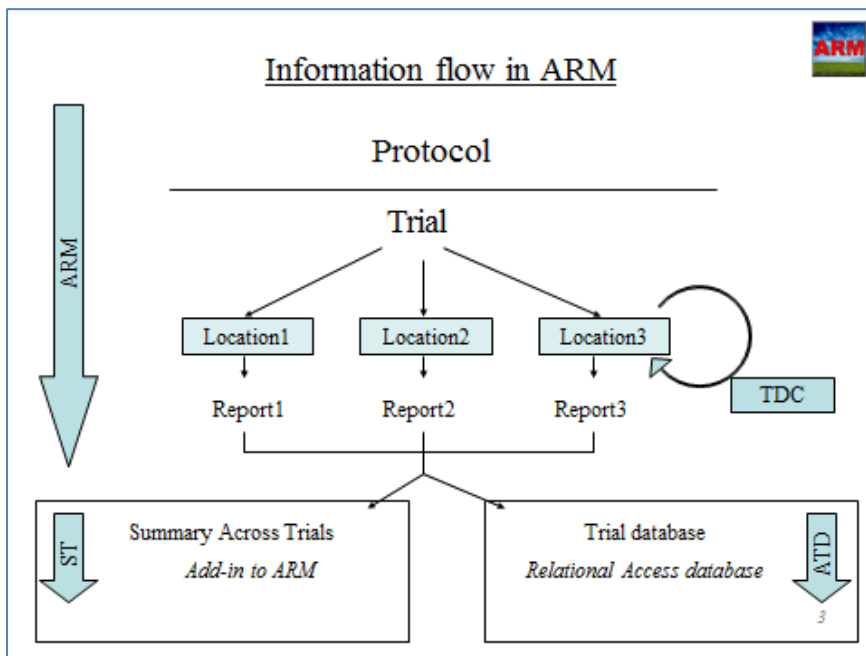




"Flow Chart" for a Trial Season

1. Product manager defines a project to test or develop a product
2. Scientist/protocol author/sponsor representative defines individual protocols for crops or crop groups that consist of:
 - a. Treatment details including rates and application timings
 - b. Required and optional assessments, including how to describe key entry fields for each assessment (at minimum the Part Rated, Rating Type, Rating Unit)
 - c. Study rules
3. Trialist conducts protocol, and fills entry fields for key trial information
 - a. Assessments
 - i. Measurements taken using defined assessment methods
 - ii. Photographs
 - iii. Assessment level or plot level notes
 - b. Site description, providing all basic and required information:
 - i. General trial
 - ii. Crop details including variety
 - iii. Application conditions, timing, equipment
 - iv. Appropriate soil and soil test information
4. Trialist provides sponsor representative with validated interim trial updates as required (use "Send To" to validate trial, provide complete trial with raw data and attachments including photographs)
5. Trialist provides sponsor representative with validated final results (use "Send To" to validate trial, and provide complete trial with all raw data plus all related attachments/information including photographs)
6. Scientist/protocol author/sponsor representative summarizes all trials (across trialists) per protocol, provides results to product manager
 - a. Review and re-validate every trial
 - b. Analyze the trial series
 - c. When "trial" (location) effects are evident, divide trials into homogeneous groups and analyze each group
 - d. Diagnose/explain trial effects based on site description information (weather, soil, moisture, application, timing, ...)
 - e. Store reviewed and validated trials in sponsor's central trial repository/database
7. Product manager summarizes project based on per-protocol trial summarizations



What can "break" this process?

- Providing only a Word document or report instead of actual ARM protocol or trial with all raw data
- Manually attaching an ARM trial to email message instead of using "Send To"
- Prevent successful multi-trial summaries by changing treatments, assessment headers, or original Trial ID that sponsor provided
- Using non-standard terms instead of industry standard codes (Rating Type="%" control" instead of Rating Type=CONTRO, Rating Unit=% in rating type)
- Not completing the trial site description, so site details are not available to diagnose differences in treatment response
- Missed deadline so a trial is not available in time for sponsor product decisions