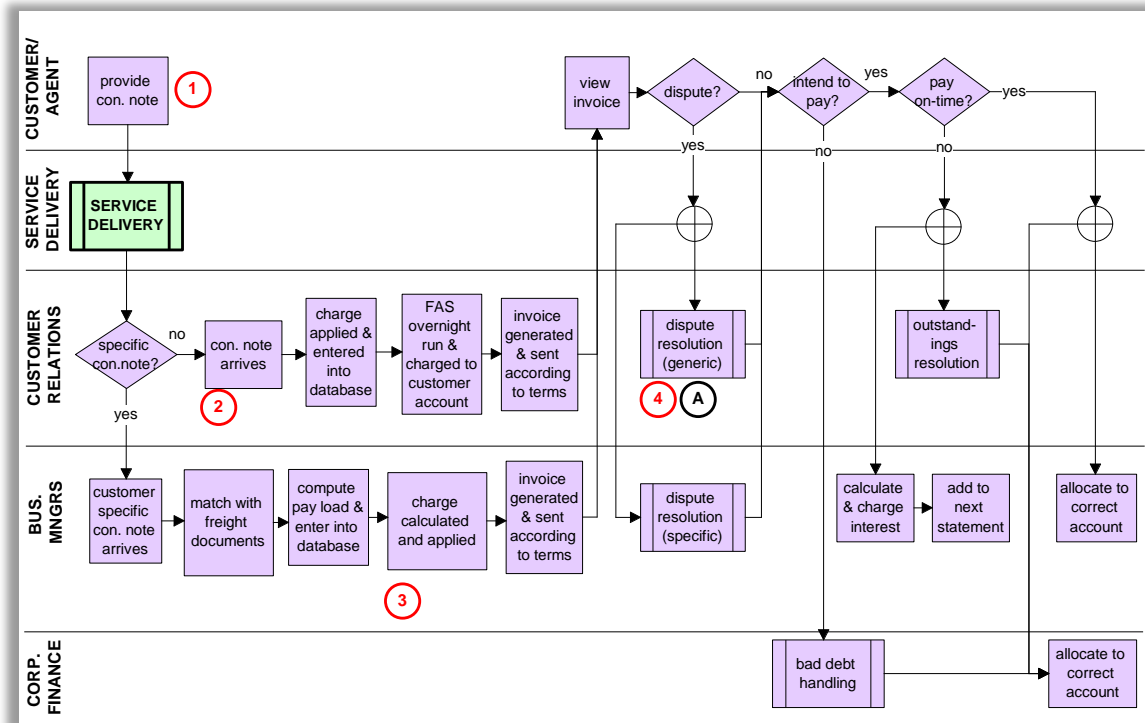
The billing team's high level process is fairly straightforward:

<i>Purpose:</i>	To provide accurate, timely and clear bills for the cost effective gathering of revenue.
<i>Owner:</i>	Manager Customer Relations
<i>Start point:</i>	Pickup requested by customer (provide consignment note)
<i>End point:</i>	Recommendations adopted by industry and business
<i>Macro steps:</i>	<ol style="list-style-type: none"> <li>1. Receive booking from customer</li> <li>2. Deliver the freight (another business process owned by Operations Team)</li> <li>3. Apply charges to customer account</li> <li>4. Generate and send invoice</li> <li>5. Handle disputes and late payments</li> <li>6. Receive and process payment</li> <li>7. Manage bad debts</li> </ol>
<i>Process outputs:</i>	<ul style="list-style-type: none"> <li>• statements, invoices and adjustment notes</li> <li>• receipts for payments received from customers</li> <li>• overdue notices</li> </ul>
<i>Stakeholders:</i>	<ul style="list-style-type: none"> <li>• customers</li> <li>• operations staff</li> <li>• finance department</li> <li>• organisation's shareholders</li> </ul>

### Step 3.2: Draw the cross-functional process & Step 3.3: Analyse the process for disconnects

Firstly on giant sheets of butcher's paper hanging on a wall in a depot meeting room, the billing team mapped by hand their billing process. They used post-it notes to flag the disconnects, or problems in different parts of the process that prevented them from achieving the outcome of customers paying bills on time.

Later, their process map was documented using flowcharting software:



These disconnects are identified in the process flowchart as red numbers in circles, and these numbers correspond to the following problems:

1. Freight consignment notes are not always supplied when they should be, and freight is shipped without them.
2. Freight consignment notes go missing when they are paper-based.
3. The wrong charges can be applied when the data about exactly what freight and what amount of freight is not accurately provided by the customer.
4. Accounts should never get to this stage, but there is a considerable number that are in dispute over what has been invoiced and the charges applied.

## STEP 4: Clearly map the team's most measure-worthy results

### Step 4.1: Translate the process purpose into results language

From their process outline in Step 3.1, the billing team discussed their process purpose and decided on its most important performance result:

<i>Process Purpose</i>	<i>Performance Results</i>
To provide accurate, timely and clear bills for the cost effective gathering of revenue.	Invoices are paid on time and in full.

### Step 4.2: Translate the customer priorities into results language

From the freight business' Customer Priority Quadrants in Step 2.3, the billing team was responsible for one of the Priority 1 attributes of service. Interestingly, this attribute of service has a direct cause-effect relationship to their process' most important performance result (invoices are paid on time and in full):

<i>Customer Priority Attributes</i>	<i>Performance Results</i>
Accurate invoices/statements	Customers are satisfied with invoice accuracy.

### Step 4.3: Translate the process disconnects into results language

The billing team framed each of the problem-oriented disconnects into results-oriented performance priorities:

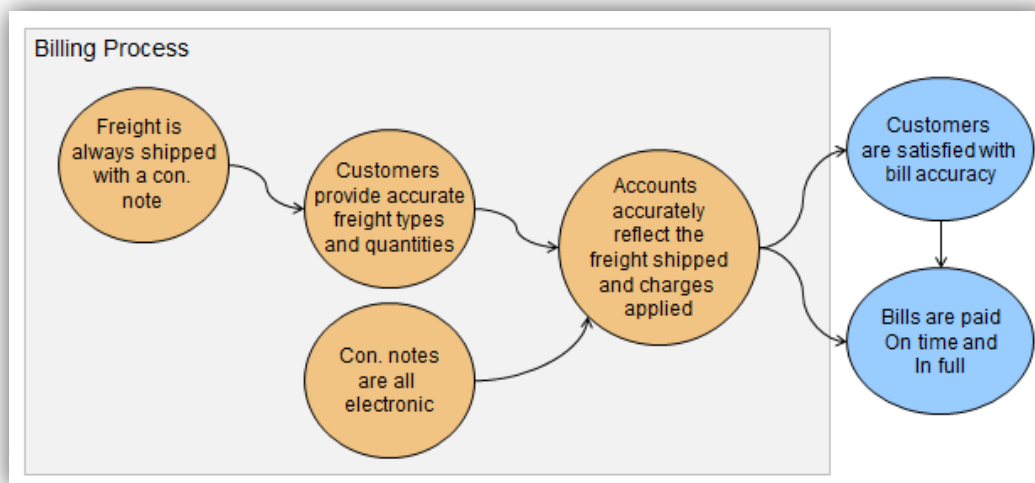
<i>Process Disconnects</i>	<i>Performance Results</i>
Freight consignment notes are not always supplied when they should be, and freight is shipped without them.	Freight is always shipped with a consignment note.
Freight consignment notes go missing when they are paper-based.	All consignment notes are electronic.
The wrong charges can be applied when the data about exactly what freight and what amount of freight is not accurately provided by the customer.	Customers provide accurate freight types and quantities.



<i>Process Disconnects</i>	<i>Performance Results</i>
Accounts should never get to this stage, but there is a considerable number that are in dispute over what has been invoiced and the charges applied.	Accounts accurately reflect the freight shipped and charges applied.

#### Step 4.4: Create a results map

Collating their collection of performance results into a simple Results Map provided the billing team – and their stakeholders – with a clear focus on the important results to measure:



## STEP 5: Engage the team in designing their own measures

### Step 5.1: Design measures for each result

The billing team used the PuMP Measure Design template to find the best measures for their collection of Performance Results. PuMP is a performance measurement methodology. Read more at <http://www.staceybarr.com/pump>.



For example, the Measure Design for “Invoices are paid on time and in full” produced 3 performance measures:

<i>begin with the end in mind</i>	Invoices are paid on time and in full.			
<i>be sensory specific</i>	<ul style="list-style-type: none"> <li>• There are no accounts that are unpaid after the due date</li> <li>• All invoices and bank statements can be reconciled</li> <li>• Accounts are not overdue by much</li> <li>• Accounts never become bad debts</li> </ul>			
<i>find potential measures</i>	<i>potential measures</i>	<i>strength</i>	<i>feasibility</i>	✓
	1. Number of invoices not paid on time and in full	L	H	
	2. The percentage of invoices that are paid on time and in full	H	H	✓
	3. The total amount of revenue currently outstanding for accounts that have not been paid by their due date	M	H	
	4. The percentage of invoices that cannot be reconciled against bank statements	L	H	
	5. The average number of days that overdue accounts are overdue by	M	H	✓
	6. The total amount of revenue for invoices classified as bad debts, as a percentage of the total amount of revenue received	H	H	✓
<i>check the bigger picture</i>	<ul style="list-style-type: none"> <li>• The average number of days that accounts are overdue might not be a direct measure of this result but it could prove to be a useful lead indicator.</li> </ul>			

<i>name the measure(s)</i>	<p>On-time Payment = The percentage of invoices that are paid on time and in full.</p> <p>Lateness of Overdue Accounts = The average number of days that overdue accounts are overdue by.</p> <p>Bad Debts as a % of Revenue = The total amount of revenue for invoices classified as bad debts, as a percentage of the total amount of revenue received.</p>
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## Step 5.2: Prepare the measures for implementation

The complete set of performance measures chosen for the billing team's Performance Results are:

<i>Performance Results</i>	<i>Performance Measures</i>
Bills are paid on time and in full	<ul style="list-style-type: none"> <li>On-time Payment = The percentage of invoices that are paid on time and in full.</li> <li>Lateness of Overdue Accounts = The average number of days that overdue accounts are overdue by.</li> <li>Bad Debts as a % of Revenue = The total amount of revenue for invoices classified as bad debts, as a percentage of the total amount of revenue received.</li> </ul>
Customers are satisfied with bill accuracy	<ul style="list-style-type: none"> <li>Customer Satisfaction with Invoice Accuracy = The average satisfaction rating provided by customers about the accuracy of invoices they receive from us.</li> </ul>
Accounts accurately reflect the freight shipped and charges applied.	<ul style="list-style-type: none"> <li>% Freight Movements Billed = The total number of freight movements (consignments) that have been billed as a percentage of the total number of freight movements that have been consigned.</li> <li>Value of Accounts in Dispute = The total amount of revenue associated with accounts that are currently being disputed by customers.</li> </ul>
Customers provide accurate freight types and quantities.	<ul style="list-style-type: none"> <li>Accuracy of Freight Data = Number of errors found in quantity or type of freight that would affect how the freight was charged, divided by the number of freight consignments.</li> </ul>

<i>Performance Results</i>	<i>Performance Measures</i>
Consignment notes are all electronic.	<ul style="list-style-type: none"> <li>• % Freight Consignment Notes Electronic = The number of consignment notes that were supplied electronically as a percentage of the total number of consignment notes supplied.</li> </ul>
Freight is always shipped with a consignment note.	<ul style="list-style-type: none"> <li>• % Freight Consignment Notes Not Supplied = The number of consignments where a consignment note was not supplied as a percentage of the total number of consignments.</li> </ul>

## Next steps...

The next steps for the billing team were to define the data and calculation requirements for their measures, and begin reporting them and using them in monthly team meetings.

### About implementing performance measures...

This case study has demonstrated a process for how to identify what is worth measuring, specifically for hard-to-measure teams whose performance results or goals are not easy to define.

But **there are more steps in the performance measurement process** that follow on from selecting the performance measures, including sourcing the data, computing the measures, graphing them, reporting them and interpreting and using them to improve performance.

The PuMP Blueprint is a methodology to support this entire performance measurement process. When your team has successfully reached this point, **PuMP is a logical next step** for them. For more information:

<http://www.performancemeasureblueprint.com/>