

# Mapping EBR - Understanding how your POS integrates with EBR



Understanding your POS will help you determine what you can or can't investigate:

- Take a POS class through the Sales Training Team
- Understand the Transactions
  - Types of Transactions – Sale, Return, Exchange, Suspends, Voids, etc
  - Types of Data – collected (scanned or enter), system looked up (prices) and printed on receipts
- What type of activity does your Company allow at POS?
  - Discount methods \$ vs. %
  - How many different ways can a transaction be altered?
- Think of how the POS can be manipulated and the controls in place:
  - System Controls vs. Business Rules (policy & procedures)

## What's in your T-Log?

**T-Log or Transaction logs are the data files that are used to transmit the transactional information and related codes/flags from the POS:**

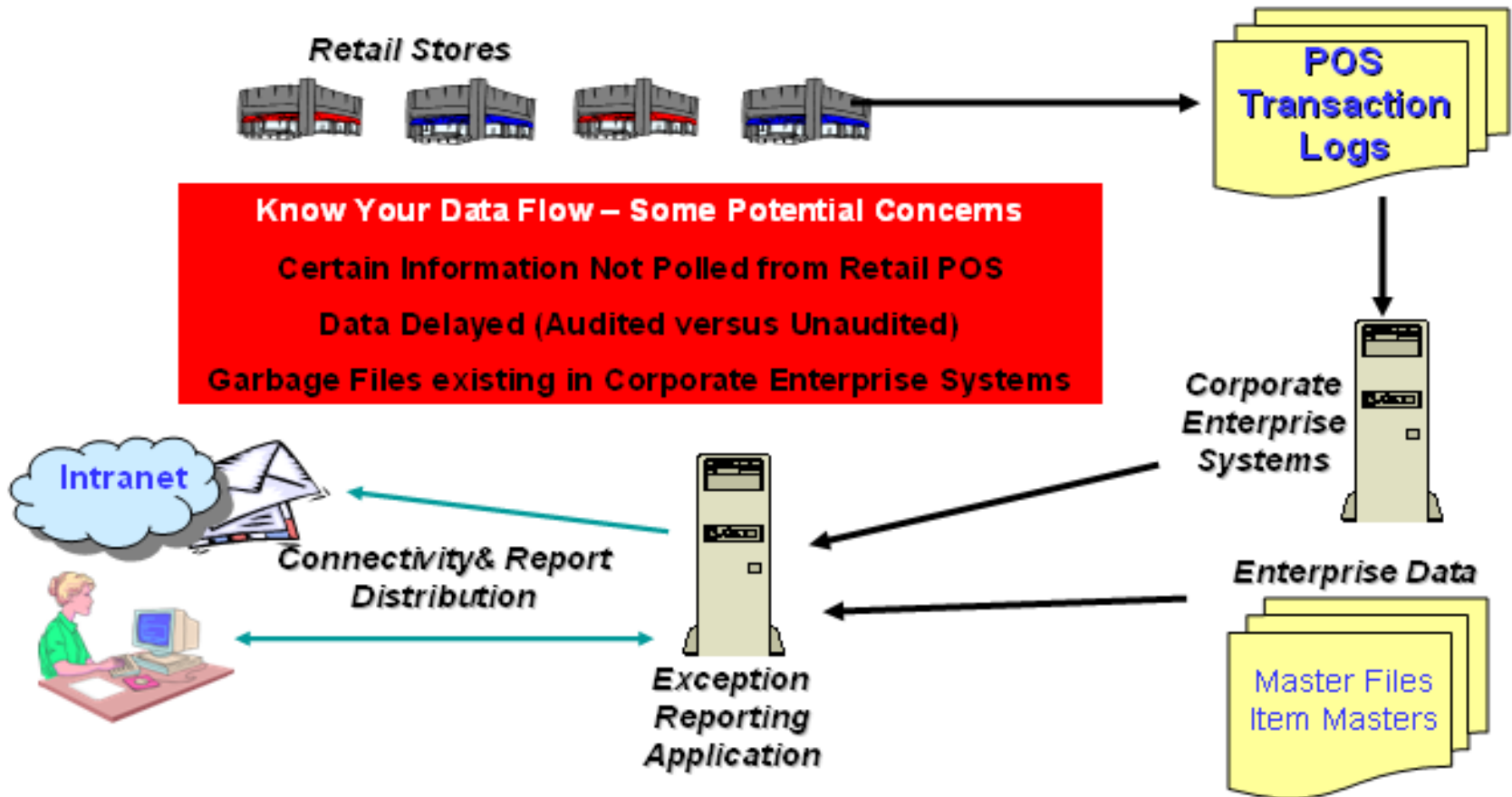
- What is the data flow process to your EBR? **POS T-Log to the EBR**
- Are there any potential systems that may drop data? **POS to Audit/EDW to EBR**
  - Do you know if sales audit has altered that transaction?
  - Is it raw data or audited?
- Knowing what's included and excluded from the T-Logs is critical for EBR Analysis.
- What could be passed and loaded into my EBR application?

# System Data Flow

Making the most of your LP systems.

(Provided by Dave Johnston)

## Generic Data Flow: Point of Sale to Exception Reporting Tool



# Data Layout

Making the most of your LP systems.

## What's in your T-Log? What data is available?

Record Type	Description
A	Paid In/ Payment
C	Non-Merchandise Activities
D	Discounts
E	Paid Out
G	Associate
I	Merchandise Item Details
M	Miscellaneous
T	Transaction Totals
U	Tenders
X	Returns
Y	Credit Authorization

	Field	New Type	Start	New Size	Field Name	Field Start	Field Size	Comments
	Record Type	A	1	1				
	Division	N	2	2				
	Store	N	4	5				
	Register	N	9	3				
	Cashier	N	12	3				
	Salesperson	N	15	10				
	Transaction Date	N	25	6				
	Transaction Time	N	31	6				
	Transaction Number	N	37	5				
	Return Flag	N	42	1				
	Post Void	N	43	1				
	Record Count	N	44	4				
	Original Transaction Number	N	48	5				
	Filler	N	53	1				
	Promo Flag	N	54	1				
	<b>Block Data</b>	<b>A</b>	<b>55</b>	<b>83</b>				
	Transaction Date	N	138	8				
	Filler	N	146	28				
	Filler	A	174	2				
<b>Record Type</b>	<b>BLOCK DATA</b>							
<b>A</b>								
<b>Payment</b>	Type	N	55	1	TYPE	55	1	
	Sign	A	56	1	AMOUNT	56	10	
	Amount	N	57	9				
	Reference	N	66	18	ACCOUNT	66	18	
	Filler		84	54	FILLER	84	92	

# Example Item Data

Making the most of your LP systems.

	Field	New Type	Start	New Size	Field Name	Field Start	Field Size		Comments
<b>I</b> <b>Item</b>	SKU	N	55	20	STOCKNUM	55	20		
	SKU Type	N	75	1	TYPE	75	1		
	Quantity	N	76	2	QUANTITY	75	3		
	Sign	A	78	1	EXTOTAL	78	10		
	Actual Amount	N	79	9					
	Sign	A	88	1	PREDISCAMT	88	10		
	Full Price	N	89	9					
	Filler	N	98	2	TAXSTAT	98	1		New Field
					PRICECHG	99	1		New Field
	Sign	A	100	1	PLUPRICE	100	10		
	Original Price	N	101	9					
	Filler	N	110	1	OFFLINEFLG	110	1		New Field
	SKU scanned vs keyed	N	111	1	SWIPEFLG	111	1		
	Filler	N	112	2	PLUIND	112	1		New Field
					PLUFEATIND	113	1		New Field
	Return Code	A	114	4	REASONCODE	114	4		
	Line Void	N	118	1	LINEVOID	118	1		
	Filler		119	19	FILLER1	119	27		
					VOIDOVER	146	1		New Field
					FILLER2	147	29		

I08009070029620000000940070220102043054670010020000000  
 I08009070029620000000940070220102043054670010030000000  
**I08009070029620000000940070220102043054670010040000000**

4569059801 00000900 0000090000 00000900010000001  
 63729301412601 000001250 00000125000 000001250010000001  
**4569063701 00000000 0000060000 00000600010000001**

SKU EAN	Item Desc	Qty	Line Void	PLU Price	Ln Disc Amount	Price Ovrnd	Extded Amount
45690637	TB1oz_MSBC_TRUEB	1	---	\$6.00	\$6.00		

# T-Logs

## How specific is your T-log?

- **Is the data in the fields and values exactly what you expected?**
- **Is the data useable/understandable to the end user?**
  - Tender Code Changed from “01” to CASH, “30” to Credit...
  - Transaction Types – “S” to Sale, “R” to Return, “E” to Even Exchange...
- **Does similar activity get lumped together like discounts or voids?**
  - Are all line discounts shown or are multiple discounts rolled into one amount?
  - When an item is marked down does the t-log specify if it was an operator markdown or a system markdown?
- **Can you tell difference between certain activity?**
  - Indicators/Flags - may be values of 0 or 1, meaning “No” or “Yes”
  - Examples-Swiped vs. Keyed; Employee vs. Non-Employee; Focus vs. Non-Focus
    - Items that have been hand keyed or scanned – similar to credit cards?

## EBR can be used to help bring about changes to POS:

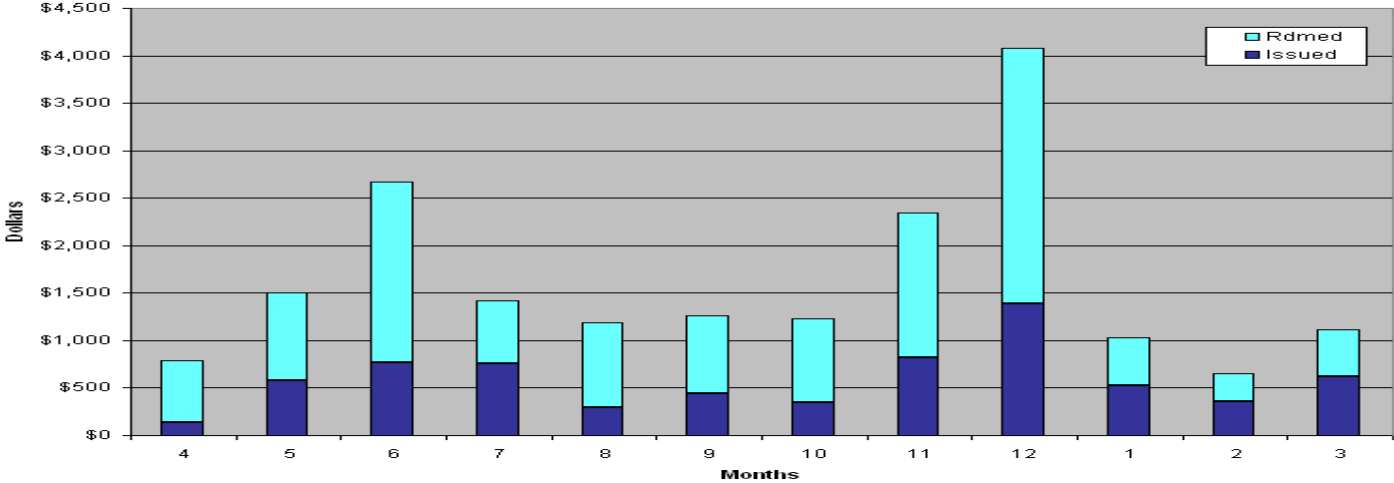
- Identify the need for system controls vs. policy & procedures
- Validate the Potential for Control Failures
- Prove ROI on the POS change through Reporting

## How often is this feature used and will it have effect on customer service?

- Are there processes in the system that are obsolete?
- Are there transaction that provide too much opportunity for dishonesty?

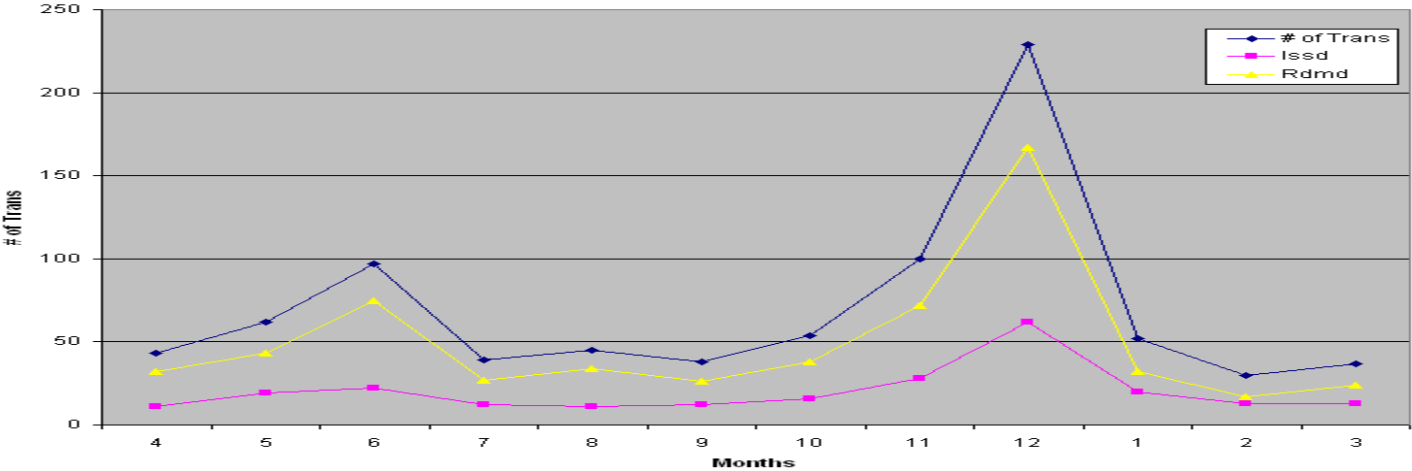
# RIO Example

Card as Certificates



What is the Dollar Impact for the Last Year?

How many customers impacted for the Last Year?



- **Have new features been added that are going to cause issues with current queries or exceptions?**
  - Multiple receipted returns
  - New Transaction types
  - Price inquiry inside a transaction
- **Have you been involved in making the changes?**
  - When did you first learn about these changes?
  - Are the T-Logs capturing enough data in relation to the changes? (i.e. Associate logon)
  - Is the change adding or eliminating a POS function / option?
  - Do modifications need to be made to your EBR application to collect this new data?
  - Has it been mapped properly to your EBR application

## Known Impacts to be aware about:

Discounts – Code (system vs. manual) and Promotional Types

Discounts via Promotional Reward Cards or on Gift Cards (especially 3<sup>rd</sup> Party)

Line Voids / Clears / Deletes – previously may not have been captured

Balance Inquiries / Price Verification – outside or within Sales transaction

Price Adjustments – X Days allowance for Sales Pricing

Original Receipt -

- Re-Print of Receipt or Gift Receipts
- Validation and Data Storage Thresholds
- Multiple Original Receipts per Return or Exchanges
- Transactional Order – Returned items followed by Purchased items?

Cash Out of Stored Value Cards (Gift Cards or Merchandise Credits)

Real-Time Transaction Recording at Corporate or Central Depositories

# Future Data Feeds

## **POS Central Depositories and Data Warehouses:**

Data is being captured by numerous departments for various purposes

Data Warehouses are capturing more and more information for longer periods

## **Consider instead of getting T-Log files, capturing the data from Database Connection and feed**

Less time in delay for data capture or real time analysis

Less duplication of data storage

Less opportunity for discrepancies between POS and EBR

# Questions

Making the most of your LP systems.

