MERCHANT ADVISORY GROUP ®




# *SAMPLE* PARTICIPANT GUIDE

Last Updated: 4/23/2021

## EXPLORE THE PILLARS OF THE PAYMENTS INDUSTRY

The objective of this course is to enable the learner to be an effective contributor within the payments ecosystem.

## Table of Contents


How to Use this Sample Manual ..... 2
About this Course ..... 2
Technical Support ..... 2

1. Introduction ..... 3
    1.1 Welcome ..... 3
    1.2 Copyright ..... 3
    1.3 Goal ..... 3
    1.4 Objectives ..... 4
    1.5 Topics ..... 4

2. A History of Value ..... 4
    2.1 Introduction ..... 4
    2.2 Topic Goal ..... 5
    2.3 Value ..... 5
    2.4 Summary – A History of Value ..... 5

3. Overview of the Payments Ecosystem ..... 6
    3.1 Introduction ..... 6
    3.2 Goal ..... 6
    3.3 Payments Ecosystem ..... 6
    3.4 Customer Value ..... 7
    3.5 Summary – Overview of the Payments Ecosystem ..... 8

4. The Customer Journey ..... 9
    4.1 Introduction ..... 9
    4.2 Topic Goal ..... 9
    4.3 Customer Personas ..... 9
    4.4 Meet the Merchants ..... 10

    Step 1: Account Setup ..... 11
        4.5.1 Title ..... 11
        4.5.2 Introduction ..... 11
        4.5.3 Merchant POV - Payment Method Attributes ..... 11
        4.5.4 Customer POV - Payment Method Attributes ..... 12

    Step 2: Transaction by Customer ..... 13
        4.6.1 Title ..... 13
        4.6.2 Introduction ..... 13
        4.6.3 Customer Transactions ..... 13

    Step 3: Transaction Data sent for Authorization ..... 15
        4.7.1 Title ..... 15
        4.7.2 Introduction ..... 15
        4.7.3 POS Hardware ..... 15

    Step 4: Clearing and Settlement ..... 16
        4.8.1 Title ..... 16
        4.8.2 Introduction ..... 16

    Step 5: Funds Flow ..... 18
        4.9.1 Title ..... 18
        4.9.2 Introduction ..... 18

    Step 6: Disputes, Chargebacks & Refunds ..... 19
        4.10.1 Title ..... 19
        4.10.2 What is a Chargeback? ..... 19
        Summary – The Customer Journey ..... 19

5. The Cost of Payments ..... 20
    5.1 Introduction ..... 20
    5.2 Topic Goal ..... 20
    5.3 Topic Objectives ..... 20
    5.4 Payment Processing Costs ..... 21
    5.5 Types of Costs ..... 21
    5.5 Summary – The Cost of Payments 21

6. The Value of Analysis ..... 22
    6.1 Introduction ..... 22
    6.2 Topic Goal ..... 22
    6.3 Topic Objectives ..... 22
    6.4 Types of Payments KPIs ..... 23
    6.5 Approval Ratio ..... 24
    6.6 Summary – The Value of Analysis .. 24

7. Summary: The Benefits of Payment Management ..... 25

## How to Use this Sample Manual

This manual is a companion to the sample MP101 eLearning course. Herein you will find illustrations of the screens, as well as the transcript, for the sample provided. Where screens continue further than provided in this sample, a series of ellipses indicate missing materials.

## About this Course

Merchant Payments 101 is a foundational course designed for anyone seeking a role in the merchant payments industry, or who has a stake in the acceptance of payments and is looking to brush up on their skills. The full course will take approximately 4.5 hours to complete the 5 distinct sections - this sample provides approximately 20 minutes of that course.

## Technical Support

This course is presented as a pop-up from your browser window. Please ensure you have pop-ups enabled for seamless viewing of the course.

Note that most technical issues can be resolved by refreshing the learning, through one or more of the following actions:

1. Click the previous button on the learning, then next again to refresh the screen you are on
2. If in a lightbox, closing and reopening the lightbox OR, if you are in a multi-screen lightbox, hitting the previous button
3. Closing the eLearning and reopening it
4. Shutting down your computer and restarting it

If these measure do not work, please contact learningcenter@merchantadvisorygroup.org for further technical support.

## Course Companion Materials (available with full course only)

In addition to the full participant guide, you will find other supporting materials in the resources section of the full course as listed below. These resources are NOT part of the sample course.

- MAG BIN-Expansion Merchant Readiness Guide
- Relevant Fees Schedule (the fee schedules for interchange and assessments)
- 2 Workbooks which you will not need until you reach the final section of the course;
    - **Participant Cost of Payments Workbook** is used throughout the final section and should be opened while you view the module, so that you may experience the information being shared on screen in a working model.
    - **Activity Workbook** is also used in the Value of Analysis section, as a data source to perform the KPI calculations required in the knowledge check.

# Merchant Payments 101_Sample

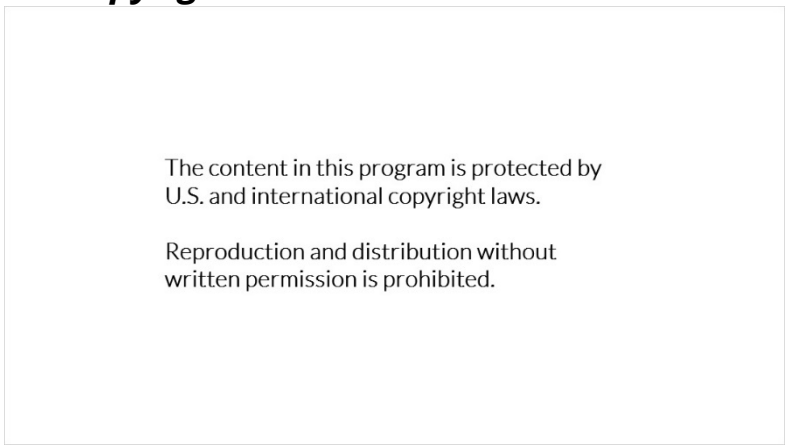
## 1. Introduction

### *1.1 Welcome*

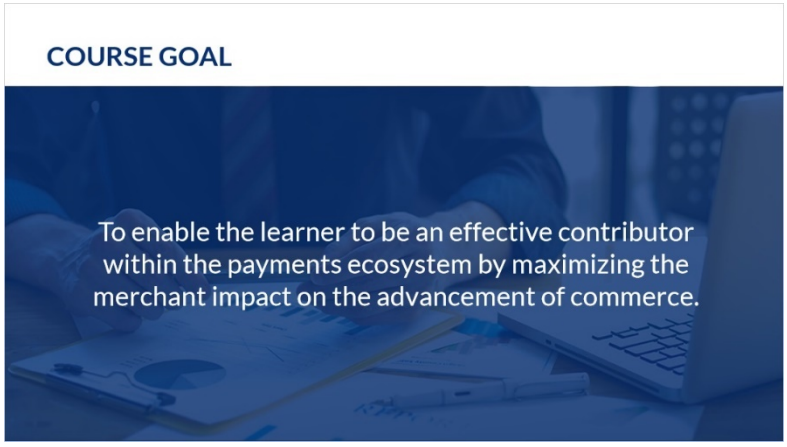



**Notes:** Welcome to Merchant Payments 101.

### *1.2 Copyright*




### *1.3 Goal*




**Notes:** The objective of this program is to enable the learner to be an effective contributor within the payments ecosystem by maximizing the merchant impact on the advancement of commerce.

### *1.4 Objectives*

**Notes:** In order to demonstrate their ability to do this, at the end of the course learners will be able to;




- Describe how the history and progress of payments have influenced commerce today
- Identify the components of a transaction lifecycle in the customer journey
- Demonstrate they can do foundational calculations and analysis of the cost of payments

### *1.5 Topics*

**Notes:** The program is divided into 5 sections, as indicated on screen.

Click on the History of Value to get started!



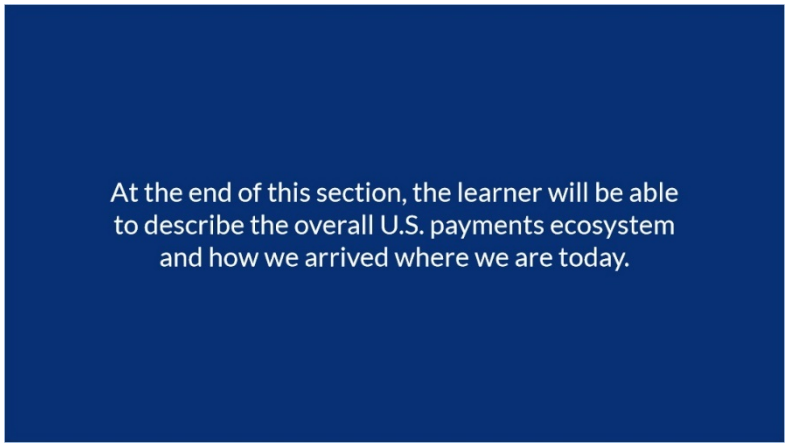

## 2. A History of Value

### *2.1 Introduction*




**Notes:** The history of value in the United States highlights the ever-present and fluid nature of value, how it is stored, accessed, and exchanged.

## *2.2 Topic Goal*



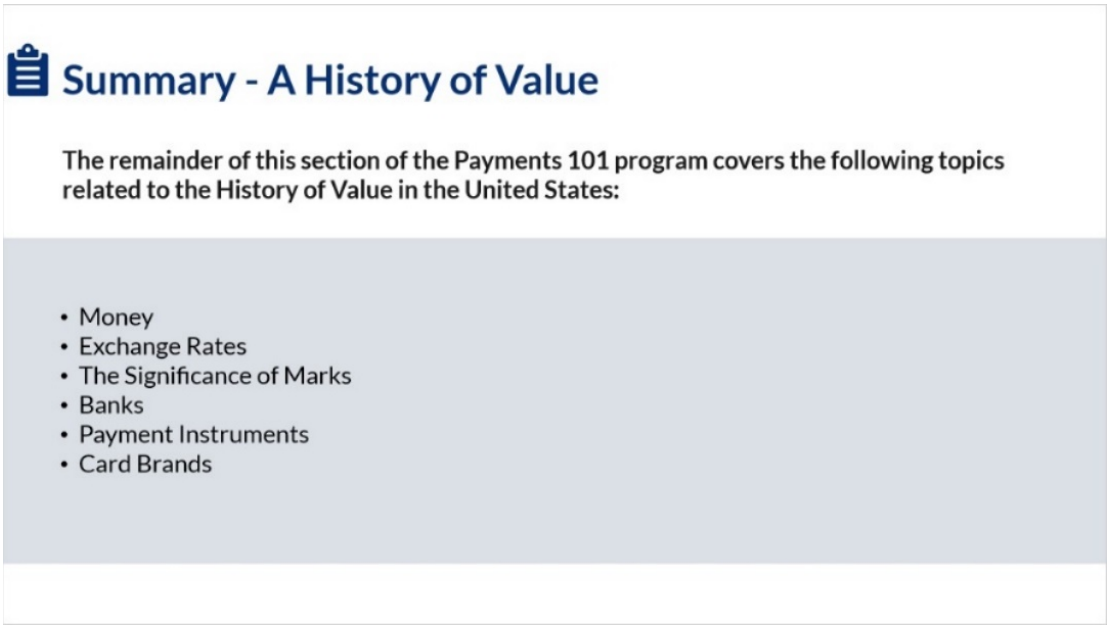

**Notes:** At the end of this section, the learner will be able to describe the overall U.S. payments ecosystem and how we arrived where we are today.

## *2.3 Value*

**Notes:** A Payment is the transfer of value. The value itself can be land, a commodity, a shekel, a coin, or a packet of data. When Americans exchange their goods or labor for a fistful of dollars, it's not the actual paper the dollar is printed on that they are trusting. Instead, they are actually trusting that the U.S. Financial System won't manufacture so much paper currency that each dollar ends up being worth no more than the paper used for printing. What matters to both the buyer and the seller of any commercial transaction, is that they receive trustworthy and convertible value: Money.




## *2.4 Summary – A History of Value*



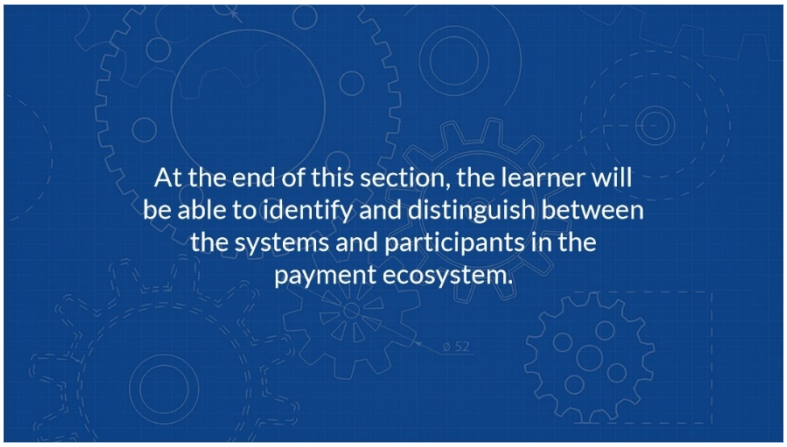
# 3. Overview of the Payments Ecosystem

## *3.1 Introduction*




**Notes:** As you have learned in "A History of Value," the size and complexity of the U.S. marketplace has created significant interdependencies to enable the payments ecosystem we have today.

## *3.2 Goal*




**Notes:** At the end of this section, the learner will be able to identify and distinguish between the systems and participants in the payment ecosystem, within the context of merchant payments.

## *3.3 Payments Ecosystem*




**Notes:** The history of value highlights the ever-changing relationship between the customer and merchant.

For the customer, the value is within the item or service the merchant provides them. In a barter system, it could be difficult for merchants to receive the equivalent value in trade. For each trade, money, which is ever present and convertible, gives both the buyer and seller an equally trusted medium for the direct exchanging of goods and services.

This concept is best displayed when customers hand merchants cash at a brick-and-mortar store. Non-cash payments are more complex. These include checks, bank transfers, and the most prevalent today… card transactions.

For checks and bank transfers, the merchant must trust the customer or withhold the delivery of goods until funds are deposited in the merchant's bank account. It may take several days before the merchant receives the funds from that transaction, making these payment methods more friction-prone.

For card payments, merchandise can be released faster because merchants trust the card brands and customers trust that the merchandise will be as expected. There are exceptions... Customers could have used fraudulent payment credentials or may claim to their bank that the goods provided do not meet the description and want their money back. We will learn more about these types of customer issues later in this course.

Every non-cash transaction requires additional parties to safeguard the trustworthiness of the payment including financial institutions, instruments, networks, processors and sometimes other “wrappers” or technological devices. These parties introduced processes and systems to regulate and monitor these non-cash transactions. When these parties made these payments more trustworthy for customers, they also introduced additional complexity.

## *3.4 Customer Value*




**Notes:** Customers store value in multiple ways. As we saw in the earlier section, they have traditionally held stores of value in commodities, coins, and bank notes.

With the introduction of banking services, consumers began to store that value in bank accounts because banks (and accounting practices) allow for value to be stored and transferred using bills of exchange, otherwise known as checks. To spur further commerce, banks and merchants also offer customers lines of credit to borrow funds for purchases.

Thanks to electronic payments value can be easily accessed and transferred using mediums such as loyalty points, frequent flyer miles, mobile minutes or cryptocurrencies all accessible by phone. Whatever the value may be, a payment is an exchange of value.

When conducting a transaction, the system, instrument, delivery, and technology layers of the payments framework work together to provide the means of connecting the customer’s funds, or value, to the merchant’s bank account. At checkout, the customer chooses which instrument and/or delivery technology they want to use. It is common for multiple payment instruments to access the same account.

Merchants rarely have the insight into why customers choose which payment instruments to use. Convenience, cost, rewards programs, and data visibility are all considerations for the customer

when making a purchase. Regardless of how or where they pay, customers are generally unaware of the impact their choice makes on the merchant.



When a customer makes a payment, they are funding their purchase from a store of value such as cash, a bank account, a credit line, or some other store of value. Regardless of the type of payment instrument or payment network used, a payment is the transfer of the customer's value to the merchant.

Click the buttons on the next slide to learn more about each customer account type.

## *3.5 Summary – Overview of the Payments Ecosystem*



# 4. The Customer Journey

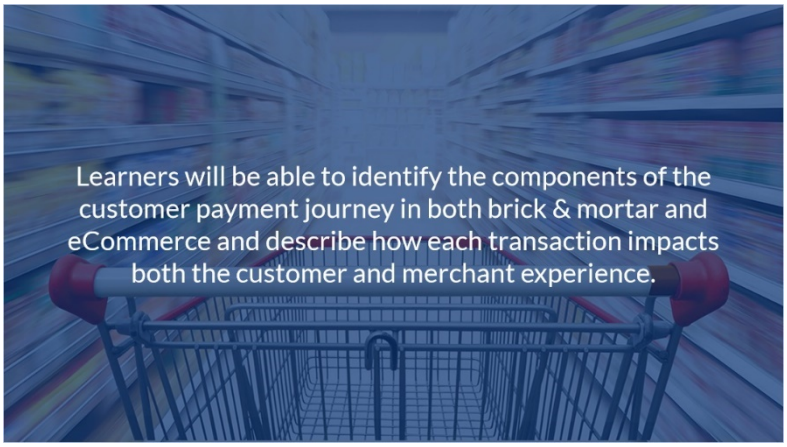
## *4.1 Introduction*

**Notes:** This section explores the multiple steps that make up the customer's payment journey - both what the customer experiences, as well as the payments experience that occurs "behind the scenes."




## *4.2 Topic Goal*

**Notes:** At the end of this section learners will be able to identify the components of the customer payment journey in both Brick & Mortar and eCommerce and describe how each transaction impacts both the customer and merchant experience.

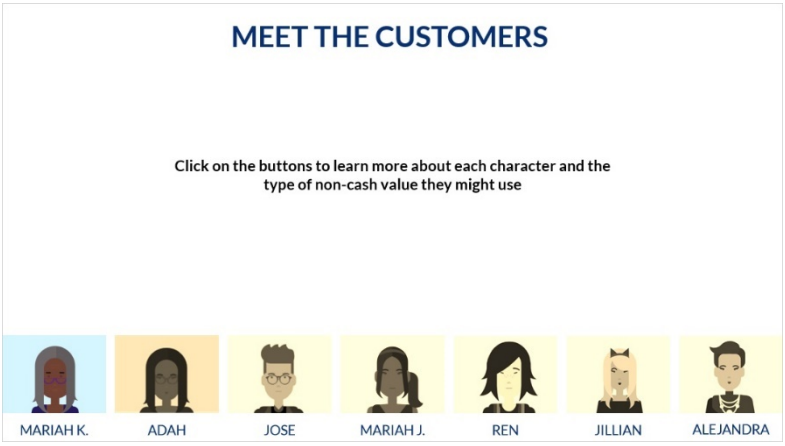



## *4.3 Customer Personas*

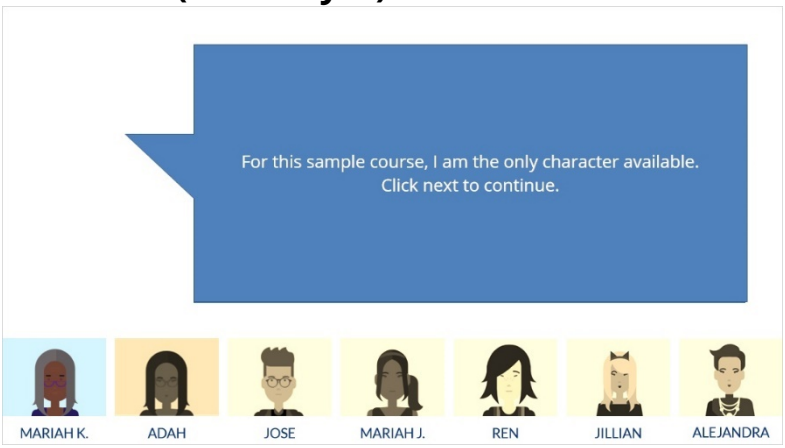
**Notes:** Meet the Jimenez family and friends. They will appear throughout the program to help us understand how the payment choices customers make can impact the merchant's bottom line.

Click on the buttons to learn more about each of them and the type of non-cash value they may use as customers.

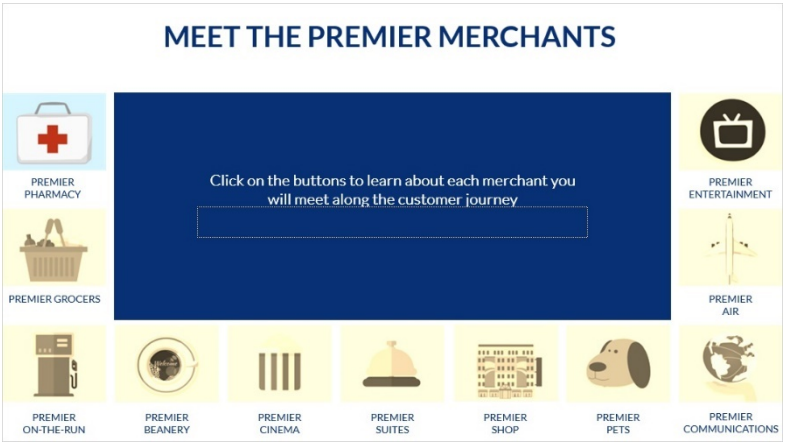
Click next when you are ready to continue.



## MARIAHK (Slide Layer)

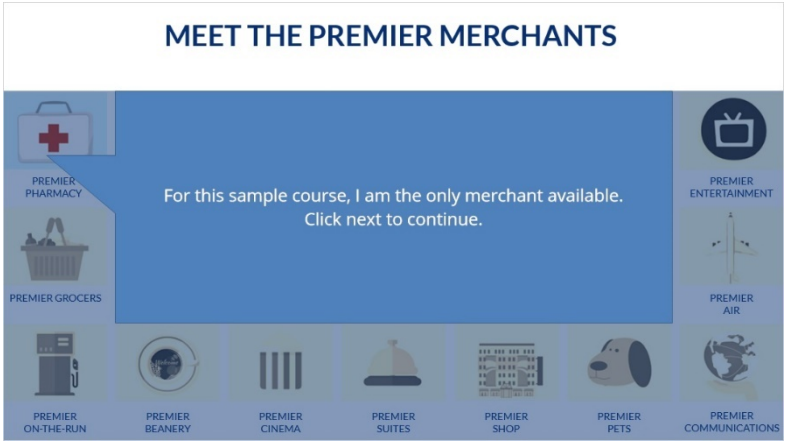



## *4.4 Meet the Merchants*




**Notes:** Each of the merchant's in today's customer journey are businesses owned by Premier Holding Company. You will learn more about the company later in the program. For now, click on the buttons to learn a little about each shop.

Premier **Pharmacy is a neighborhood pharmacy and gift shop frequented by the Jimenez family…**



## Step 1: Account Setup




### *4.5.1 Title*

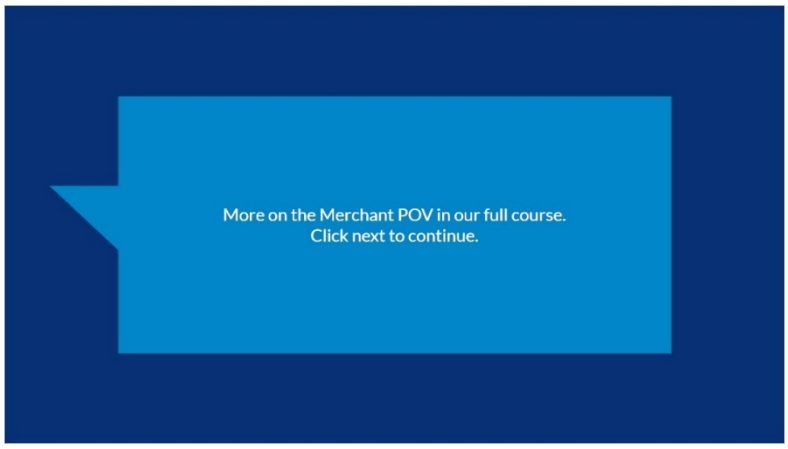
**Notes:** Step 1 in the journey for the non-cash customer involves them setting up access to their stored value.

### *4.5.2 Introduction*




**Notes:** Once a customer has a deposit account they generally have access to a Debit Card and checks to directly access their value. Through their banking portal they can initiate ACH credit transfers to pay bills or use their account information to setup recurring payments for bills or paychecks.
This step also covers the anatomy of an account, whether it be a payment card or a bank account.

### *4.5.3 Merchant POV - Payment Method Attributes*




**Notes:** Now, let's talk about the different types of payment methods by starting with how merchants decide which of these payment methods to accept. While merchants consider several factors their first concern is to support payment methods that their customers want to pay with. So, the most important attribute for accepting a payment method is how many customers use that method. Generally, the second most important attribute is the cost of acceptance, followed by the risk of fraud or potential penalty fees like chargebacks associated with the payment method.

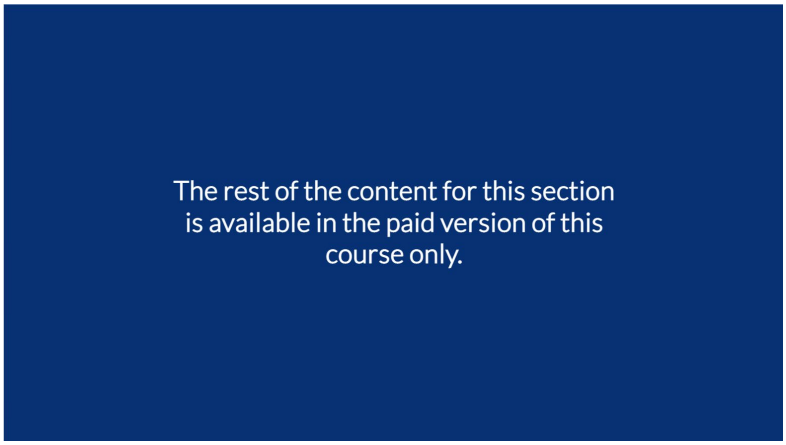
From the chart onscreen it can be seen that cards are the most widely available non-cash payment method but they are also the most expensive for merchants...

## *4.5.4 Customer POV - Payment Method Attributes*




**Notes:** Consumers make their decisions about which payment method to use based on a different set of criteria. Although consumers may pay annual fees for their credit cards or monthly account fees for their deposit accounts linked to their debit cards, they rarely pay direct transaction fees when they make a purchase.

Generally, the U.S. Consumers' choice of payment method is driven by the benefits or rewards that they get when they use the payment method...



# Step 2: Transaction by Customer

## *4.6.1 Title*

**Notes:** Step 2 is when the customer makes a purchase by presenting cash, or swiping, dipping, tapping, typing, or scanning to access their stored value.

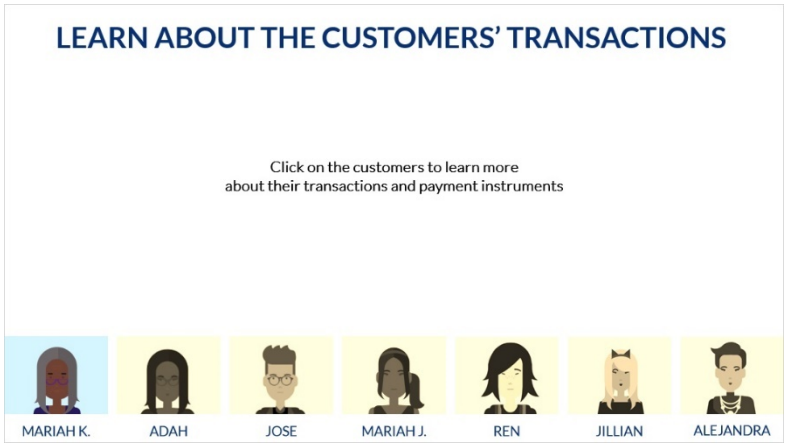



## *4.6.2 Introduction*




**Notes:**
In order to access that stored value, the merchant - whether in-store, online, or via mobile technology - must have the software and hardware to support that purchase and convey information between all parties seamlessly to create a frictionless experience.

## *4.6.3 Customer Transactions*




**Notes:** An individual provides the payment credentials when they make a purchase, whether in a store or through e-commerce or mobile, and the merchant collects those credentials toward the purchase of goods or services.

Click on the customers to access their payment instruments and learn more about their transactions**.**

**Mariah Kimathi - Check:** Mariah is using a paper check at her local pharmacy, Premier Drugs, which is a locally owned pharmacy that also sells personal care items, gifts, cards, and local artisan goods...




The rest of the content for this section is available in the paid version of this course only.

# Step 3: Transaction Data sent for Authorization

### *4.7.1 Title*

**Notes:** Step 3 is when the transaction is sent for authorization.

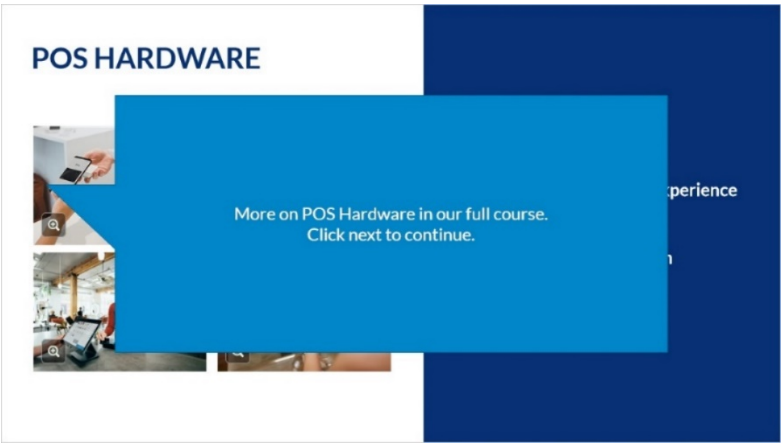



### *4.7.2 Introduction*




**Notes:** Facilitated by acquirers and processors, the authorization allows the exchange of payment information to occur between the merchants, the networks, and the financial institutions.

### *4.7.3 POS Hardware*




**Notes:** Point-of-Sale devices (POS's) were implemented to reduce risk to issuers and to improve the customer experience on the merchant end. These devices automate the authorization process on the merchant side and allow the issuer to approve or decline most in-store transactions. As stated earlier, transactions involving Point-of-Sale devices qualify as card present transactions...

The rest of the content for this section is available in the paid version of this course only.

## Step 4: Clearing and Settlement

### *4.8.1 Title*

**Notes:** Step 4 is the clearing and settlement of the transaction. This occurs when the customer's bank receives and approves the transaction and sends the payment back through the system.




### *4.8.2 Introduction*

**Notes:** Clearing is the term that covers all of the activities that occur from the time the customer commits their funds for a purchase until settlement.

For checks and ACH, this means routing the transaction to the customer's bank to learn if the committed payment is valid and that the account has sufficient funds for payment. In card payments, this already occurred during the authorization step.

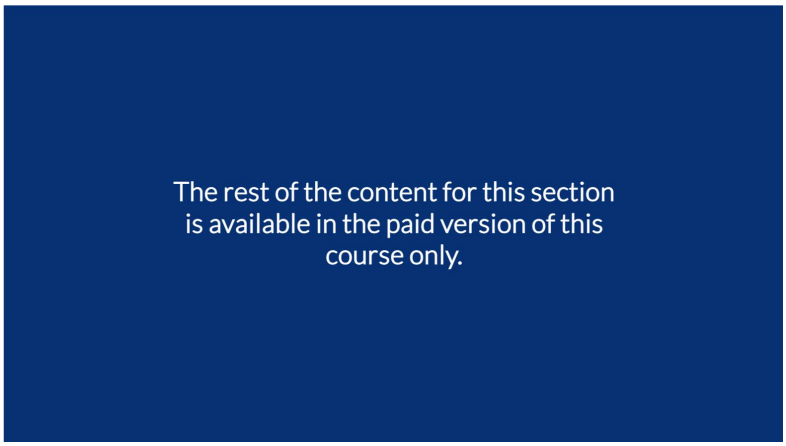
**CLEARING**

All activities that occur from the time the customer commits funds for a purchase until settlement.

During clearing for a card payment, the merchant submits a file containing all of their approved authorizations to their acquirer. How that file is submitted is called a capture. The acquirer in turn

submits that transaction information to the card brand to begin the funds withdrawal process with the issuer.

Settlement is the delivery of those committed funds. Checks and ACH transactions are settled at face value. With card transactions, the issuing bank reimburses the acquirer, less an interchange reimbursement fee for assuming the risk of non-payment from the customer.



# Step 5: Funds Flow

## *4.9.1 Title*



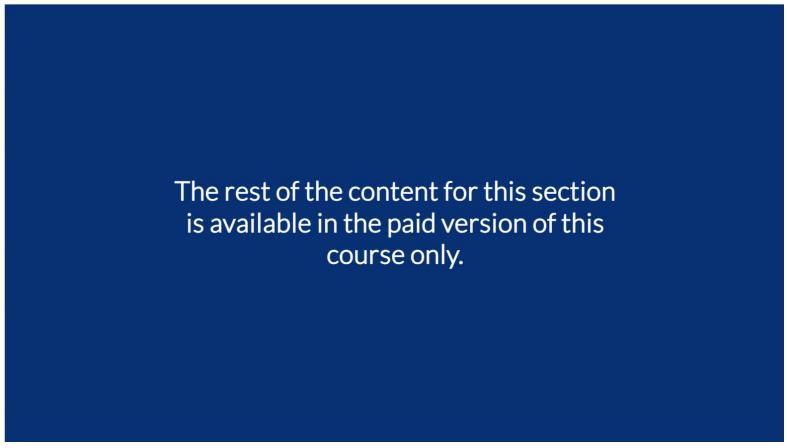

**Notes:** In Step 5, if the transaction is valid, we see the funds flow… the cardholder will see the sale amount reflected on their account, and all fees are assessed and paid to the system members.

## *4.9.2 Introduction*




**Notes:** Within any payment system, the settlement system dictates how funds exchange hands between members. In a gross settlement system, each transaction credits and debits the corresponding accounts as it clears and settles. In a net settlement system, the members debit their customers' accounts and the Issuers wire funds to the acquirer, minus interchange and the card brand's fees. The acquirer then credits the bank account associated with the MID less their discount fee and any other value service fees and fines that the merchant may have incurred. This funds transfer can happen in as little as 24 hours after receiving payment from the issuer.

To ensure that the correct amount of money has been deposited in their accounts, merchants reconcile the bank deposits to the settlement files they receive from their acquirers. Receiving a settlement file does not ensure that funds are deposited into a merchant's account, or that the amounts match. It is up to the merchant payments professional to make sure they do.



# Step 6: Disputes, Chargebacks & Refunds

## *4.10.1 Title*

**Notes:** Up to this point, everything we've discussed involves satisfied customers and no fraud. Now let's dig into the core considerations when things go wrong. This section will specifically cover payment card transactions of unsatisfied customers or fraudsters.




## *4.10.2 What is a Chargeback?*

**Notes:** The customer notices charges on his credit card statement for purchases they didn't make. Or the customer was sold goods that were less than advertised. Now there's a problem and the customer disputes the transaction, also known as a chargeback. Chargebacks give the customer recourse if their personal data has been stolen and used to buy things without their consent…

## *Summary – The Customer Journey*

### Summary – The Customer Journey

**The detail within the Customer Journey covers the following topics (and more!):**

- Case Studies for each Step and distinct Payment Type
- Payment Systems, Card Types, Characteristics, & Anatomy
- Push vs. Pull, Card Present vs. Card Not Present, and Pin vs. Signature Transactions
- POS Hardware
- More on Authorizations
- More on Clearing and Settlement
- More on Chargebacks including types and cost
- Fraud

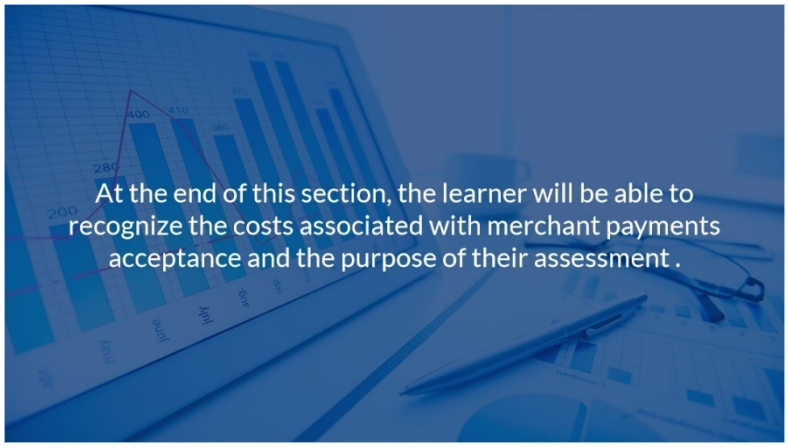
# 5. The Cost of Payments

## *5.1 Introduction*

**Notes:** This section explores the complex cost structures associated with accepting payments today. There are many terms and acronyms in this section, be sure to consult the glossary in the upper right of the player - next to the resources area - for quick definitions of each to support your learning.




## *5.2 Topic Goal*




**Notes:** At the end of this section, the learner will be able to recognize the costs associated with merchant payments acceptance and the purpose of their assessment.

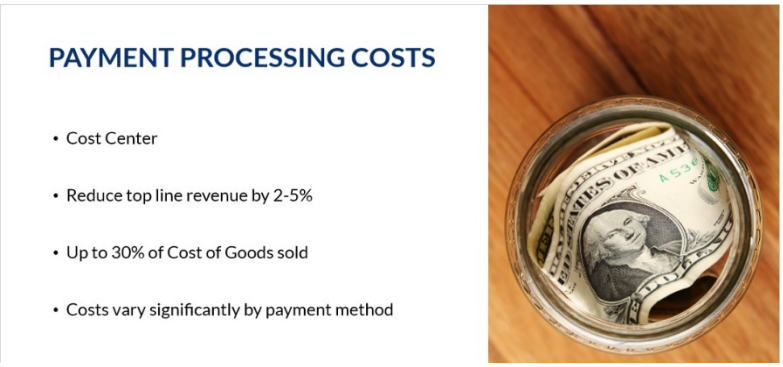
## *5.3 Topic Objectives*

**Notes:**
They will do this by demonstrating they can;

- Recognize the components of payment processing costs
- Identify the impact of the various merchant payment fees on the cost of payments
- Describe how the Durbin Amendment impacts the cost of interchange



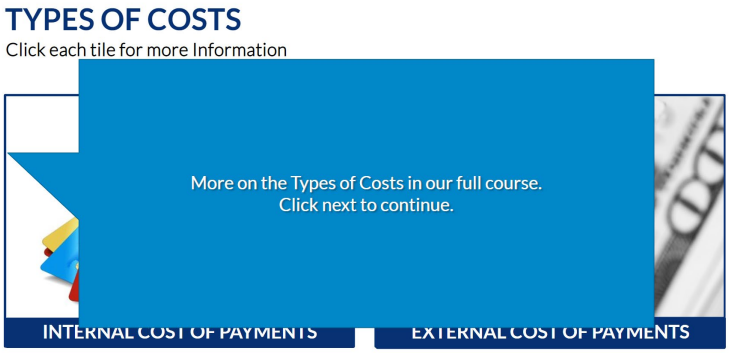
## *5.4 Payment Processing Costs*




**Notes:** Payments have traditionally been thought of as a cost center. Processing costs account for 2-5% of a merchant's top line revenue - but it can add up to 30% of the cost of goods on a small ticket.

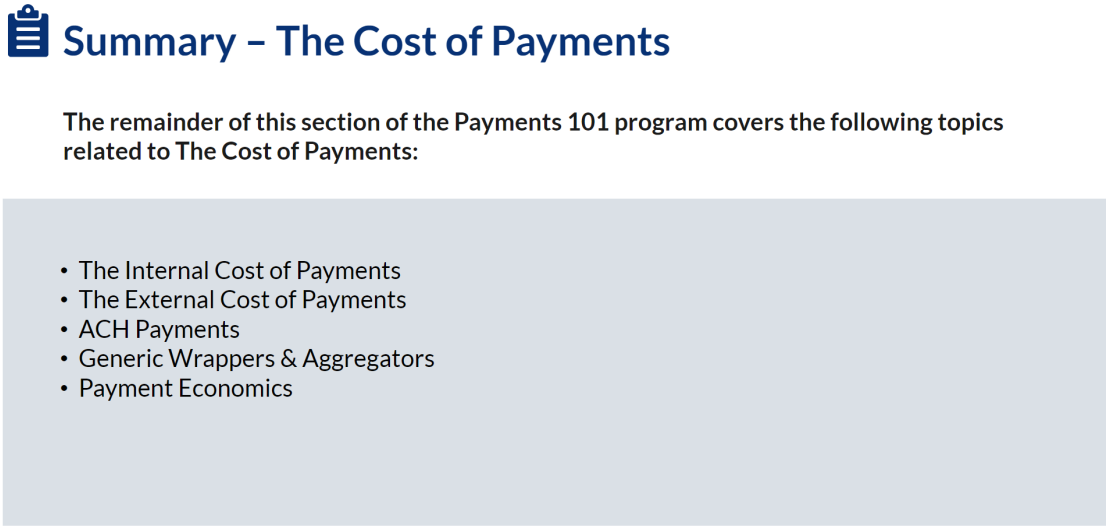
The payments industry services merchants using complex fee structures, billing models, and providers of varying services. The sustained complexity provides compelling evidence that managing payments is vital. How steep the cost of accepting payments becomes depends on many factors, some of which merchants can control. Payment processing costs vary significantly based on the payment method. So let's better understand the costs associated with payments by organizing the costs into two categories - External Costs and Internal Costs.

## *5.5 Types of Costs*




**Notes:** Click to learn about each type of cost category.

## *5.5 Summary – The Cost of Payments*



# 6. The Value of Analysis

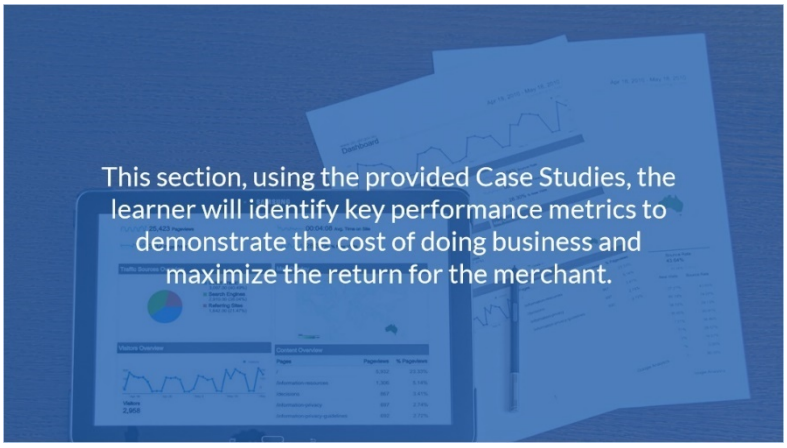
## *6.1 Introduction*

**Notes:** There are many benefits merchants can realize by closely monitoring payments program analytics, including key performance indicators and the cost of payments. By understanding the organization's baseline, operational improvements can be made because anomalies will be more easily identified, investigated, and more expediently resolved.




## *6.2 Topic Goal*

**Notes:** In this section, using the provided Case Studies, the learner will identify key performance metrics to demonstrate the cost of doing business and maximize the return for the merchant.



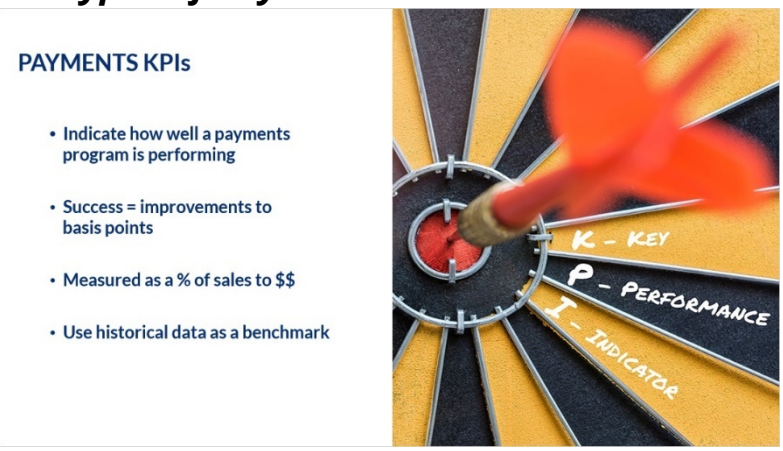

## *6.3 Topic Objectives*

**Notes:** They will do this by demonstrating they can;

- Identify and calculate the key performance indicators (KPIs) necessary to monitor a merchant's payments program
- Recognize the importance of each of the various payment KPIs in improving a merchant's payments program
- Identify cost savings opportunities for a merchant using acquirer's reports and transaction files



## *6.4 Types of Payments KPIs*




**Notes:** Merchant Payment Professionals use Key Performance Indicators from differing types of payments data to understand how well their payments programs are performing.

For the payments game, success lives within basis point improvements. Unless explicitly stated otherwise, metrics should be measured in percentages of sales to hard dollar values.

KPI performance should also be measured against historical data, as is done for all the KPIs we will explore. Using historical data as a benchmark, merchants can quantify tolerable levels of variance in their data to determine adequate, troubling or stellar performance. Tolerances can be thought of as margins of error when determining if you are over or underperforming on a specific KPI.

Payments KPIs can be categorized into three categories, Operational, Financial, and Risk Management…

## Types of Payments KPIs 2

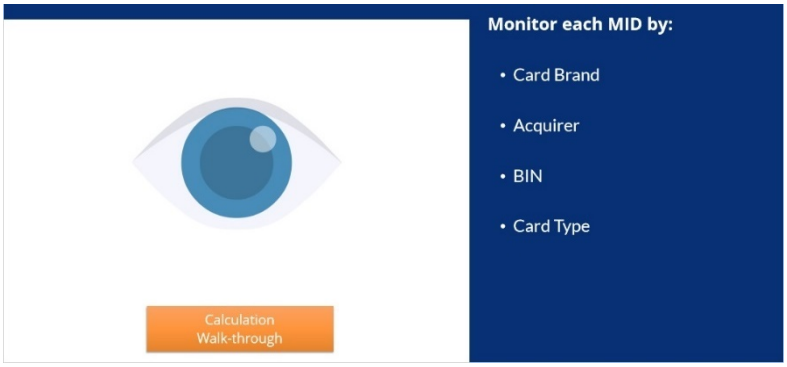


## *6.5 Approval Ratio*

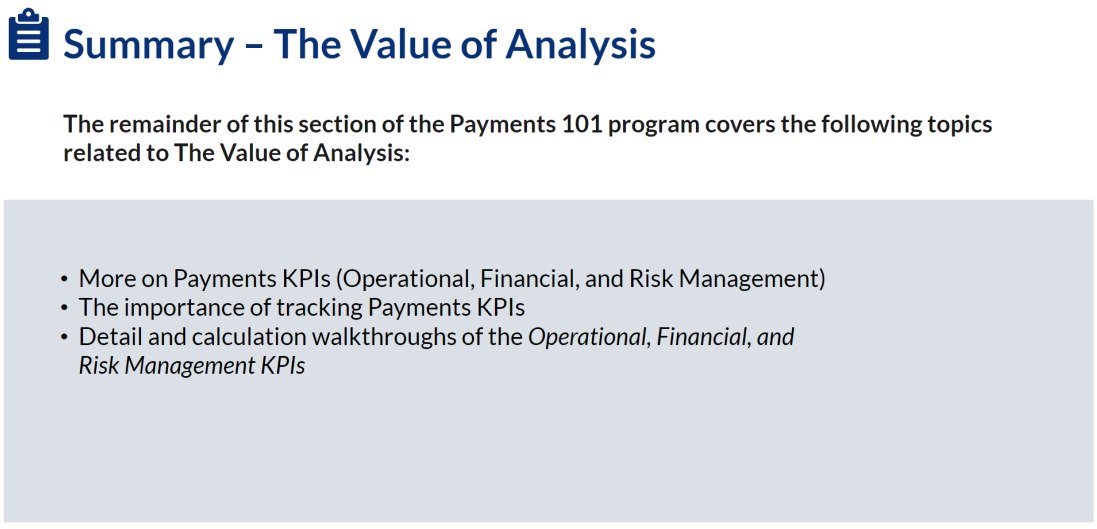



**Notes:** The approval ratio measures the performance of payment operations within a single number. Higher approval rates lead to higher sales and more revenue. This KPI directly supports the Conversion Rate KPI valued across several other departments within a company. Lower approval rates mean less sales and an increased customer insult rate, which could lose future customers. While there is little that merchants can do to change an issuer's approval or decline decision, a sudden and major decrease in approvals may be due to a merchant data transfer problem or an increase of fraud activity on the MID submitting the authorization request. When this ratio drops below historical norms, merchants need to investigate and resolve the issues that cause these challenges.

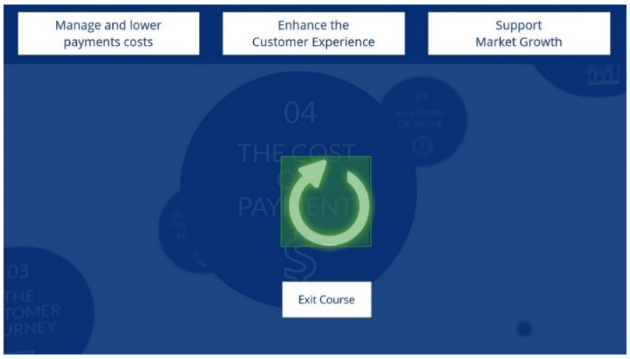
Click on the calculation walk-through button to follow the approval rate calculation video, you should also refer to your downloaded workbook for the clearest view.




## *6.6 Summary – The Value of Analysis*



# 7. Summary: The Benefits of Payment Management




**Notes:** As we learned in the Value of Analysis, payments directly affect a company's bottom line. Yet, it provides much more than just a financial impact. Payment and fraud fees make up anywhere from 4-8% of a merchant's top-line revenue. An approval rate improvement of 1% can add up to millions in new sales without unnecessary customer churn. Adding the right new payment method can unlock hundreds of millions of new customers that were previously unreachable. Now that you're conscious of this common, esoteric world, these are the three ways payments provide value to a merchant's overarching business goals.

- Manage and lower payments costs
- Enhance the customer experience
- Support market growth

The actions of an equipped and well managed payments function supports these three goals and does not hinder the business. The good merchant payments teams don't optimize to any one KPI without considering the impact to all the other KPIs. An improvement in approvals may not be worth the headache in additional chargebacks and disputes.

Merchant payments professionals balance these business goals on a daily basis which trains us well for using data to prioritize actions in a fluctuating world. Welcome to the payments game. Click on each of the buttons on screen to learn more.

**Manage and lower payments costs.** Large global merchants rank the cost of payments as one of their top five challenges. While a merchant payments professional can renegotiate a contract, it's a small percentage of their actual payments costs. Instead processing a transaction to minimize non-negotiable fees like interchange and assessments prove more valuable.

**Enhance the Customer Experience.** Payments enhance the customer experience by not letting the customer experience falter at the precipice of a purchase. Taking a customer's money is one of the most intimate things a merchant can do. It is vital that payments support the trust that is built during the rest of the customer experience. That means payments can't fail due to outages or false declines. Refunds and statement descriptors need to be clear to understand.

**Support Market Growth.** While this course predominantly covers U.S. Card and bank payments, there's a whole world we haven't discussed. Cards are the dominant consumer payment method in the U.S., but that does not hold true in the vast majority of the world. Understanding, implementing, and handling the payment methods that make the most sense for the markets you sell in is a vital part of the payments job.

We hope you found this course insightful, educational, and leaves you prepared to manage your own payments program.

## ADDITIONAL MATERIALS IN THE FULL COURSE PARTICIPANT GUIDE:

***APPENDIX A: GLOSSARY***

***APPENDIX B: FINAL EXAM PREPARATION***

***APPENDIX C: FINAL EXAM CASE STUDY***