

***EPC* FIELD TEST**

# **BOARD OF OVERSEERS MEETING**

**NOVEMBER 14-15, 2001**

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## OBJECTIVES

**OBJECTIVE OF THE FIELD TEST IS  
TO DEMONSTRATE THE POWER  
AND POTENTIAL OF *EPC* IN THE  
REAL WORLD ACROSS THE  
SUPPLY CHAIN**



## ACTION STANDARD

- **PROVE TECHNICAL FEASIBILITY**

- ✱ Install, debug and evaluate effectiveness of Auto-ID Center system and software
- ✱ Assess robustness of the system with increased demand

- **DEVELOP A BUSINESS CASE**

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## BACKGROUND

### •NOTE

- Today we will review:
  - Status of the field test
  - What has happened
  - Future steps
  - no specific details of what we have learned

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## BACKGROUND

### •THREE PHASES:

#### ✱Phase I: Pallet level

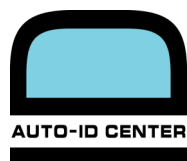
- ✱Technical feasibility of system software using existing reader and tag technology

#### ✱Phase II: Pallet and case level

- ✱Use existing technology to check robustness of system

#### ✱Phase III: Pallet, case and unit level

- ✱Introduce new technology. Cheap Chips and Low Cost Readers.



# FIELD TEST SPONSORS STATUS

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## PARTICIPATING

END USER	TECHNOLOGY
CHEP INTERNATIONAL PAPER JOHNSON & JOHNSON PHILIP MORRIS GROUP PROCTER & GAMBLE THE GILLETTE COMPANY UNILEVER WAL-MART WESTVACO YFY COCA COLA DAI NIPPON PRINT UCC/EAN consulting only (non paying)	INVENSYS NCR SAP SENSORMATIC SUN MICROSYSTEMS ALIEN MARKEM RAFSEC SAVI CHECKPOINT PHILIPS



## STATUS - PHASE I

- **TIMING: OCTOBER 2001-JANUARY 2002**
- **EXISTING READER AND TAG TECHNOLOGY**
- **IMPLEMENTATION COMPLETE (4 SITES)**
  - Pilot test facility, Bentonville, Ak.
  - Auto-ID Center, Cambridge Ma.
  - P&G Factory, Cape Girardeau, Mo.
  - Sam's Club, Tulsa. Ok.

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## STATUS - PHASE I

- **DEVELOPMENT COMPLETE AND FUNCTIONING ON:**

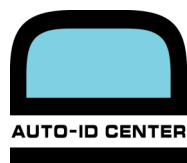
- ONS (Object Name Service)
- Savant
- Software

- **WORK CONTINUES ON DEVELOPMENT OF PML (PHYSICAL MARK UP LANGUAGE)**

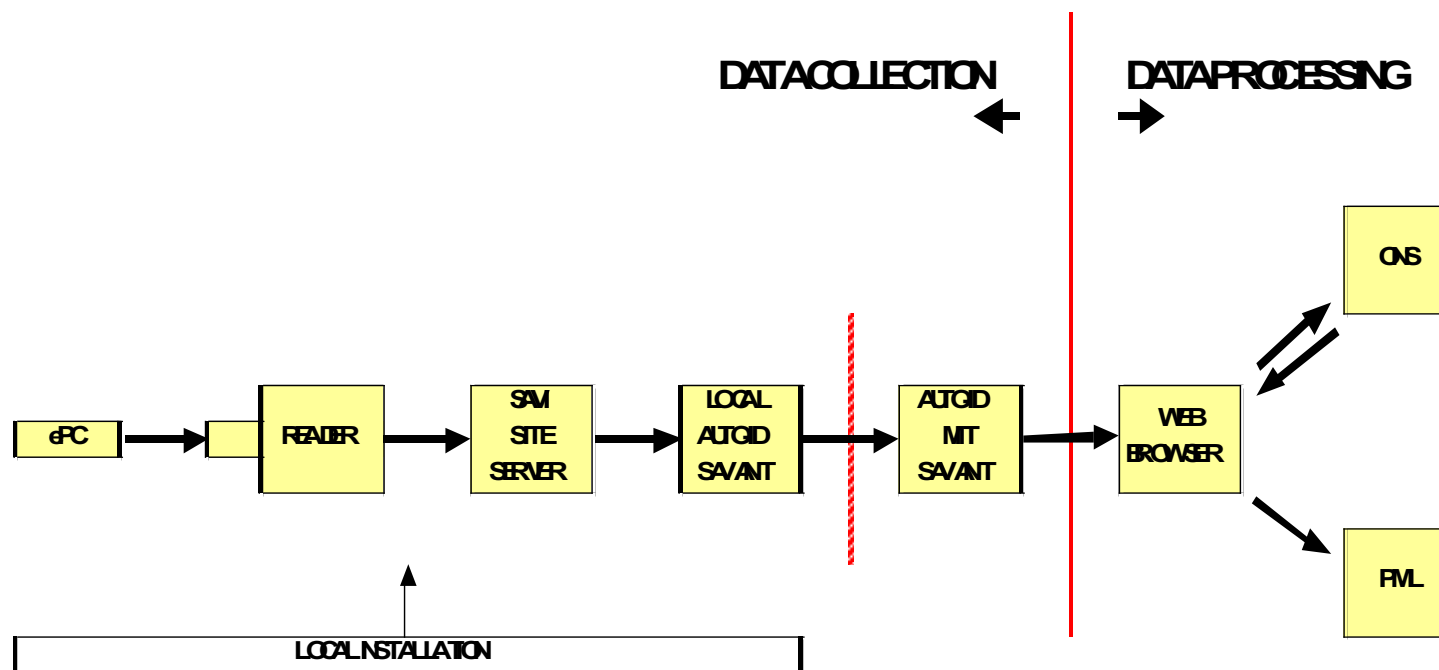
- **HARDWARE SYSTEM LIMITED TO EXISTING TECHNOLOGY**

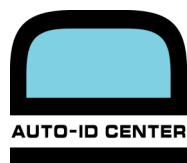
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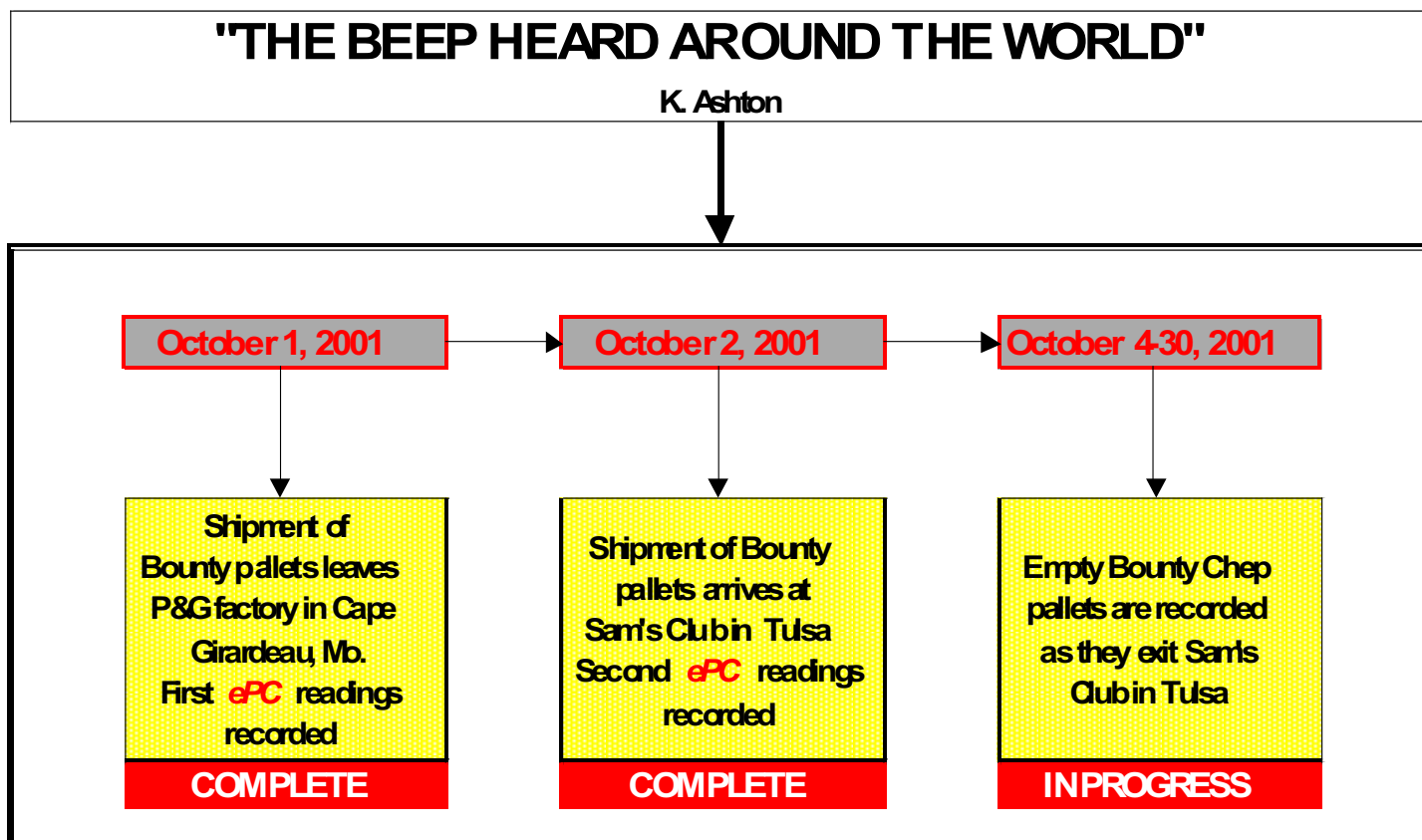


# PHASE I - STATUS





# HISTORY MADE



**Since October 1, over 2 million reads have been received**

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## PROGRAM STATUS UPDATE

**• ALL PARTICIPATING SPONSORS ARE NOW ABLE TO VIEW DATA BY LOGGING IN:**

- ✱ URL: for Field Test sponsors only
- ✱ USER NAME: Confidential
- ✱ PASSWORD: Confidential

If a Field Test sponsor does not have the required information please contact S. Albano

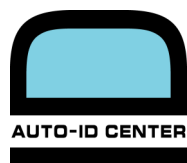
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## SCREEN INFORMATION

Location	Reader	EPC	Mfg	Product	Icon	Date/Time
	No					
Cape Girardeau	FF03	#	Chep	Pallet		10/1/01 -10:30

Note: date will appear many times. Readers are constantly reading

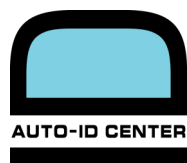


# PROGRAM STATUS UPDATE

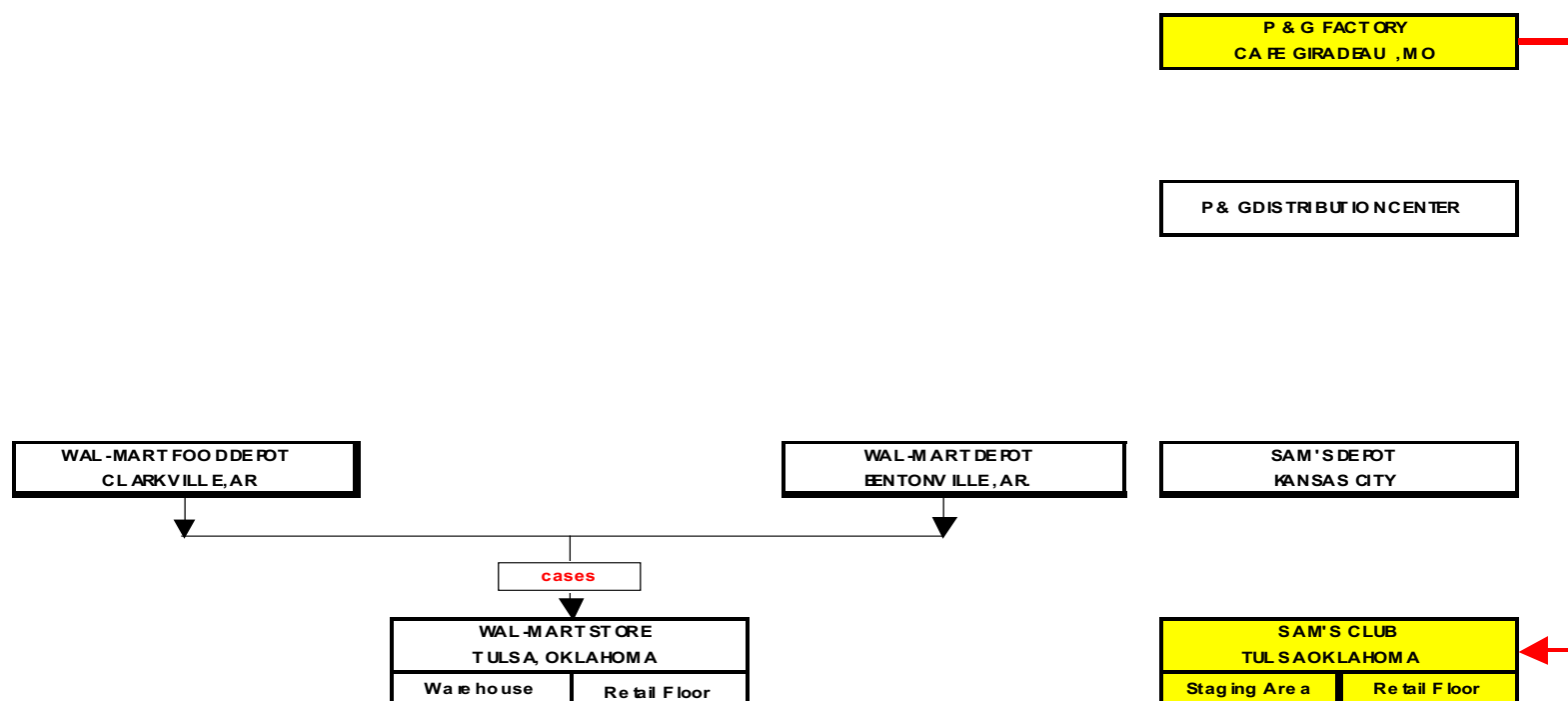
## ***Phase I***

**P&G Cape Girardeau Factory and Sam's Club, Tulsa are in play on a weekly basis.**

	P&G Cape Girardeau Exit door		Sam's Club Tulsa Ok		Comments
	Number of pallets	Number of reads	In door	Exit door	
1-Oct	26*	3252tags 25/26 pallets	3652tags 22/26 pallets**	none to date	*34 actual pallets shipped 8 had no tags **Sai's upgraded system
11-Oct	30	NO reads power outage	59/60 tags* 30/30 pallets	none to date	*One damaged tag Sai's send personnel to debug problem
17-Oct	22	NO reads power outage	31/32 tags 16/16 pallets	none to date	Only 16 pallets read, suggest 6 pallets had no tags
22-Oct	22	32/44 tags 22/22 pallets	40/44 tags* 22/22 pallets*	none to date	*extra tag identified from pallet not shipped
29-Oct	25	32/50 tags 25/25 pallets	47/50 tags 25/25 pallets	none to date	
4-Nov	24	33/48 tags 23/24 pallets	NONE*		*System unplugged at Sam's. Effected present RFID system in use at Sam's



# PHASE I - OCTOBER PRODUCT FLOW



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## PHASE I EXPANSION

### • **TIMING: DECEMBER 2001**

- 2 additional end users Distribution Centers

- GILLETTE, Chicago, Il.

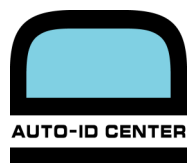
- UNILEVER, Baltimore, Md.

- 2 additional products

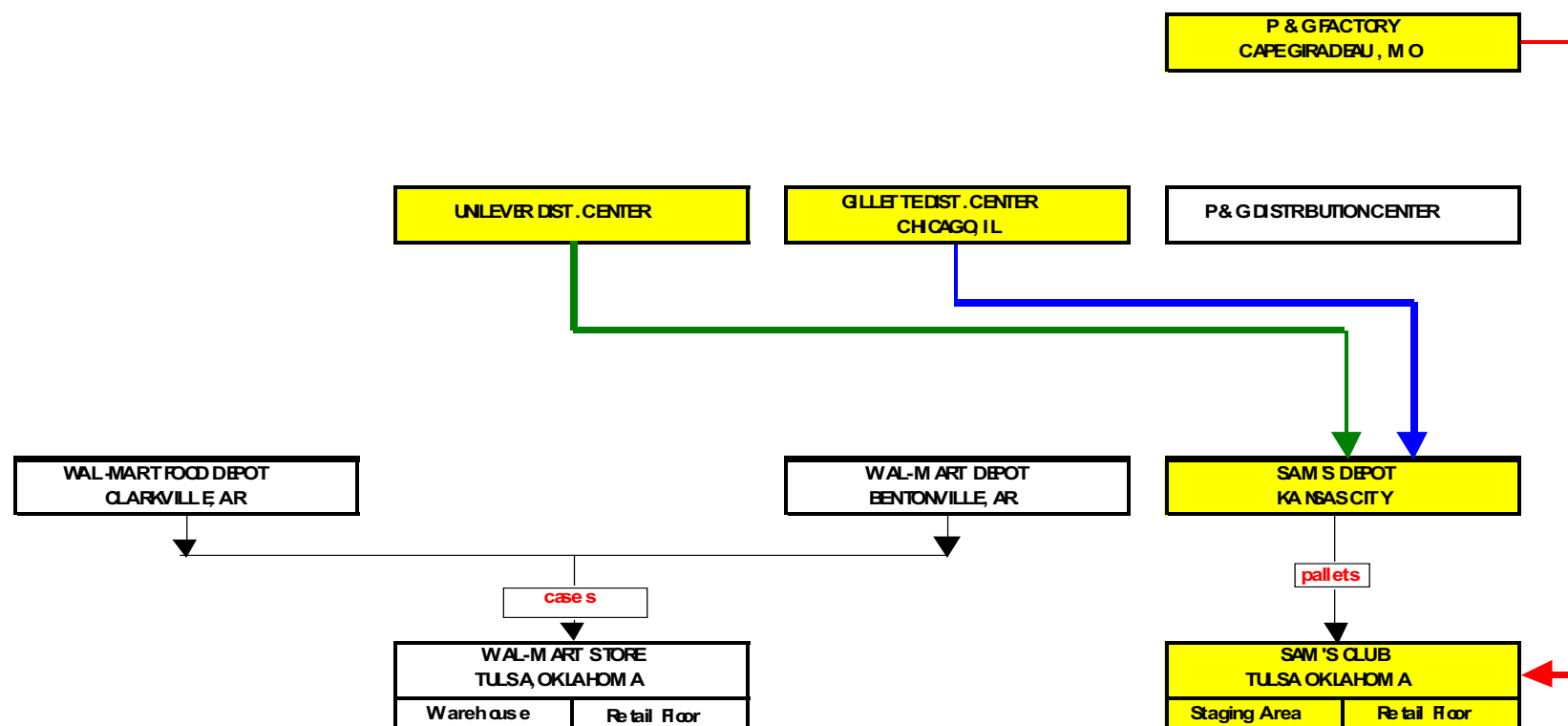
- Mach 3, 16 packs, Liquid All

- 1 additional retailer Distribution Center

- Sam's Distribution Center, Kansas City, Mo.

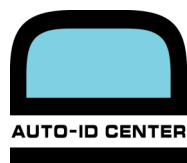


# PHASE I, EXPANSION - DECEMBER PRODUCT FLOW



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## PHASE I - SUMMARY

	TIMING	END USERS	CONFIGURATION	TECHNICAL TESTING OF
PHASE I	Q4'01/Q1'02	Procter & Gamble Sam's Club The GilletteCo. Unilever	Pallets	Software and Auto-ID system

**Cost of Phase I, \$321,000 versus a budget of \$345,000**

**On time: October 1 start**

**Successful results**

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## PHASE II - OBJECTIVES

- **UPGRADE AND EXPAND THE FIELD TEST FROM THE PALLET LEVEL TO THE CASE LEVEL**

- **UPGRADE**

- All participating Phase I sponsor's locations and product by implementing case level tagging and reads

- **EXPAND**

- Additional sponsors, products and locations

- **TIMING: FEBRUARY 2002**



## PHASE II - END USERS

- |               |                      |                        |
|---------------|----------------------|------------------------|
| • P&G         | Bounty Towels        | Cape Girardeau Factory |
|               | Pantene Shampoo      | P&G DC                 |
| • Gillette    | Mach 3, 4 pack       | Chicago DC             |
|               | Mach 3, 16 pack      |                        |
| • Unilever    | Liquid All           | Baltimore DC           |
|               | Dove Soap            |                        |
| • J&J         | Care Free            | Memphis DC             |
|               | Baby Shampoo         |                        |
| • Kraft Foods | TBD                  | TBD                    |
| • Coca Cola   | 2 liter, 8 pack tray | TBD                    |

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## PHASE II - RETAILERS

- Sam's Club Tulsa, Ok
- Sam's Club TBD
- Sam's Club DC Kansas City, Mo.
- Wal-Mart DC Bentonville, Ak.
- Wal-Mart Store Tulsa, Ok.



## PHASE II - TECHNOLOGIES

- **FOUR TECHNOLOGY SPONSORS BEING EVALUATED FOR PHASE II IMPLEMENTATION**

- Savi Technology
- International Paper
- Philips Semiconductors
- Auto-ID (Bring some of Phase III into Phase II)

- **ALL TECHNOLOGIES MUST BE TESTED AND APPROVED IN THE PILOT FACILITY PRIOR TO IMPLEMENTATION**

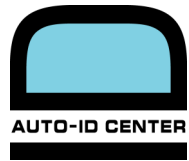
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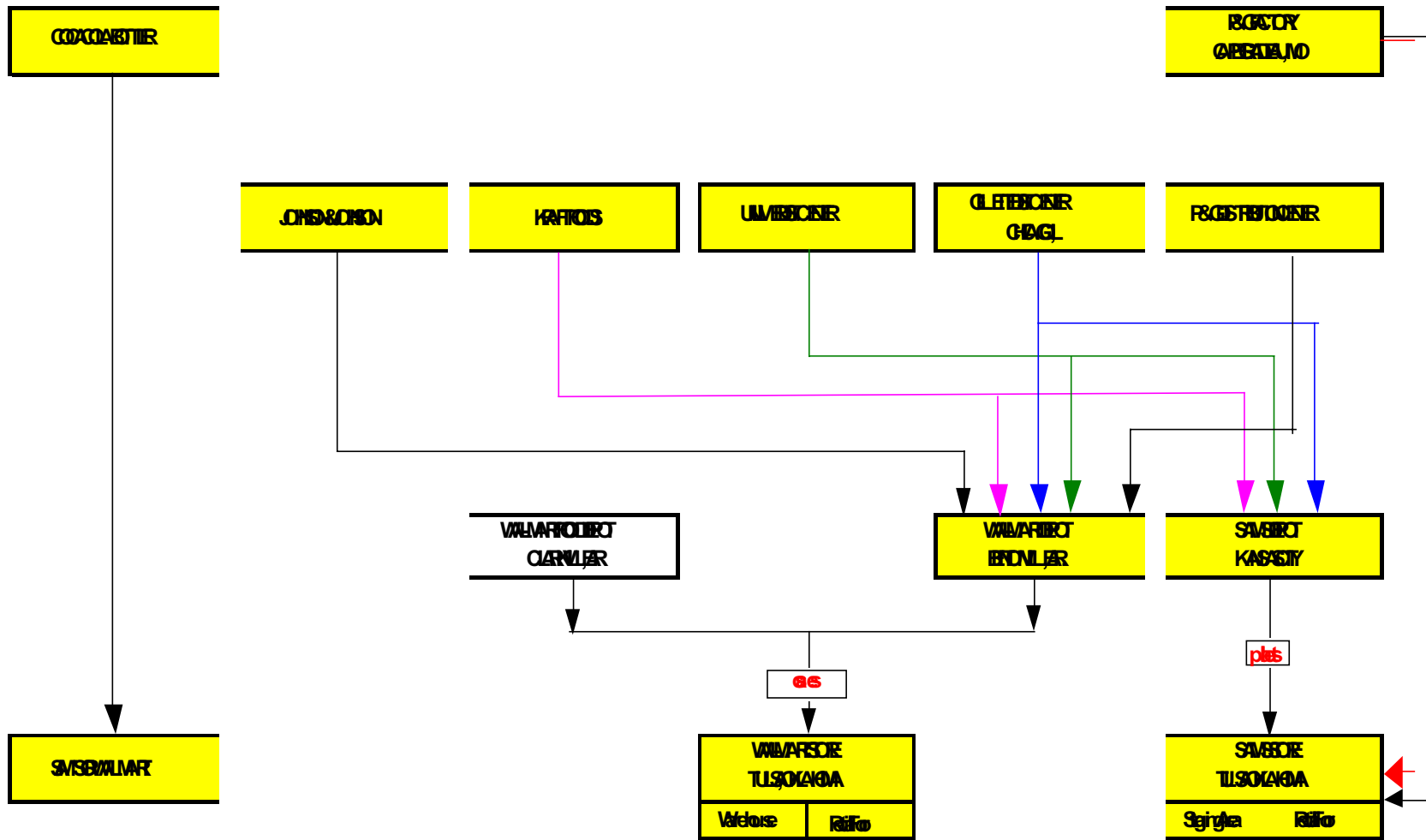
## PHASE II - NEXT STEPS

- **GATHER ALL INFORMATION FROM TECHNOLOGY SPONSORS**
- **PREPARE PROPOSAL FOR PHASE II IMPLEMENTATION TO BE PRESENTED TEAM APPROVAL EARLY DECEMBER**
  - Note; Phase II budget \$445,000
- **PILOT LAB TEST SELECTED TECHNOLOGY PRIOR TO IMPLEMENTATION**
- **IMPLEMENT PHASE II FOR FEBRUARY 2002 START**

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## PHASE II-COMplete PRODUCT FLOW



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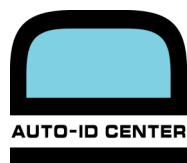


## PHASE III - STATUS

- **MEETING HELD BETWEEN TRANSPONDER MANUFACTURER, CHEAP CHIP MANUFACTURER AND END USERS**
- **LOW COST TECHNOLOGY ON SCHEDULE FOR PHASE III IMPLEMENTATION SUMMER 2002**
- **OBJECTIVE UNCHANGED: TAG AND READ UNITS WITH NEW LOW COST TECHNOLOGY**

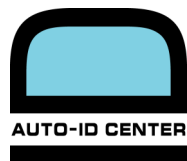






# FIELD TEST SUMMARY

	TIMING	END USERS	CONFIGURATION	TECHNICAL TESTING OF
PHASE I	Q4'01/Q1'02	Procter & Gamble The Gillette Co. Unilever Sam's Club	Pallets	Software and Auto-ID system
PHASE II	Q1/Q2'02	Procter & Gamble The Gillette Co. Unilever The Coca Cola Co. Kraft Foods Johnson & Johnson Sam's Club Wal-Mart	Cases and Pallets	Test robustness of Auto-ID Centers software and system
PHASE III	Q2/Q4'02	Procter & Gamble The Gillette Co. Unilever The Coca Cola Co. Kraft Foods Johnson & Johnson Sam's Club Wal-Mart	Units and Cases and Pallets	Evaluate low cost chips and readers technology



## FIELD TEST - KEY DATES

• <b>BEGIN PHASE I</b>	<b>COMPLETE</b>
• <b>BOARD OF OVERSEERS MTG.</b>	<b>NOV 14, 01</b>
• <b>EXPAND PHASE I</b>	<b>DEC 2001</b>
• <b>DECISION ON PHASE II</b>	<b>DEC 13, 01</b>
• <b>IMPLEMENT PHASE II</b>	<b>JAN 2002</b>
• <b>BEGIN PHASE II</b>	<b>FEB 1, 02</b>
• <b>BEGIN PHASE III</b>	<b>SUMMER 02</b>

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