

# The Express Guest Check: Saving Steps with Process Design

**Current procedure requires servers to make four trips to the table to process a credit-card transaction. Here's how to streamline the process**

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THE CUSTOMER and the restaurant both benefit when a restaurant procedure can be accomplished faster or be made more pleasant for customers. The credit-card transaction is a procedure that invites improvement, since the multiple steps involved in settling a bill by credit card occupy a great deal of a server's time and delay customers who have finished their meal and wish to leave.

This article describes a less time-consuming procedure that might work in your restaurant for processing credit-card transactions and outlines the method used to measure the efficiency of the procedure. The method, called process design, isolates and examines each step of a procedure to determine whether some steps could be streamlined or eliminated to enhance efficiency. The credit-card

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## EXHIBIT 1

### Sample process-analysis flow chart



Distance	Time		Activity
	5.3 min.	○ → D ▽ □	work on item ×
50 feet	1.3 min.	○ → D ▽ □	transport item ×
	2.2 min.	○ → D ▽ □	wait to use machine
	1.1 min.	○ → D ▽ □	work on item ×
20 feet	.5 min.	○ → D ▽ □	transport x to microscope
	1.4 min.	○ → D ▽ □	inspect item ×
30 feet	1.0 min.	○ → D ▽ □	carry × to storage unit
	.5 min.	○ → D ▽ □	store item ×
100 feet	1.9 min.	○ → D ▽ □	return to work station

In this nine-step flow chart, the first step is performing an operation with item × (○), the second step involves transporting item × (→), the third step involves waiting to use some equipment (D), the fourth step is completing an operation on item × with the equipment (○), the fifth step involves transporting item × to a microscope (→), the sixth step is inspecting item × (□), the seventh step is transporting item × to the location where finished items are stored (→), the eighth step is storing item × (▽), and the ninth step is the return to the original work station to begin the procedure again (→). If every worker is performing the steps outlined in the flow chart, this operation is clearly inefficient and could be streamlined by division of labor and hiring an individual to collect and transport all items from work stations to the inspection station and finally to storage.

transaction is only one of many restaurant procedures that could be improved through the process-design method.

### Analyzing Tasks

Process analysis, the first step in process design, involves breaking down a procedure into its individual steps. In manufacturing industries, where process design originated, each step was built into a flow chart and timed. The goal was to cut the time required for the procedure by designing a new flow that altered, combined, or eliminated steps.

Process design is somewhat more complicated in food-service operations, because the operator must consider the effect on the customer of any change in procedure. More efficient methods are not necessarily better from the customer's point of view.

When analyzing restaurant operations, the operator can use the standard process flow chart developed for manufacturing (see Exhibit 1).

However, the chart must incorporate additional elements specific

to service operations. For instance, the operator should note all steps that directly involve the customer and indicate the steps in the process where problems could arise. The operator can then analyze each step of the procedure to determine whether the procedure can be streamlined without losing sight of how any change will affect customers.

To create a flow chart for a specific procedure, each step of the procedure is recorded and classified under one of five categories: operation, transport, delay, storage, or inspection. Each step is timed, and in the case of transport, distances are measured. A completed flow chart will highlight inefficiencies by revealing how much time each step of the procedure involves, and a restaurant operator can use the information to determine whether some steps can be eliminated or modified.

### The Slow Charge

A credit-card transaction in a restaurant typically involves at least four trips to the customer's table. The process begins when the cus-

tomers signals the server to request the check or the server comes to the table to prompt the customer by asking if he or she would like anything else. Once the server determines that the customer is ready for the check, he or she leaves the table to prepare the check. The server then makes a second trip to the table to present the check and withdraws while the customer considers the charges. If the customer places a credit card on the check, the server returns to the table to pick up the check and card and leaves to process the transaction.

This involves selecting the appropriate credit-card slip, filling it out, and calling the credit organization's authorization number or using an automatic processing unit to get authorization of the purchase if the check amount exceeds the floor limit for purchases.<sup>1</sup>

The server returns to the table with the customer's card, the check, and the credit-card slip with only the meal charges entered, and discreetly withdraws to allow the customer to check the figures on the credit-card slip, enter a gratuity on the slip if he or she wishes to charge the tip, and sign the slip.

The server returns to the table yet again to tear off the customer's receipt and pick up the slip. Sometimes the customer tears off the receipt and leaves, but the server must still return to the table to retrieve the restaurant's copies of the charge slip. Some banks offer a discount on their processing fee if the server verifies the new charge total including the gratuity,<sup>2</sup> and in those cases, the restaurant's credit-card procedure will include a second call for authorization or

<sup>1</sup>When a check exceeds the floor limit, most restaurants require the server to obtain authorization for the amount charged by either calling the authorization number provided by the credit organization or running the card through an automatic processing unit.

<sup>2</sup>The discount rate charged by credit organizations varies. Amex charges from four to six percent, Visa and MasterCard average 2.5 percent, and Discover Card charges two percent.

## EXHIBIT 2

### Comparison of current procedure and proposed procedure

#### Server Trips

##### Current Procedure

1. Go to prepare check
2. Present check
3. Leave customer after presenting check
4. Pick up card and check
5. Go to processing station to process card
6. Return for customer's signature
7. Leave customer after presenting charge slip
8. Return to pick up signed slip
9. Carry slip to cashier and seek second authorization if necessary

##### Proposed Procedure

1. Prepare slip and check
2. Present slip and check
3. Leave after presenting check and slip
4. Pick up card and signed slip
5. Go to processing station to process card
6. Return to present card and customer's receipt

another turn at the automatic processing unit.

If the customer is anxious to leave and is delayed by slow check processing, the wait may detract from an otherwise enjoyable dining experience. Moreover, other customers are being neglected while the server is involved in the numerous trips necessary to process a credit-card transaction.

### The Quick Charge

Martin Kahn, of Discover Financial Services Card, has proposed a more efficient procedure. When customers request their check, the server can bring not only the check, but a universal credit slip with the sales amount and the sales tax filled in. The check and the credit slip can be presented in a folder that contains a pocket for a credit card. The server tells customers to ignore the credit slip unless they are paying by credit card, and to complete the credit-card slip, sign it, and place the slip and credit card in the folder if they are charging the meal.

Customers will check the figures, fill in the amount of the gratuity, and sign the slip at this time, and

## EXHIBIT 3

### Flow charts for current and proposed charge transaction procedures

#### Current Procedure

Distance	Time		Activity
			Customer requests check <b>C</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks
	.5 min.	○ → D ▽ □	Server prepares check <b>F</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks
	.25 min.	○ → D ▽ □	Server presents check <b>C</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks
	.5 min.	○ → D ▽ □	Customer inspects, puts card out
30 ft.	.5 min.	○ → D ▽ □	Server returns to table
	.25 min.	○ → D ▽ □	Server picks up card <b>C</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks to process
	.5 min.	○ → D ▽ □	Server fills out slip <b>F</b>
	.5 min.	○ → D ▽ □	Server processes slip <b>F</b>
	1.0 min.	○ → D ▽ □	Server obtains preauthorization <b>F</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks
	.25 min.	○ → D ▽ □	Server presents slip <b>C</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks
	.5 min.	○ → D ▽ □	Customer signs [leaves] <b>F</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks
	.25 min.	○ → D ▽ □	Server picks up slip [ <b>C</b> ] <b>F</b>
30 ft.	.5 min.	○ → D ▽ □	[Customer leaves] Server walks

#### Total time

Server: 9 min.

Customer: 7.75 min.

#### Proposed Procedure

Distance	Time		Activity
			Customer requests check <b>C</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks
	.5 min.	○ → D ▽ □	Server prepares check <b>F</b>
	.5 min.	○ → D ▽ □	Server fills out slip <b>F</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks
	.25 min.	○ → D ▽ □	Server presents check and slip <b>C</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks
	.5 min.	○ → D ▽ □	Customer inspects, puts card out, signs slip <b>F</b>
30 ft.	.5 min.	○ → D ▽ □	Server returns to table
	.25 min.	○ → D ▽ □	Server picks up card and slip <b>C</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks
	.5 min.	○ → D ▽ □	Server processes slip and card <b>F</b>
	1.0 min.	○ → D ▽ □	Server obtains authorization <b>F</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks
	.25 min.	○ → D ▽ □	Server presents card and receipt <b>C</b>
30 ft.	.5 min.	○ → D ▽ □	Server walks
		○ → D ▽ □	Customer leaves

#### Total time

Server: 7.5 min.

Customer: 6.75 min.

Note: **C** = times when server interacts with customer  
**F** = potential failure points

the rest of the transaction can be completed in one step. When the server picks up the folder, he or she has the customer's card and a completed and signed slip ready for final processing. The server can obtain authorization for the total amount of the transaction including the gratuity, process the card, give the check and credit slip to the cashier to ring up, and remove the customer's copy of the charge slip. The server returns to the table one

last time to return the credit card and the customer's receipt. The transaction is completed in three trips instead of four.

Exhibit 2 compares the current procedure and the procedure Kahn suggested in terms of the number of steps involved, and Exhibit 3 shows the flow charts used to compare the efficiency of the two procedures. To develop the flow charts, we assigned a distance of 30 feet between the table and the

check-processing area. The contact points when the server is dealing directly with the customer are designated with a *C*, and potential failure points in the flow, where something could go wrong, are designated with an *F*.

Although the proposed procedure would eliminate only one minute of the customer's waiting time, the importance of that time reduction should not be underestimated. A minute can seem very long to a customer who is anxious to leave. In addition, the procedure would reduce the time the server had to devote to the transaction from nine minutes to 7.5 minutes, ample time to replenish other customers' water or coffee, bring a wine list or dessert menu to another table, or begin the process of settling another customer's bill.

**Fewer failures.** The flow charts indicate that Kahn's proposal offers several advantages. Not only does the alternative procedure save time, but it eliminates some of the potential failure points found in the current procedure. For instance, the server is more likely to make an error when filling out the check and the credit slip at different times than when preparing the check and slip at the same time. By using a universal credit slip, such errors as processing the transaction on the wrong credit slip are eliminated.

Problems can also arise surrounding authorization. The authorization number may be busy, the server might forget to obtain authorization, or the server might read the card number incorrectly. Eliminating the second authorization process reduces the number of times such delays or errors might occur.

Finally, the streamlined procedure eliminates some problems surrounding obtaining a signed credit slip as a record of the transaction. In the current procedure,

the customer's card is returned before he or she signs the credit slip. At that point, the customer may leave, forgetting to sign the slip, or may simply "walk." The customer may sign the slip but take the entire slip when departing, leaving the restaurant with no record of the transaction. The server may become involved with other customers and forget to go back for the restaurant's copies of the charge slip, and consequently the slip may be misplaced when the table is cleared.

In the alternative Kahn suggested, the server obtains the customer's signature before the transaction is processed, and the customer's credit card is not returned until the transaction is completed. Customers are less likely to leave when the server is still holding their credit card, and the server can verify that the customer has signed the card at the time he or she is processing the transaction. Only the customer's receipt is returned with the credit card, eliminating the danger of the customer's leaving with the entire slip or the server's forgetting to pick up the restaurant's copies.

**Customer reaction.** The current procedure can create uncertainty. Some customers know that once they have signed the credit slip, they can take their copy and leave. Others remain at the table, waiting for the server to return, retrieve the slip, and present them with their copy. The proposed alternative eliminates this source of uncertainty. It is clear that the transaction has been completed when the server comes to the table, returns the credit card and receipt, and thanks the customers for their patronage.

Restaurant patrons feel a certain degree of uncertainty whenever the server leaves them. They feel somewhat abandoned because they don't know when the server will return.

Both methods of processing a credit-card transaction consequently create some uncertainty, but the method Kahn proposed has some advantage in that the server leaves the customer fewer times before the transaction is completed.

## Industry Response

We interviewed restaurant operators and servers to get their reactions to the proposed system. Their reaction was favorable overall, but they expressed some reservations.

**Increase in credit transactions.** Some operators were concerned that presenting a credit-card slip with the check would encourage more credit transactions. However, most customers decide the method of payment before entering a restaurant, so it is unlikely that being presented with a credit slip will influence their decision.

**Initial customer confusion.** Some of the restaurant personnel we interviewed thought that customers would be confused by the new system. Any initial confusion could be eliminated by a written explanation inside the folder in which the check and slip are presented or by the server's verbal explanation.

**Waste of credit slips.** Some operators objected that filling out credit slips for every transaction, whether the customer pays by credit card or not, would be a waste of time and credit slips. Since most operators know their average percentage of credit transactions, it is easy to determine the cost-benefit ratio of presenting charge slips with every check. If an operation has a high percentage of credit customers, then the time savings and greater customer satisfaction would compensate for the wasted slips. In establishments where customers generally pay cash, this potential waste could be eliminated simply by having servers ask whether the customer will be paying with cash or a

credit card at the time the check is requested.

**Retraining staff.** Some of the individuals we interviewed pointed out that the staff would have to be retrained if Kahn's method were adopted. Although any new method involves retraining, the proposed method is similar enough to the current method that extensive retraining should not be necessary. Moreover, when servers are shown that the new procedure eliminates both steps and potential errors, they are likely to be motivated to learn it.

Both operators and servers were enthusiastic about the concept of a universal credit slip. Operators cited the advantage of having a reduced inventory of credit slips. One operator who accepts five credit cards said that one of the cards he accepts is not commonly presented, and he rarely has more than one or two customers per week who wish to charge their meal on that card. However, when he orders the slips for that card, he is shipped the minimum order of 500. He told us that he throws half away because he uses so few and has nowhere to store them.

The operators and servers we interviewed pointed out that a universal charge slip would eliminate an error that creates costly delays in payment for credit purchases. Occasionally a server will use the wrong credit slip. If the error is not caught before the transactions are sent out, there is a substantial delay before the error is straightened out and the restaurant receives payment. There are no card names on the universal credit slip, and the type of card the customer is using is indicated by the first two digits of the individual card number, which are the card identification code (e.g., 52 for MasterCard, 38 for Diners Club, 60 for Discover Card). In the more peaceful atmosphere of the back office, the slips are

sorted by code number to be sent to the appropriate processing center.

The individuals we interviewed recognized other notable advantages in Kahn's proposed system. These included:

**Increased security.** Operators said that they have problems with customers' forgetting to sign the credit slip or inadvertently taking the entire slip with them, leaving the restaurant with no record of the transaction. In the new procedure, as we mentioned above, the guest signs the slip before the transaction is processed, so the server can verify that the slip has been signed before the guest leaves the restaurant. When the transaction is completed, only the guest's copy of the slip is returned to the table, ensuring that the restaurant has a record of the charge. In the new procedure, the customer could still walk with the slip when it is first presented in the folder, but since the customer is holding the entire charge slip only once, rather than twice as in the current procedure, the number of such walks should be reduced to those that are intentional.

**Improved productivity and service.** The reduction in the number of trips to the table afforded by the proposed procedure would give servers more time to spend with other customers. In addition, some servers told us that they hover in the area during check settlement waiting for the customer to sign the slip because they are held responsible if the customer walks with the slip. They are afraid to take the risk of attending to other customers while the charge customer is holding the slip.

In operations that require both preauthorization of the charge transaction and final authorization after the gratuity is added, obtaining authorization for both the meal and the tip at once eliminates a time-consuming second call and

ensures that the total charge purchase is authorized while the customer is still in the restaurant.

**The universal credit slip.** Although Kahn's step-saving procedure could be adopted using card-specific charge slips if servers asked credit customers what card they would be using at the time the check is requested, we recommend the use of a universal credit slip to eliminate the potential error of using the wrong slip.

The universal slip includes the same information currently found on Visa and Amex forms, but there is no credit-card name on the slip. A slip of this type will soon be available from Discover Card. The cards a particular establishment accepts can be listed inside the folder used to present the check and slip.

### **Simpler and Better**

Whenever a procedure can be made simpler, several advantages emerge. Training is simplified, and with fewer steps, there are fewer opportunities for error. Streamlined procedures save time and increase the productivity of employees. Through process design, many restaurant procedures can be simplified without sacrificing customer satisfaction.

The credit-card processing procedure described in this article is a prime example. Risks to the operation are reduced, servers can complete the transaction more rapidly and move on to attend to the needs of other customers, and above all, customer satisfaction is increased. Once the pleasurable part of the dining experience is over, operators should do their best to make the painful part—paying the bill—as quick and effortless as possible. When a customer has finished the meal and is waiting to leave, seconds may seem like minutes, and minutes, like hours. Settling the bill with dispatch may give a restaurant a competitive edge. □