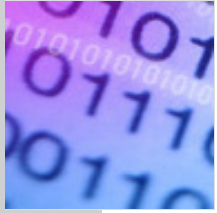


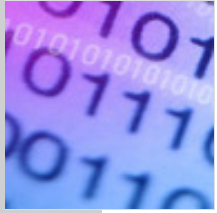


Tag Data JRG
Summary of User and TID Memory Requirements
presented to Healthcare and Life Sciences IAG



Tag Data Joint Requirements Group (TD JRG)

- **JRGs Overview:** Joint Requirements Groups brings together the End Users and the Technology Providers for dialogue to reach a common understanding on the needs of the End Users and the capabilities of the technology.
- **TD JRG Questionnaire:** Tag Data Joint Requirements Group (TD JRG) created a questionnaire and requested that all EPCglobal end users complete the on-line tool to describe their application and convey requirements for user memory and tag ID.
- **TD JRG Requirements Doc:** The TD JRG requirements document has been posted for comment for the past two weeks. The comment period has now closed, **but additional IAG input is welcomed.**



Summary of Questionnaire Results

- 56 Distinct use cases were submitted and described representing 8 different industry groups
- **HLS submitted just over 10% of the use cases**
- While the questionnaire was designed to gather requirements from End Users who intend to use User Memory and/or Tag ID, the results clearly specify that not all End Users have such a need:
 - The Tag Data Standards shall support tags with no user memory
 - **The Tag Data Standard memory format shall support a mixed tag population of tags with varying amounts of user memory (including tags with no user memory).**



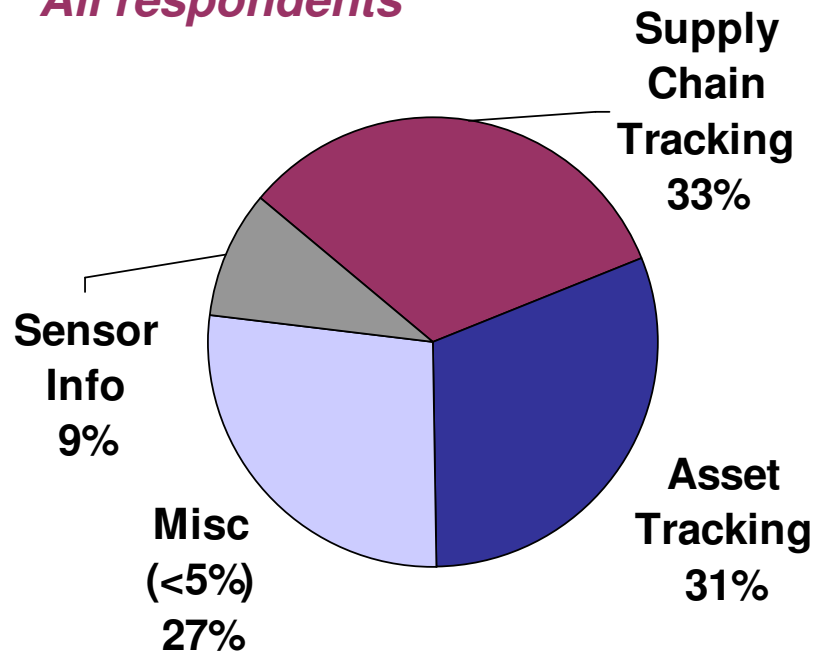
Questionnaire Results - Summary

- Actual results of all respondents follow
- HLS results are compared to all respondents
- TD JRG still welcomes your comments, jrg_td-chair@lists.epcglobalinc.org
- Your input and ideas are requested for HLS

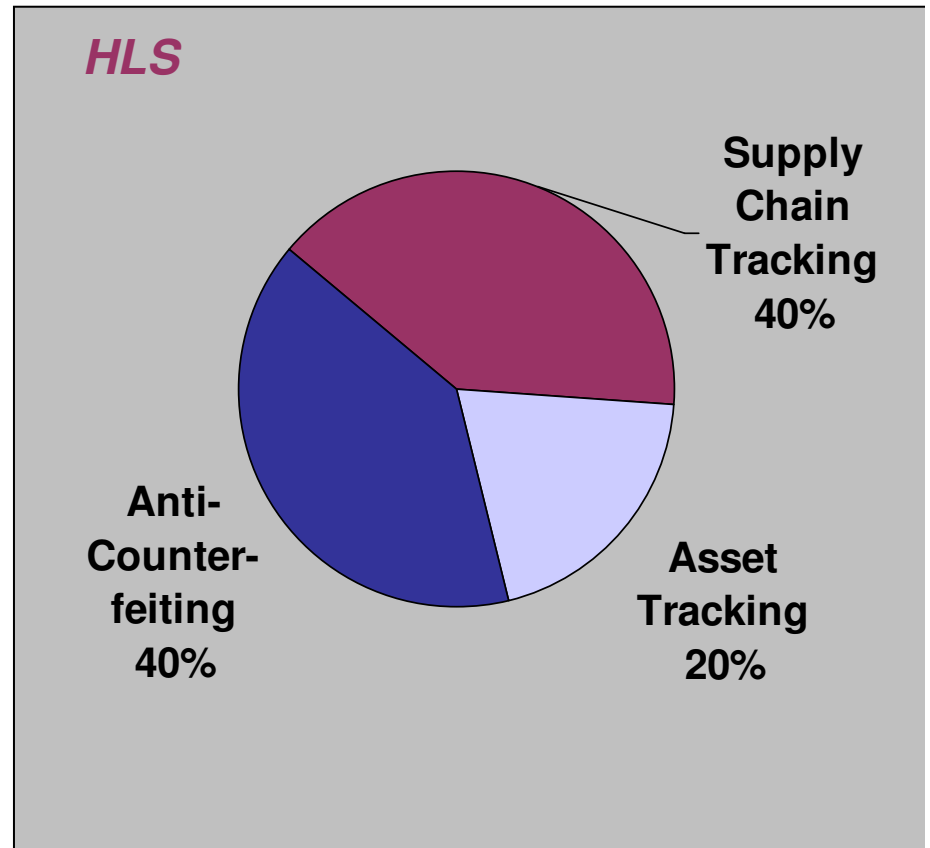


What application are you referencing in answering the User Memory Questionnaire?

All respondents



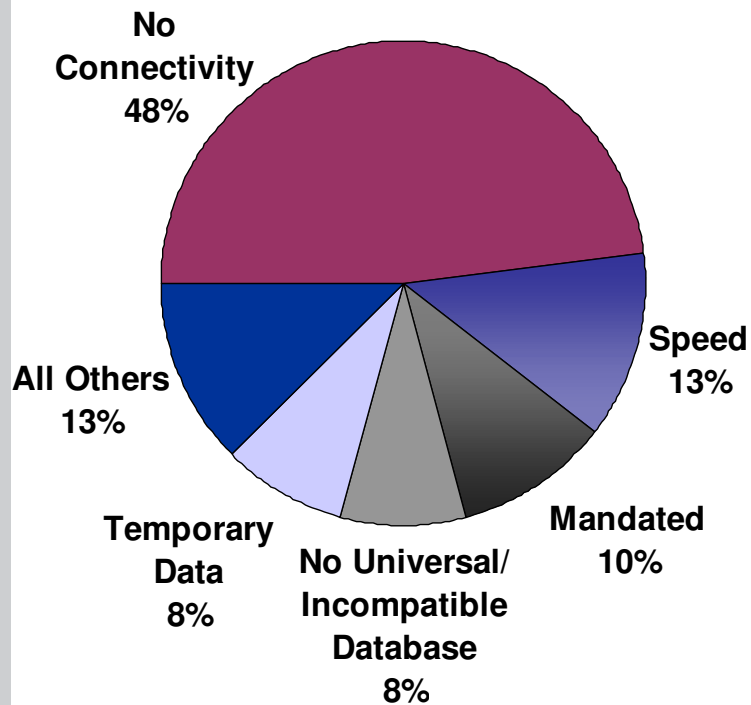
HLS



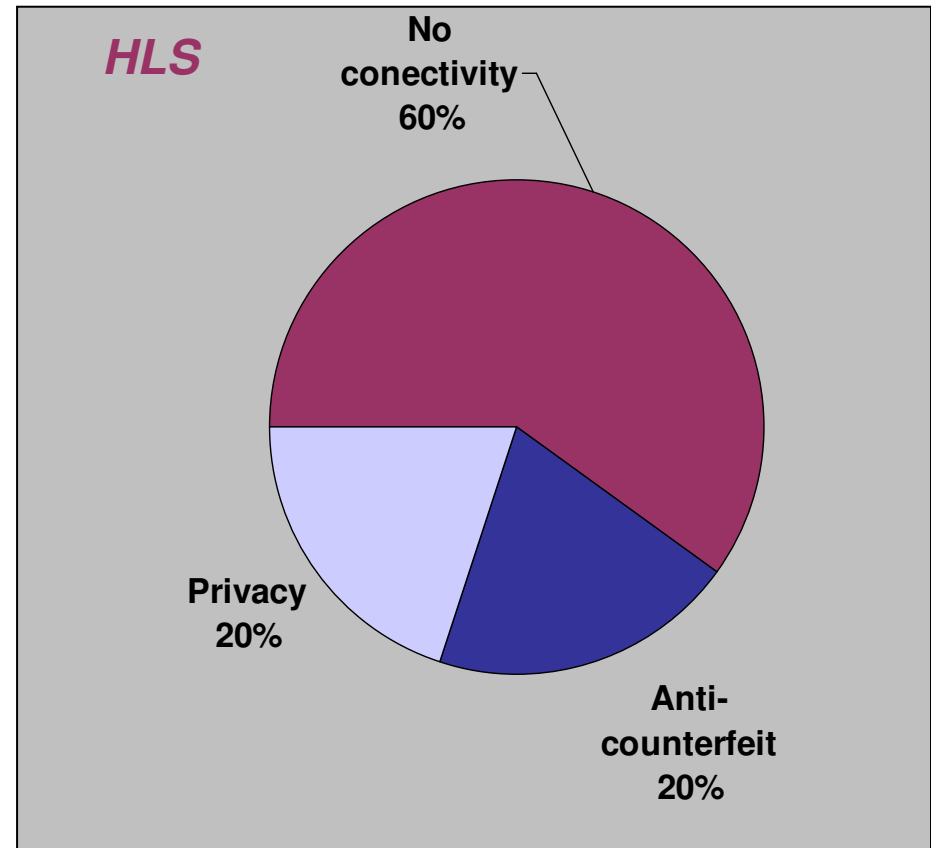


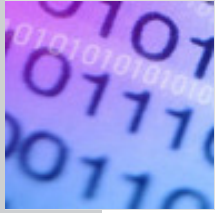
Why should the information reside on the tag rather than accessing it via lookup?

All respondents



HLS





What data standards are you currently using (select all that apply)

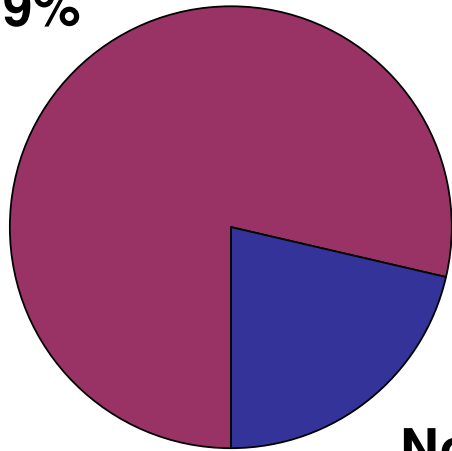
- The majority of all respondents indicated they are currently using AI's, followed closely by DI's and/or the requirement for a mixed environment.
 - Aerospace uses TEIs and many use open system standards (IATA, AAR, UPU, etc.).
 - A few respondents use proprietary standards.
- **HLS identified AI's and DI's, with the vast majority (80%) indicating they are currently using AI's only**



Does your organization need to write data to user memory?

All respondents

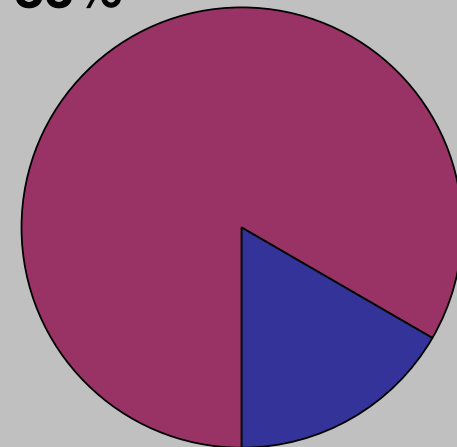
**Yes
79%**



**No
21%**

HLS

**Yes
83%**

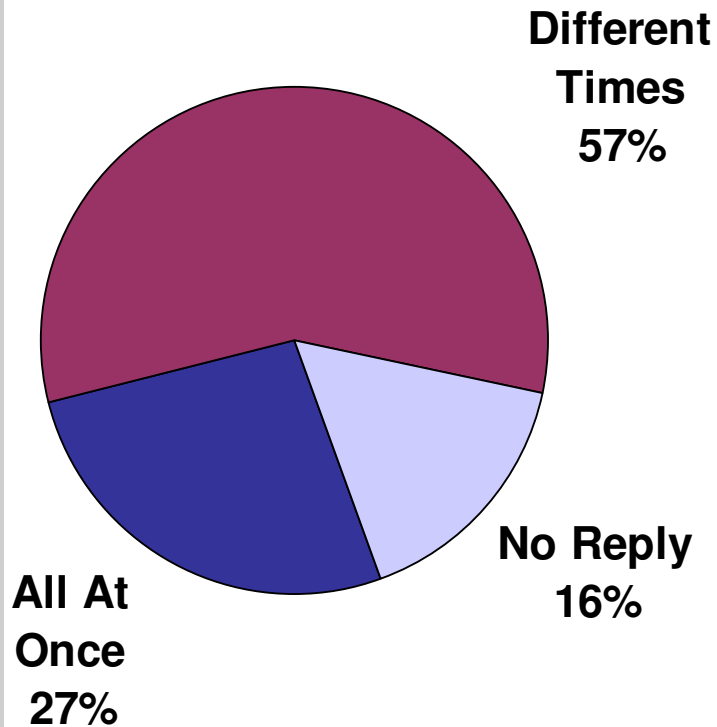


**No
17%**

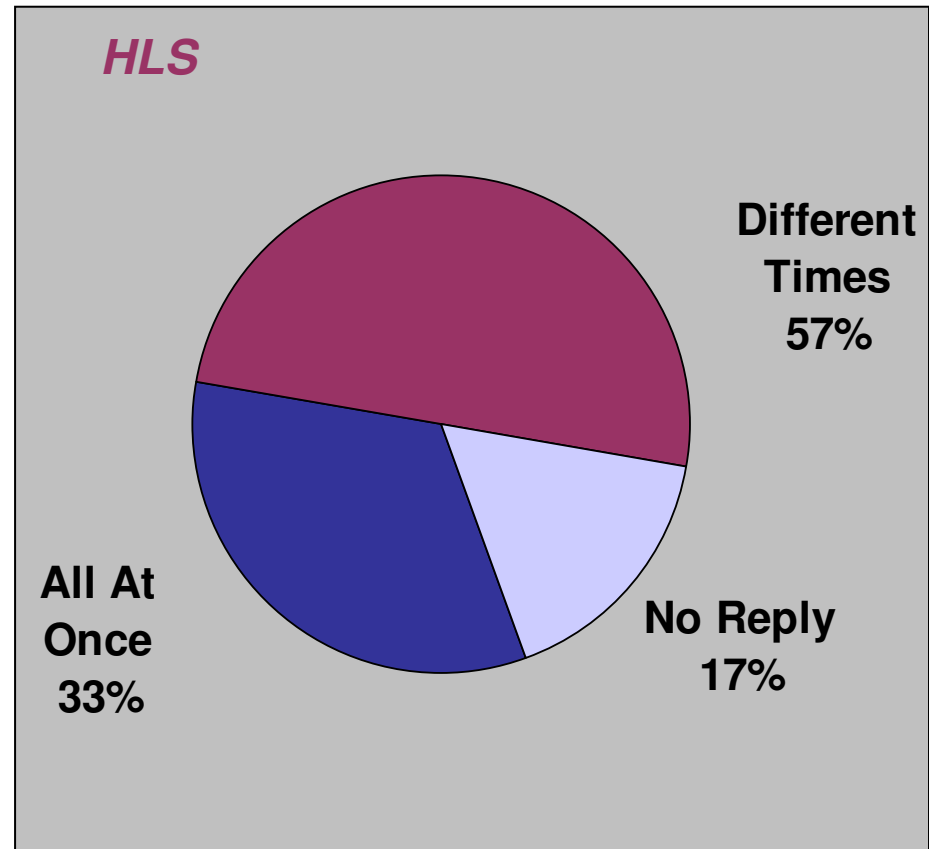


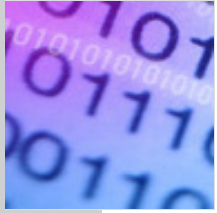
Do you write data all at once or at different times over the product lifecycle?

All respondents



HLS

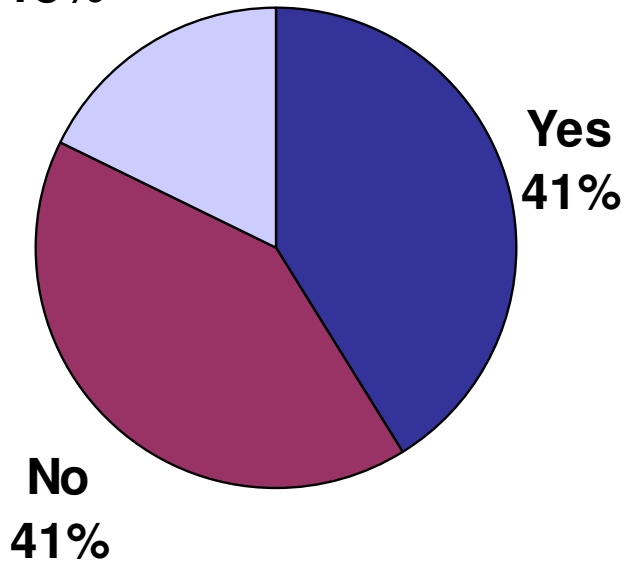




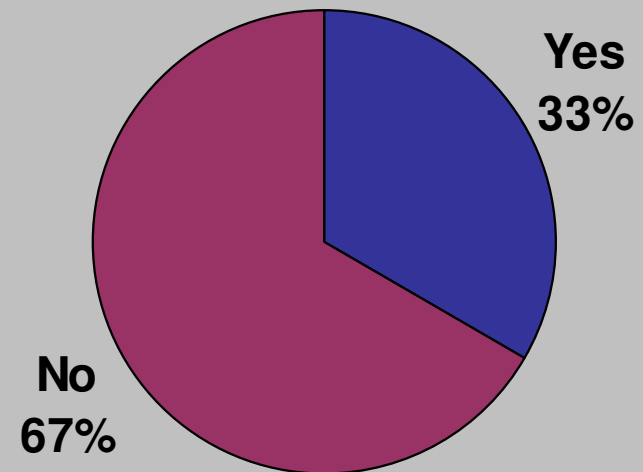
Do supply chain partners need to have access to write to your tag?

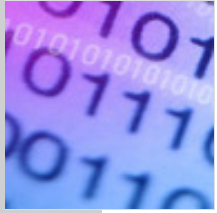
All respondents

No Reply
18%



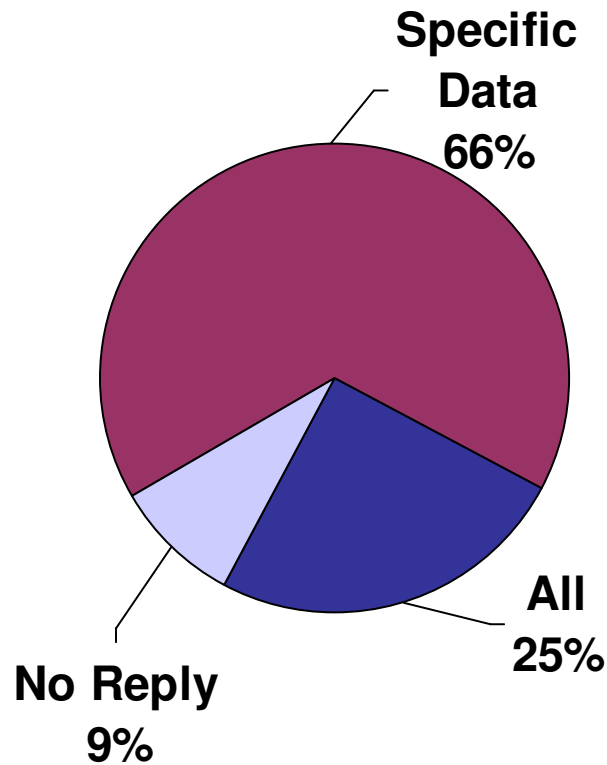
HLS



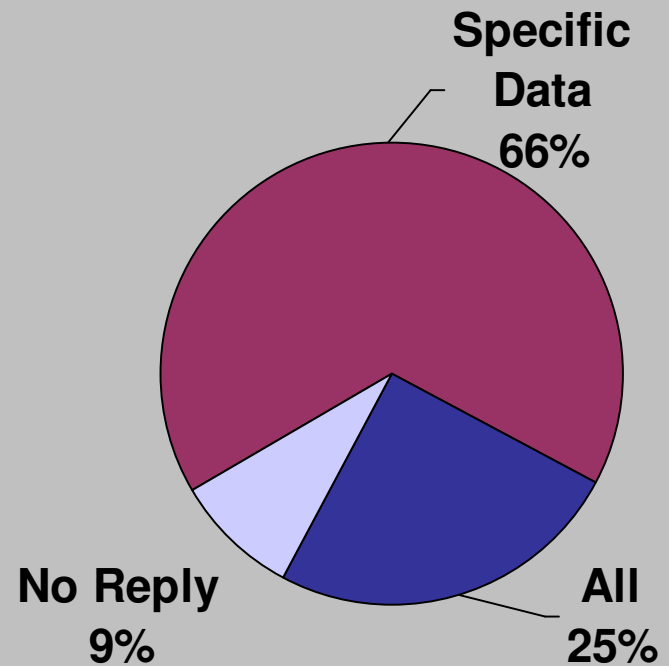


When reading user memory, do you want to read all or only pieces at specific points in the life cycle?

All respondents



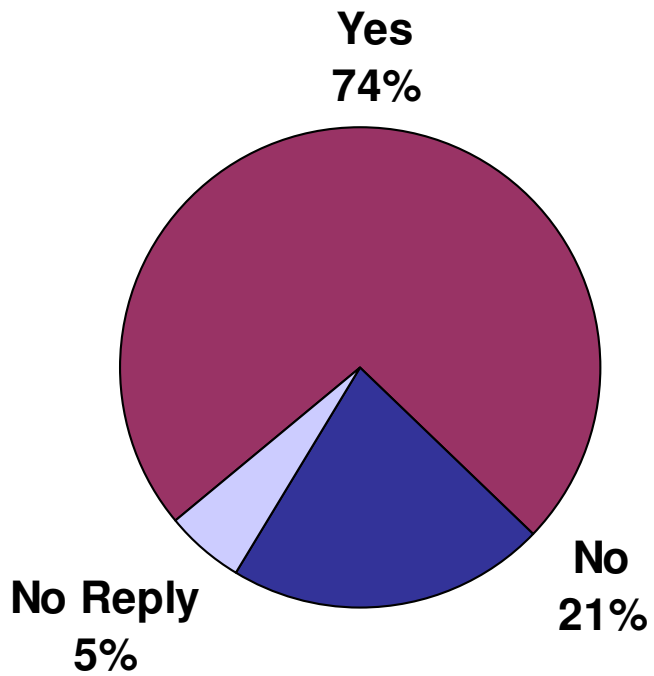
HLS



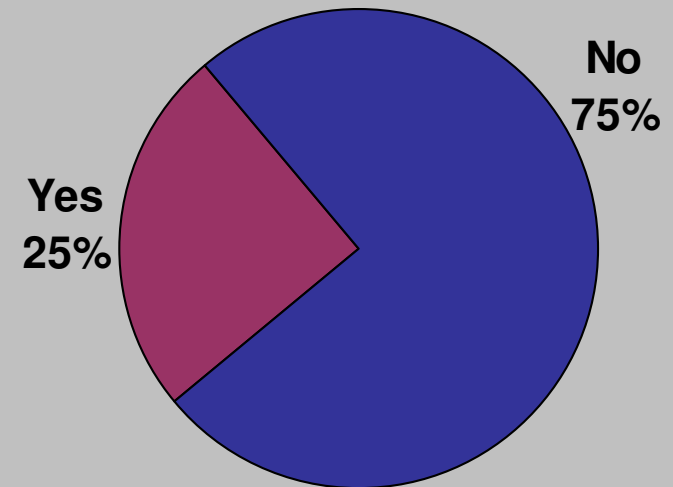


Is write locking required?

All respondents



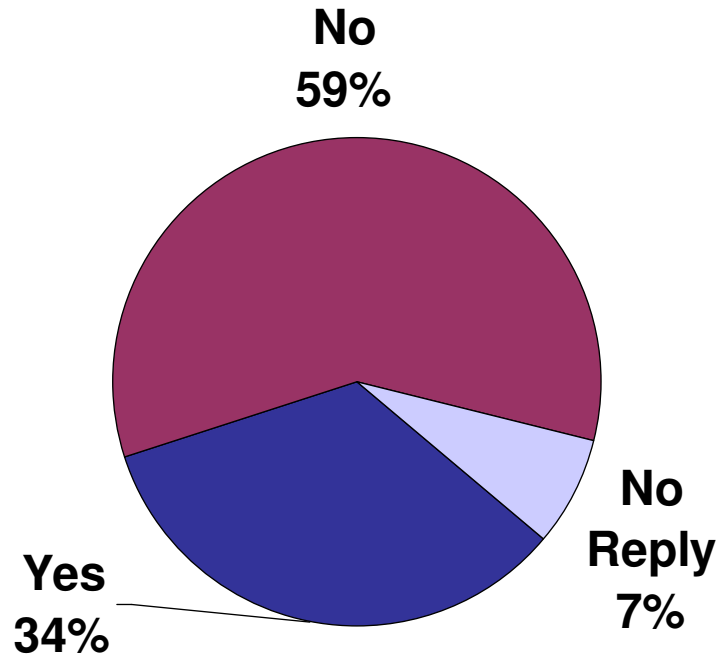
HLS – significantly differs



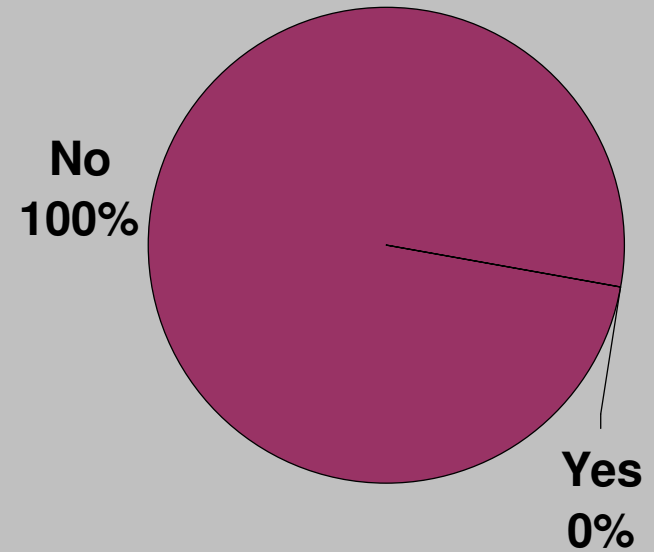


Is read locking required?

All respondents



HLS

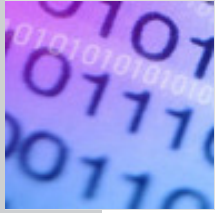




What is your requirement for reading speed (in tags per second)?

- Wide variation by industry & application
- **HLS identified a need to read nested Tags at 3-10 TPS and Conveyor applications at 5 TPS**

All respondents	Min	Max	Avg
Anti-counterfeiting	1	1	1
Asset Management	1	600	161
Blood Bags	5	5	5
Nested Tags	5	1,000	188
Part Identification	50	600	200
Sensor	0	0	0
Shipping Container	1	20	4
Tag on Conveyor	0.5	600	72
Tags on Shelf	50	50	50
WIP	5	5	5



What is your requirement for writing speed (in tags per second)?

- Wide variation by requirement
- **HLS identified a need to write to tags from 1 to 300 TPS**

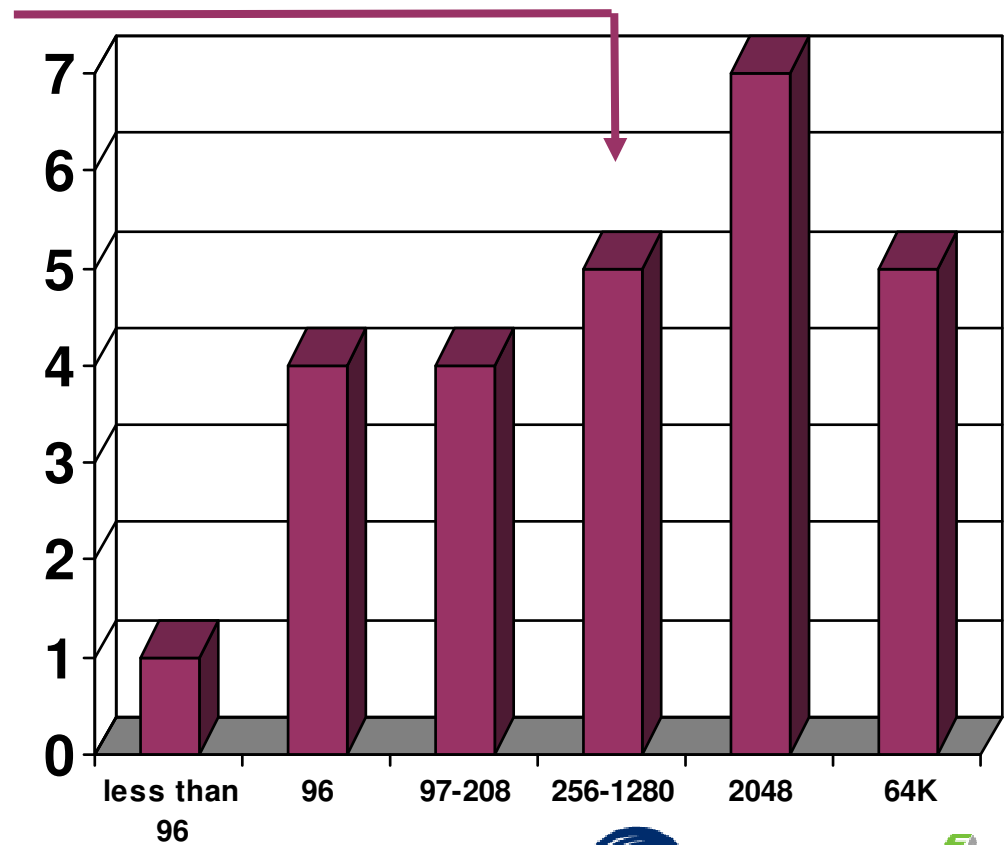
All respondents	Min	Max	Avg
Asset Management	1	600	200
Encoder/ Applicator	1	1	1
Nested Tags	1	500	83
Part Identification	1	1	1
Shipping Container	1	1	1
Tag on Conveyor	0.5	300	32
WIP	10	10	10



What is your requirement for tag size (if known)?

- One HLS respondent indicated a known tag size. That respondent indicated 1024 bits.

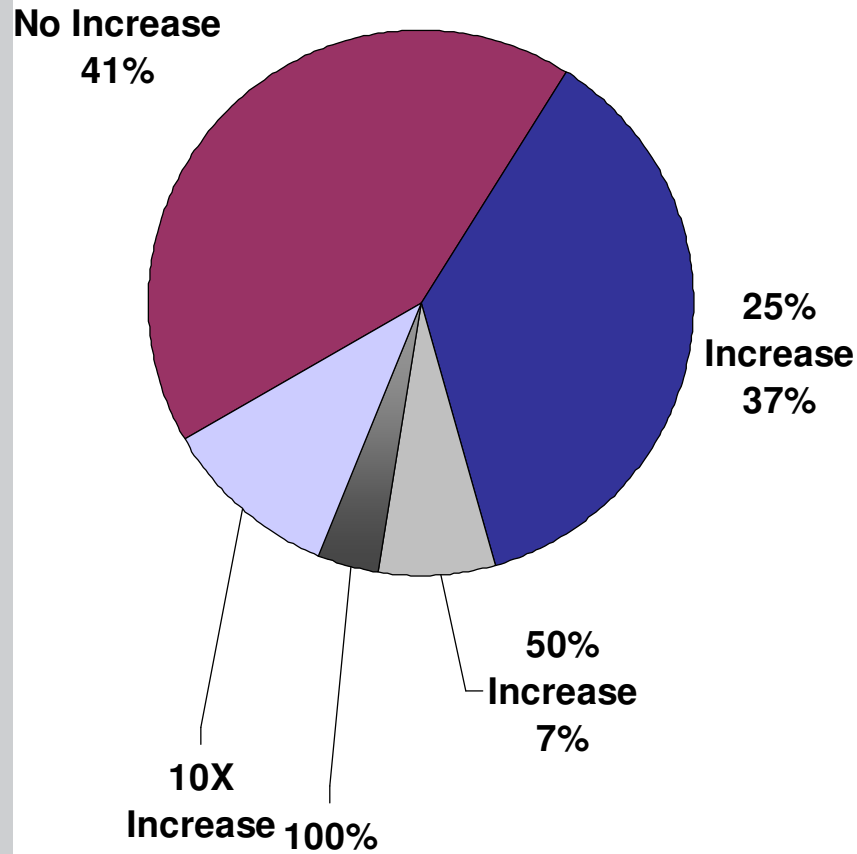
All responses



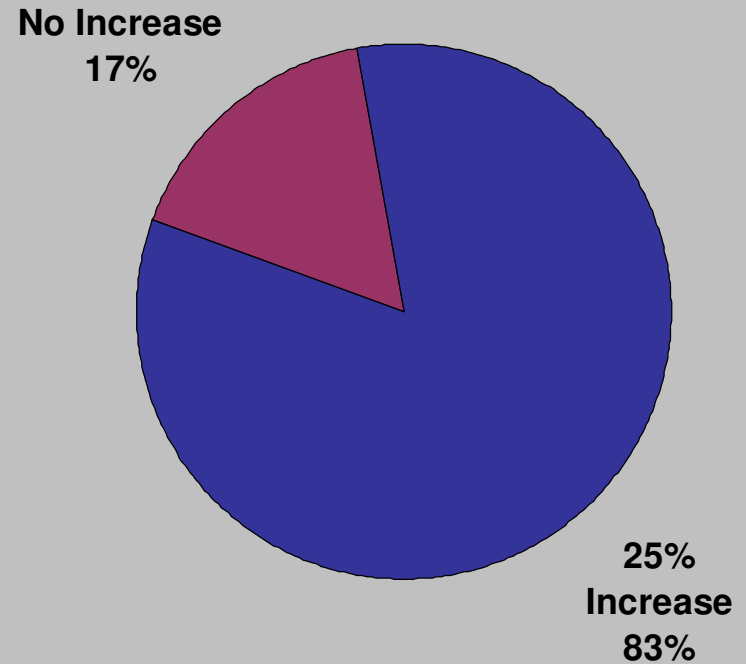


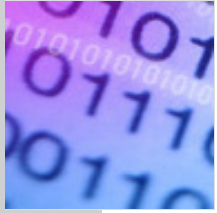
What cost premium are you willing to pay for user memory?

All respondents



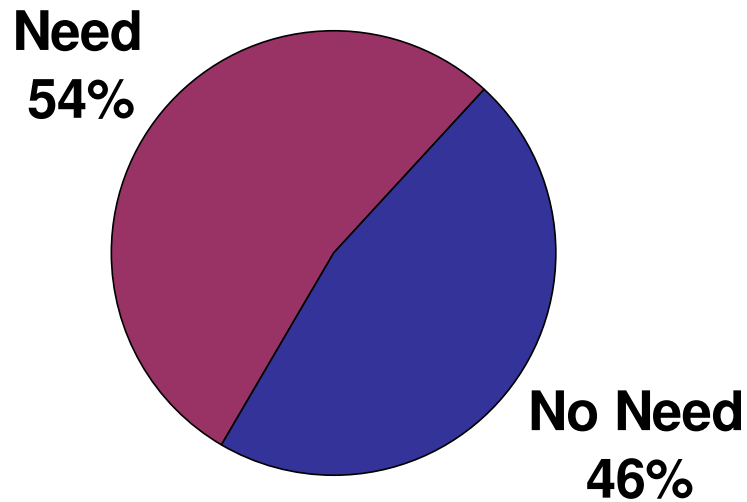
HLS



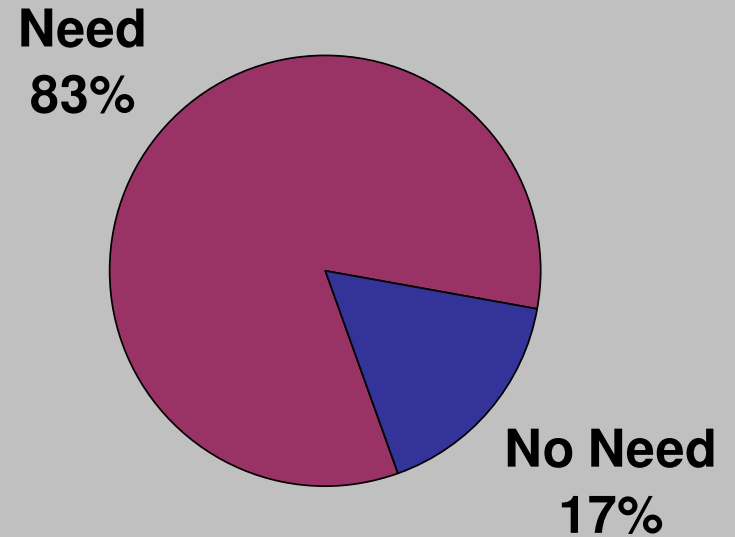


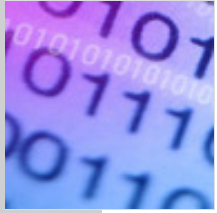
Do you have a need to have each tag uniquely identified independent of the EPC?

All respondents



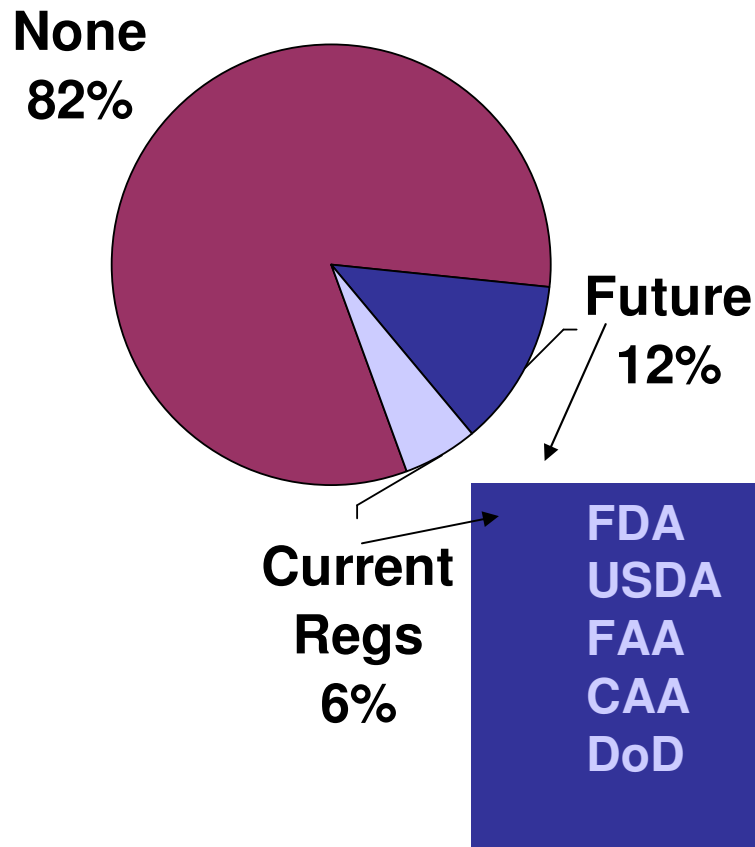
HLS



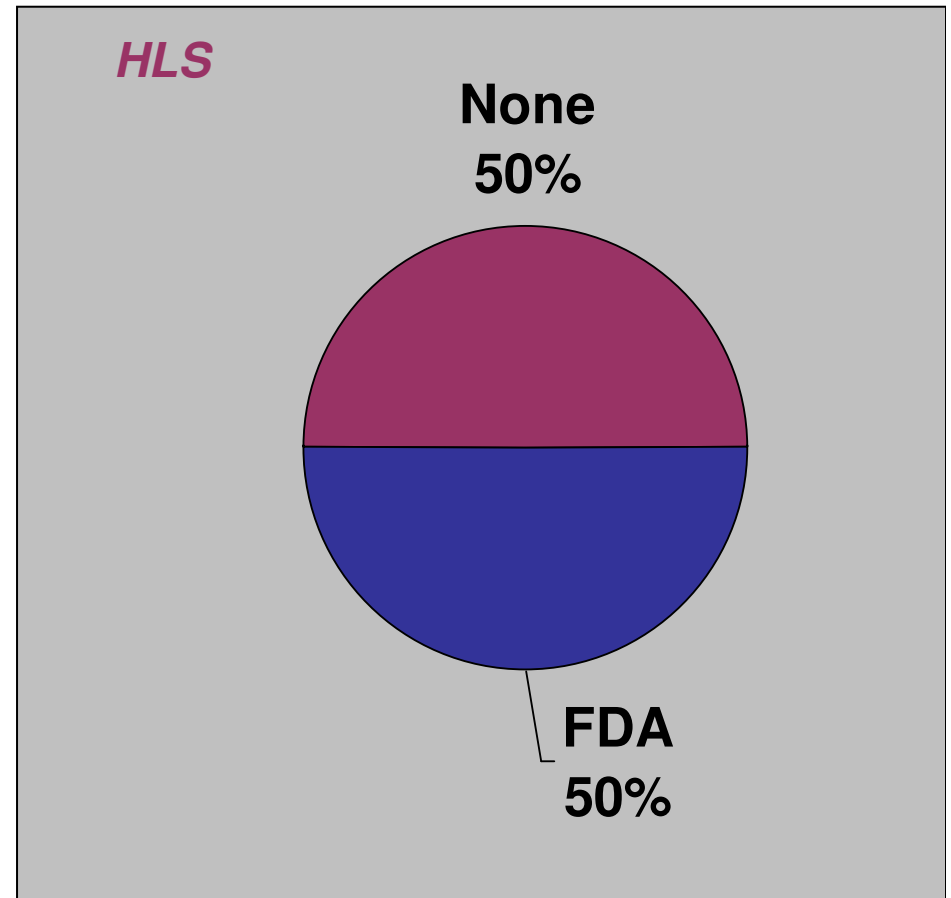


What government regulations, if any, affect memory usage in your application?

All respondents



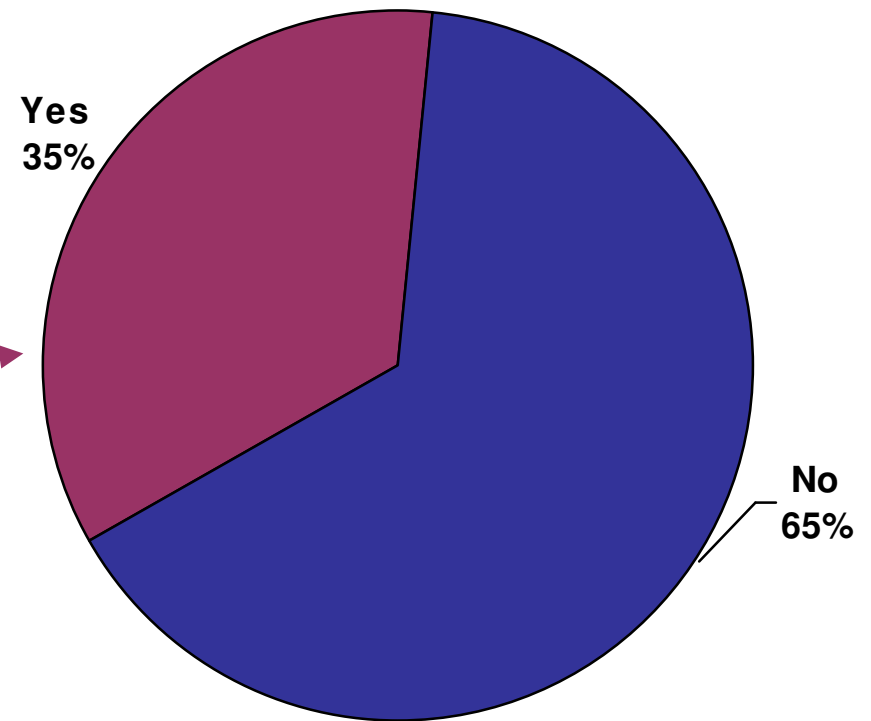
HLS





Do you need to identify material that would be classified as Hazardous? (*same for special handling*)

- 65% of all respondents to this question required HazMat identification – 45% of those needed to know immediately (not via lookup)
- **One** HLS respondent indicated a need to identify Hazardous materials – that respondent needed to know immediately





TD JRG Results REMINDER

- A relatively few HLS respondents were included in the overall results
- That works if it meets with the HLS IAG approval
- If not, you have an opportunity to provide more data
- TD JRG still welcomes your comments, jrg_td-chair@lists.epcglobalinc.org



TD JRG Thanks HLS!

THANKS!